An examination of the values that motivate socially conscious and frugal consumer behaviours

Miriam Pepper¹, Tim Jackson¹ and David Uzzell²

¹Centre for Environmental Strategy, University of Surrey, UK
²Department of Psychology, University of Surrey, UK

Keywords
Consumer behaviour, frugality, sustainable consumption, values.

Correspondence: Tim Jackson, Centre for Environmental Strategy, University of Surrey, Guildford, Surrey GU2 7XH, UK.
E-mail: t.jackson@surrey.ac.uk
doi: 10.1111/j.1470-6431.2009.00753.x

Abstract
This article extends social psychological research on the motivations for sustainable consumption from the predominant domain of ecologically conscious consumer behaviour to socially conscious and frugal consumer behaviours. A UK-based survey study examines relationships between socially conscious and frugal consumer behaviours and Schwartz’s value types, personal and socio-political materialism, and demographics among the general public. Socially conscious consumer behaviour, like its ecological counterpart, appears to be an expression of pro-social values. In contrast, frugal consumer behaviour relates primarily to low personal materialism and income constraints. As such, it does not yet represent a fully developed moral challenge to consumerism.

Introduction
‘Sustainable consumption’ as a discourse, a field of enquiry and a course of action, has arisen within a context of growing awareness of the ecological limitations on human activity. Sustainable consumption is a broad and contested concept that concerns the interaction of social and ecological issues such as environmental protection, human needs, quality of life, and intra-generational and inter-generational equity (see Jackson and Michaelis, 2003, p. 14 for a range of definitions). Its development marks an expansion of the sustainability agenda from production issues like ecological efficiency into the realm of consumption and the consumer.

Social scientific research into sustainable consumption has become a burgeoning field across many perspectives, including in economics, anthropology, psychology, sociology, human geography and marketing (for overviews, see e.g. Princen et al., 2002; Reisch and Røpke, 2004; Jackson, 2006b). Considering psychological approaches, a large body of research has examined the factors that influence ecologically conscious consumer behaviour, that is, consumer behaviour undertaken with the intention of having a positive (or less negative) effect on the environment (Roberts, 1993). Among these influences, much is now known about factors and processes considered to be internal to the individual (albeit socially acquired and/or influenced), such as worldviews, values, personal norms, beliefs and attitudes, as well as external forces, for example, social norms, financial incentives and infrastructural constraints (for an overview, see e.g. Jackson, 2005). Another much smaller, although rapidly growing, body of research (e.g. Harrison et al., 2005) concerns a distinct but related form of consumption known as socially conscious consumer behaviour (Roberts, 1993). This is consumer behaviour undertaken with the intention of having a positive (or less negative) effect on other people, and relates to issues such as labour rights and the impacts of businesses on the communities in which they operate (e.g. Cowe and Williams, 2000).

Key to sustainable consumption debates is the extent to which sustainability requires consuming less or merely consuming ‘differently’ (Jackson and Michaelis, 2003, p. 15). Aside from the ecological pressures and growing social inequalities that characterize global consumption, some critics maintain that consumerism fails to improve human well-being, even for its apparent beneficiaries (e.g. Kasser, 2002). There is evidence that substantial numbers of people in affluent societies are questioning continued consumption growth, and are choosing to make changes in their lifestyles that entail earning less money (e.g. Schor, 1998; Hamilton, 2003). This opens the way for sustainable consumption research that examines frugal consumer behaviour, regardless of whether such behaviour is undertaken with pro-social or pro-environmental intent. Frugal consumer behaviour (frugality) is defined as the limiting of expenditures on consumer goods and services, and is characterized by both restraint in acquiring possessions and resourcefulness in using them (Lastovicka et al., 1999). Research into more frugal lifestyles is an emerging field, particularly in the case of voluntary simplicity (e.g. McDonald et al., 2006).

The aim of this article is to extend psychological research on the internal motivations for socially conscious and frugal consumer behaviours. These domains are under-researched by comparison with the domain of ecologically conscious consumer behaviour. Yet, such behaviours are key to understanding sustainable consumption. The article starts with an overview of values as...
motivators of consumer behaviour, and refers specifically to Schwartz’s value theory and to the particular values of personal and socio-political materialism. Next, hypotheses relating socially conscious consumer behaviour and frugal consumer behaviour to the values are developed and tested by means of a quantitative UK-based survey of the general public. Finally, the implications, limitations and potential extensions of the research are discussed.

**Value theory and consumer behaviour**

Values provide ‘guides for living the best way possible’ for individuals, social groups and cultures (Rohan, 2000, p. 263). More specifically, values are defined as enduring beliefs that pertain to desirable end states or behaviours, transcend specific situations, guide selection or evaluation of behaviour and events, and are ordered by importance (Schwartz and Bilsky, 1987, p. 551). Individuals are understood to acquire values through socialization and learning experiences (e.g. Rokeach, 1973, pp. 23–24), and the particular relevance of values to ecologically conscious consumer behaviour is said to be because of the nature of environmental issues as ‘social dilemmas’, where short-term narrow individual interests conflict with the longer term social interest (e.g. Osbaldiston and Sheldon, 2002). Accordingly, researchers have consistently demonstrated the importance of values that transcend selfishness and promote the welfare of others (including nature) for this behavioural domain (e.g. Karp, 1996; Stern et al., 1999; Milfont et al., 2006). While most of these studies are correlational, the presumption that causality proceeds predominantly from values through to behaviour is given support by Thogerson and Ölander’s (2002) longitudinal study.

Values are fairly distal influences on consumer behaviour; their impact is mediated and moderated by factors such as worldviews, personal norms, the self-concept, attitudes, and situational or contextual influences (see Rohan, 2000 for an overview). As such, the predictive power of values for ecologically conscious consumer behaviour is often low, ranging between just a few percent (e.g. Thogerson and Sheldon, 1997) up to approximately 20% (e.g. Karp, 1996). This so-called ‘value-action gap’ (Verplanken and Holland, 2002) does not, however, invalidate the use of value theory for understanding behavioural motivations. Ignoring mediating and moderating constructs is justified when examining more general patterns of behaviour, and is helpful for a first approximation and for reasons of parsimony (Thogerson and Ölander, 2002, pp. 608–609). Furthermore, when comparing different types of behaviour, the relative strengths of the influence of values can be compared.

**Schwartz’s value theory**

Shalom Schwartz’s (1992, 1994) theory of universal aspects of the content and structure of human values represents a significant advance on previous value theories, enabling the systematic study of relationships between the full spectrum of human values and other constructs such as self-reported behaviour. As such, the theory continues to be widely used among psychologists. It has been empirically validated in at least 65 countries (Schwartz, 2003, p. 266).

<table>
<thead>
<tr>
<th>Value type</th>
<th>Description</th>
<th>Example values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Social status and prestige, control or dominance over people and resources</td>
<td>Social power Authority</td>
</tr>
<tr>
<td>Achievement</td>
<td>Personal success through demonstrating competence according to social standards</td>
<td>Successful Capable</td>
</tr>
<tr>
<td>Hedonism</td>
<td>Pleasure and sensuous gratification for oneself</td>
<td>Pleasure Enjoying life</td>
</tr>
<tr>
<td>Stimulation</td>
<td>Excitement, novelty and challenge in life</td>
<td>Daring Exciting life</td>
</tr>
<tr>
<td>Self-direction</td>
<td>Independent thought and challenge in life</td>
<td>Creativity Freedom</td>
</tr>
<tr>
<td>Universalism</td>
<td>Understanding, appreciation, tolerance and protection for the welfare of all and for nature</td>
<td>Social justice Protecting the environment</td>
</tr>
<tr>
<td>Benevolence</td>
<td>Preservation and enhancement of the welfare of people with whom one is in frequent personal contact</td>
<td>Helpful Forgiving</td>
</tr>
<tr>
<td>Tradition</td>
<td>Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide</td>
<td>Humble Devout</td>
</tr>
<tr>
<td>Conformity</td>
<td>Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms</td>
<td>Politeness Obedient</td>
</tr>
<tr>
<td>Security</td>
<td>Safety, harmony and stability of society, of relationships and of self</td>
<td>National security Social order</td>
</tr>
</tbody>
</table>

Adapted from Schwartz (1994, p. 22).

In terms of the content of human values, the theory specifies 10 motivational value types (see Table 1), which are operationalized by a battery of 56 or 57 individual values contained in the Schwartz Value Survey (SVS). The value structure (i.e. the set of relationships between values) is theoretically grounded in the compatibility of and conflicts between values. Multidimensional scaling of respondents’ ratings of the importance of the values yields a circular structure known as a circumplex (see Fig. 1). Value types whose pursuit is compatible appear adjacent in the circumplex, whereas conflicting values appear opposite each other. The polarities of the axes of the circumplex denote four higher order value types. The first dimension is openness to change (consisting of self-direction, stimulation and hedonism) vs. conservation (consisting of security, conformity and tradition), relating to the conflict between the motivation for people to follow their own interests in unpredictable directions, and the motivation to preserve the status quo and the certainty it provides in relationships with others. Self-enhancement (power, achievement and hedonism) and self-transcendence (universalism and benevolence) form the second dimension, representing the extent to which values motivate people to enhance their own interests even at the expense of others, vs. transcending them and promoting the welfare of others (Schwartz, 1992, pp. 43–44).
Because of the pattern of compatibilities and conflicts among values, ‘every hypothesis that specifies the association of one value type with an outside variable has clear implications for the associations of the other value types as well’ (Schwartz, 1992, p. 54). In brief, correlations between the priority given to the value types and an outside variable should follow a (roughly) sinusoidal pattern. That is, if one commences from the most positively correlated value type (e.g. universalism, in the case of ecologically conscious consumer behaviour) and moves around the circumplex, the correlations should decrease to the most negatively correlated value type (power), and increase again as one completes the full cycle to the most positively correlated type.

Materialist values

The question of consuming less is central to sustainable consumption debates, whether framed as individuals’ choices to downshift or a societal focus on curbing economic growth. Consequently, an examination of the motivational importance of specific (anti-) materialist values for socially conscious and frugal consumer behaviours is warranted.

Research on materialist values has followed two strands. The first is concerned with personal values, that is, with values that relate to an individual’s own behaviour and goals (Mueller and Wornhoff, 1990). Richins and Dawson’s (1992) and Richins’ (2004) Material Values Scale (MVS) is the most widely used construct of ‘personal materialism’ (Ahuvia and Wong, 2002), and is defined as ‘the importance ascribed to the ownership and acquisition of material goods in achieving major life goals or desired states’ (Richins, 2004, p. 10).

The second strand of materialist values research concerns ‘socio-political materialism’ (Ahuvia and Wong, 2002), and employs the notion of social values, that is, the goals an individual holds for society (Mueller and Wornhoff, 1990). Sociologist Ronald Inglehart, drawing on Maslow’s hierarchy of needs (Maslow, 1970), understands materialism as a focus on ‘lower order’ needs for material comfort and physical safety over ‘higher order’ needs for self-expression, affiliation, aesthetic satisfaction and quality of life (Inglehart, 1990, pp. 66–68). Postmaterialism is the converse of materialism. Socio-political materialists view economic growth, low crime rates and strong national defence as important social priorities, whereas postmaterialists place greater emphasis on freedom of speech, giving people more of a say in government decisions, and enhancing the natural environment. Inglehart (1977, 1990) and Inglehart and Welzel (2005) document a large-scale shift in western society from materialist to postmaterialist values over recent decades. According to Inglehart’s theory, materialist and postmaterialist values are mutually exclusive. However, various other researchers have empirically demonstrated that materialism/postmaterialism may in fact be multidimensional, and that it is possible to endorse both types of values simultaneously (e.g. Bean and Papadakis, 1994; Braithwaite et al., 1996).

Theoretical consideration and empirical research suggest that personal and socio-political materialism relate somewhat differently to the SVS (e.g. compare the results of Richins and Dawson, 1992, Sharpe, 1999 and Burroughs and Rindfleisch, 2002 with Braithwaite et al., 1996 and Wilson, 2005). In addition, socio-political materialism and postmaterialism do not appear to be directly opposed on the value circumplex (Zavestoski, 1998). Personal materialism aligns along the self-enhancement–self-transcendence dimension, correlating most positively with power and most negatively with universalism. In comparison, socio-political materialism is more about maintaining stability and the status quo. It is essentially a security value, and aligns along both dimensions of the value circumplex; positively with self-enhancement and conservation values, and negatively with self-transcendence and openness to change values. Socio-political postmaterialism is about universalism, and exhibits essentially the reverse pattern of correlations with the SVS to personal materialism.
Study hypotheses

Little research has examined socially conscious consumer behaviour in the context of social psychological value theory. Nonetheless, given that such behaviour is directed towards safeguarding and improving the welfare of others, it should align with the value circumplex in a similar manner to ecologically conscious consumer behaviour. Individuals who strongly value self-transcendence values, particularly universalism, and who disfavour self-enhancement values would be more likely to engage in socially conscious consumer behaviour. In agreement with this hypothesis, Shaw et al. (2005) found that universalism was the most important value type involved in fair trade grocery shopping, and Cowe and Williams (2000) found that socio-political postmaterialists were more likely to report concern about ethical issues and to buy accordingly.

H1: Socially conscious consumer behaviour will align strongly along the self-enhancement–self-transcendence dimension of the value circumplex (positively with self-transcendence values, and negatively with self-enhancement values) and weakly along the conservation–openness to change dimension. The most positive correlation will be with universalism.

H2: Socially conscious consumer behaviour will be negatively related to personal materialism.

H3: Socially conscious consumer behaviour will be negatively related to socio-political postmaterialism.

H4: Socially conscious consumer behaviour will be positively related to socio-political postmaterialism.

In contrast, within an undifferentiated sample, it is more difficult to ascertain the value antecedents of frugal consumer behaviour. If a frugal lifestyle is not voluntarily chosen, then the relationships with values may be weak. As Tatzel (2002, p. 120) notes, a ‘non-spender’ lifestyle can be both an adaptation to involuntary poverty as well as a deliberate choice. To that extent, frugality should be expected to reflect income. It is also possible that, even if freely chosen, similar lifestyle outcomes may express very different purposes and meanings (McDonald et al., 2006). Voluntarily curtailing personal consumption may be linked with altruistic motivations for some (e.g. Etzioni, 1998; Shaw and Newholm, 2002). However, research suggests that it is most often driven by more self-interested desires such as to reduce stress, to achieve more balance in life, to spend more time with family (e.g. Schor, 1998; Hamilton, 2003) and to attain an authentic sense of self (Zavestoski, 2001). In addition, some people say they live simply because of their religious beliefs (Huneke, 2005). Further, striving for self-determination and self-sufficiency are also central to the philosophy of voluntary simplicity (e.g. Elgin, 1993).

Empirical work on the value priorities of voluntary simplifiers indicates that they are more concerned with personal growth, community interactions, social and environmental issues, and religion or spirituality, and less concerned with the importance of work, security, health, financial success and popularity (Craigh-Lees and Hill, 2002; Brown and Kasser, 2005), and that they disfavour personal materialism (Richins and Dawson, 1992) and socio-political materialism (Zavestoski, 1998). However, frugal consumer behaviour may be positively associated with security values, and likewise relating frugality and socio-political materialism.

These studies suggest that frugal consumption should be positively influenced by values along an arc of the Schwartz circumplex from conformity and tradition [because of the association of these values with religiosity (Saroglou et al., 2004)], through self-transcendence values, to self-direction. Clearly, people who value the enhancement of the self (power, achievement) should be less likely to consume frugally, given that frugality is about self-restraint and not self-promotion, and while frugality may foster pleasure and enjoyment of the simple things in life [see Soper and Thomas’ (2006) discussion of ‘alternative hedonism’], in a society in which the dominant perception of self-indulgence is associated with high levels of consumption, hedonism would also be expected to relate negatively to frugality. Frugality should be unrelated to security and to socio-political materialism, however, to the extent that frugality may correlate positively with universalism, it may also be positively related to socio-political postmaterialism.

H5: Frugal consumer behaviour will align along both dimensions of the value circumplex, positively with conservation values (except for security) and self-transcendence values, as well as with self-direction, and negatively with self-enhancement values.

H6: Frugal consumer behaviour will be negatively related to personal materialism.

H7: Frugal consumer behaviour will be unrelated to socio-political materialism.

H8: Frugal consumer behaviour will be positively related to socio-political postmaterialism.

To test these hypotheses, selected findings of a UK-based survey study on religion and sustainable consumer behaviours in the context of value theory (Pepper, 2007) are now presented. The study included questions on consumer behaviours, values, demographics, religion and well-being, however, the results concerning religion and well-being are not relevant to the present article and are not presented here.

Method

Sample and procedure

In March and April 2006, 2000 questionnaires were hand-delivered to approximately every second house in six localities in south-east England. These localities represented a diversity of areas in terms of socio-economic classification.

Respondents were informed that they were taking part in an anonymous survey study about lifestyles and values, and a prize draw for four £50 gift vouchers was offered as an incentive to participate. Two hundred and sixty complete and valid questionnaires were returned, corresponding to a 13% response rate. This is not an atypically low response (see e.g. Frazer and Lawley, 2000, p. 74), and a depressed response rate was also to be expected in Woking, which is surveyed relatively frequently because of its relative affluence and proximity to a university.

There were gender and education biases in the samples. Sixty-six per cent of respondents were female, and 59% held a level four or five qualification, compared with 27% of the town’s population at the time of the 2001 English Census. The mean age of the
sample (M = 50 years, SD = 16 years) was very similar to the census figures for the adult population. The median reported annual income was £30 000–£40 000, as compared with the Neighbourhood Statistics data estimate of approximately £42 200 in 2001–2002.

### Consumer behaviours

Respondents indicated how often they engaged in 14 consumer behaviours on a seven-point scale (1 = never, 7 = always). Twelve of these behaviours were used to form six-item ‘socially conscious purchasing’ and ‘frugal purchasing’ scales, by taking the average score of the component items. Details of a preliminary study on the development of these scales are available upon request from the authors. A confirmatory factor analysis on the scale items (using LISREL 8.71, maximum likelihood method) demonstrated an acceptable fit. All standard fit indices met Hu and Bentler’s (1999) criteria for measurement models [$\chi^2(52) = 80.58$, $P < 0.01$, standardized root mean square residual = 0.053, root mean square error of approximation = 0.046, comparative fit index = 0.97, Tucker-Lewis index = 0.97]. The scale items and standardized factor loadings are contained in Table 2. The scales displayed good reliability ($\alpha_{socially\ conscious\ purchasing} = 0.78$, $\alpha_{frugal\ purchasing} = 0.77$) and were not significantly correlated ($r = 0.12$, not significant (NS)).

### Schwartz value types

Respondents rated the importance of each value in the SVS (a version provided by Schwartz in February 2006), as a guiding principle in their life, using a nine-point scale (−1 = opposed to my values, 0 = not important, 7 = of supreme importance). Ten cases were excluded through the application of specified screening criteria, and mean-centred scores on the indices for the 10 value types were then calculated as directed by Schwartz (1992, 1994, 2005). After checking the indices by means of smallest space analysis (using MicrOsiris Statistical Analysis and Data Management System 9.0, Van Eck Computer Consulting, Derry, PA, USA) and by reliability analysis, two modifications were made. Firstly, because of the absence of a clear tradition type in the smallest space analysis plot, and a poor reliability for the index ($\alpha = 0.59$), a combined conformity–tradition value type was constructed ($\alpha = 0.74$). It consisted of all four conformity values and two of the tradition values (‘humble’ and ‘accepting my portion in life’). Secondly, substitution of the value ‘healthy’ for ‘reciprocation of favours’ in the security value type resulted in improved reliability ($\alpha = 0.58–0.62$). Reliabilities for the value types ranged from 0.62 to 0.76, and were consistent with those reported by Schwartz (1992, p. 52).

### Personal materialism

Participants indicated their extent of agreement on a five-point scale (1 = strongly disagree, 5 = strongly agree) with the 15 statements from the recently improved MVS (Richins, 2004). An example statement is ‘I admire people who own expensive homes, cars and clothes’. The MVS was constructed as directed by Richins (2004), taking the average score of the component items. The scale demonstrated good reliability ($\alpha = 0.84$).

### Socio-political materialism and postmaterialism

The 12-item version of Inglehart’s postmaterialism construct, as contained in the 1995 and 2000 World Values Survey (World Values Survey, 2006), was used. Example goals are ‘a high level of economic growth’ (materialism) and ‘trying to make our cities and countryside more beautiful’ (postmaterialism). However, rather than employing Inglehart’s ranking approach, respondents rated how important they thought each of the 12 goals should be for the UK on a five-point scale (1 = not at all important, 5 = extremely important) (after Bean and Papadakis, 1994). This approach allowed for a factor analysis on all 12 items. Principal axis factorizing with varimax rotation yielded two factors, corresponding to materialism and postmaterialism, and explaining 39.8% of the variance in the items. The calculated six-item socio-political materialism and postmaterialism scales exhibited good reliabilities ($\alpha = 0.78$ for both scales) and were moderately correlated ($r = 0.29$, $P < 0.001$).

### Socially desirable responding

Socially desirable responding (SDR), the tendency to give answers that make the respondent look good, is considered one of the most pervasive forms of response bias in self-report measures.
Behaviours to do with fulfilling moral and social responsibilities (e.g. giving to charity) are susceptible to over-reporting (Sudman and Bradburn, 1982, p. 33). Furthermore, there is a general lack of research on the effect of SDR on pro-social and pro-environmental consumer behaviour (Mick, 1996, p. 117), although the results of Kaiser et al. (1999) suggest that pro-environmental behaviour may be only marginally susceptible to SDR. Therefore, a measure of SDR was included in the questionnaire to enable response bias to be partialled from correlations between values and behaviours. The instrument chosen was the 12-item short form of the impression management (IM) subscale of Paulhus’ Balanced Inventory of Desirable Responding (D.L. Paulhus, unpublished). The scale reliability was adequate ($\alpha = 0.66$).

**Demographics**

Finally, respondents indicated their sex, age (in years), education (highest qualification), marital status, working status and annual gross household income (measured on an 11-point summary scale, $0 = £9999 or less, 10 = £100 000 or more). The inclusion of demographics enabled a comparison of the relationships between values and consumer behaviour on the one hand, and demographics and consumer behaviour on the other.

**Results**

Zero-order correlations, correlations with IM controlled, and regressions between the consumer behaviours and three sets of independent variables: value types, materialism, and demographics, were performed. The correlation analysis (Table 3) was conducted in order to test H1–8. The regressions (Table 4) indicated the extent to which the sets of variables predicted consumer behaviours over and above IM. A separate sequential regression was conducted for each set, with IM entering the model first (step 1), followed by the independent variables (step 2A = value types, step 2B = materialism, step 2C = demographics).

**Schwartz value types**

Socially conscious purchasing correlated most positively with universalism ($r = 0.37, P < 0.001$), positively with benevolence ($r = 0.19, P < 0.01$), and negatively with power ($r = -0.20, P < 0.01$) and achievement ($r = -0.17, P < 0.01$) as expected. Of the openness to change and conservation value types, only security was a significant correlate ($r = -0.24, P < 0.001$). Socially conscious purchasing was not significantly correlated with IM ($r = 0.12, NS$), and all significant correlations with the values types were retained when controlling for IM. Thus, H1 was confirmed. The value types were relatively strong predictors of socially conscious purchasing, explaining an additional 19% of the variance [$F_{\text{change}}(9, 239) = 6.47, P < 0.001$]. Universalism was the strongest predictor ($\beta = 0.33, P < 0.001$).

Frugal purchasing correlated positively with conformity–tradition ($r = 0.21, P < 0.001$) and universalism ($r = 0.14, P < 0.05$) as expected, but not with benevolence or self-direction. Power and hedonism were negative correlates as expected ($r = -0.21, P < 0.001$ and $r = -0.28, P < 0.001$ respectively). There was also an unexpected negative correlation with stimulation ($r = -0.17, P < 0.01$). IM and frugal purchasing were moderately correlated ($r = 0.26, P < 0.001$). The correlations between frugal purchasing and values were attenuated somewhat when controlling for IM, losing statistical significance in the case of universalism. Thus, there was only partial confirmation of H5. Regressing the value types on frugal purchasing explained an additional 9% of the variance [$F_{\text{change}}(9, 239) = 2.95, P < 0.01$]. The impact of benevolence, the strongest predictor ($\beta = -0.23, P < 0.01$), is interesting, because there was no significant relationship at the bivariate level, and the regression coefficient was in the opposite direction to that predicted. When other values are controlled, frugal people value benevolence less, suggesting a connection between frugality and a lack of generosity.

**Materialism**

Socially conscious purchasing correlated negatively with the MVS ($r = -0.24, P < 0.001$), and positively with socio-political materialism ($r = 0.24, P < 0.001$), in accordance with H2 and H4 respectively. These relationships were retained when controlling for IM. The correlation with socio-political materialism was negative but not significant, therefore, H3 was unconfirmed. Addition of materialism to the regression added 10% to the variance explained in socially conscious purchasing [$F_{\text{change}}(3, 245) = 9.31, P < 0.001$], and postmaterialism was the strongest predictor ($\beta = 0.25, P < 0.001$). Both socio-political and personal materialism were weak negative predictors ($\beta = -0.16, P < 0.05$ and $\beta = -0.14, P < 0.05$ respectively).

Frugal purchasing was negatively correlated with personal materialism ($r = -0.37, P < 0.001$), and the relationship was retained when IM was controlled, thus, supporting H6. Frugal purchasing was not significantly correlated with socio-political materialism or postmaterialism. Thus, H7 was confirmed but not H8. The materialism variables increased the variance explained in frugal purchasing by 10% [$F_{\text{change}}(3, 245) = 9.59, P < 0.001$].

**Discussion and conclusions**

**Review and theoretical significance of our findings**

This study has made a unique contribution to research on the motivations for sustainability-related consumer behaviour by...
Summary statistics and correlations for study variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (SD)</th>
<th>Correlation with SCP</th>
<th>Correlation with FP</th>
<th>Correlation with IM</th>
<th>Correlation with Universalism</th>
<th>Correlation with Benevolence</th>
<th>Correlation with COTR</th>
<th>Correlation with Security</th>
<th>Correlation with Power</th>
<th>Correlation with Achievement</th>
<th>Correlation with Hedonism</th>
<th>Correlation with Stimulation</th>
<th>Correlation with Self-direction</th>
<th>Correlation with Power</th>
<th>Correlation with Income</th>
<th>Correlation with Full MVS</th>
<th>Correlation with SP MV</th>
<th>Correlation with SP PMV</th>
<th>Correlation with Education</th>
<th>Correlation with Working status</th>
<th>Correlation with Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCP</td>
<td>3.00 (1.07)</td>
<td>0.78</td>
<td>0.77</td>
<td>0.72</td>
<td>0.69</td>
<td>0.68</td>
<td>0.56</td>
<td>0.46</td>
<td>0.39</td>
<td>0.24</td>
<td>0.21</td>
<td>0.18</td>
<td>0.13</td>
<td>0.08</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.03</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>FP</td>
<td>5.19 (0.87)</td>
<td>0.77</td>
<td>0.76</td>
<td>0.68</td>
<td>0.58</td>
<td>0.51</td>
<td>0.41</td>
<td>0.35</td>
<td>0.29</td>
<td>0.21</td>
<td>0.18</td>
<td>0.15</td>
<td>0.12</td>
<td>0.09</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.04</td>
<td>0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>Full MVS</td>
<td>3.88 (2.94)</td>
<td>0.77</td>
<td>0.76</td>
<td>0.68</td>
<td>0.58</td>
<td>0.51</td>
<td>0.41</td>
<td>0.35</td>
<td>0.29</td>
<td>0.21</td>
<td>0.18</td>
<td>0.15</td>
<td>0.12</td>
<td>0.09</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.04</td>
<td>0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>SP MV</td>
<td>3.81 (2.94)</td>
<td>0.77</td>
<td>0.76</td>
<td>0.68</td>
<td>0.58</td>
<td>0.51</td>
<td>0.41</td>
<td>0.35</td>
<td>0.29</td>
<td>0.21</td>
<td>0.18</td>
<td>0.15</td>
<td>0.12</td>
<td>0.09</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.04</td>
<td>0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>SP PMV</td>
<td>3.81 (2.94)</td>
<td>0.77</td>
<td>0.76</td>
<td>0.68</td>
<td>0.58</td>
<td>0.51</td>
<td>0.41</td>
<td>0.35</td>
<td>0.29</td>
<td>0.21</td>
<td>0.18</td>
<td>0.15</td>
<td>0.12</td>
<td>0.09</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.04</td>
<td>0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>Sex</td>
<td>0.07 (0.87)</td>
<td>0.68</td>
<td>0.67</td>
<td>0.63</td>
<td>0.60</td>
<td>0.60</td>
<td>0.56</td>
<td>0.45</td>
<td>0.39</td>
<td>0.30</td>
<td>0.27</td>
<td>0.24</td>
<td>0.18</td>
<td>0.13</td>
<td>0.09</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
<td>0.06</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.07 (0.87)</td>
<td>0.68</td>
<td>0.67</td>
<td>0.63</td>
<td>0.60</td>
<td>0.60</td>
<td>0.56</td>
<td>0.45</td>
<td>0.39</td>
<td>0.30</td>
<td>0.27</td>
<td>0.24</td>
<td>0.18</td>
<td>0.13</td>
<td>0.09</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
<td>0.06</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Education</td>
<td>0.07 (0.87)</td>
<td>0.68</td>
<td>0.67</td>
<td>0.63</td>
<td>0.60</td>
<td>0.60</td>
<td>0.56</td>
<td>0.45</td>
<td>0.39</td>
<td>0.30</td>
<td>0.27</td>
<td>0.24</td>
<td>0.18</td>
<td>0.13</td>
<td>0.09</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
<td>0.06</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Working status</td>
<td>0.07 (0.87)</td>
<td>0.68</td>
<td>0.67</td>
<td>0.63</td>
<td>0.60</td>
<td>0.60</td>
<td>0.56</td>
<td>0.45</td>
<td>0.39</td>
<td>0.30</td>
<td>0.27</td>
<td>0.24</td>
<td>0.18</td>
<td>0.13</td>
<td>0.09</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
<td>0.06</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Income</td>
<td>3.84 (2.59)</td>
<td>0.78</td>
<td>0.77</td>
<td>0.72</td>
<td>0.69</td>
<td>0.68</td>
<td>0.56</td>
<td>0.46</td>
<td>0.39</td>
<td>0.30</td>
<td>0.27</td>
<td>0.24</td>
<td>0.18</td>
<td>0.13</td>
<td>0.09</td>
<td>0.08</td>
<td>0.07</td>
<td>0.07</td>
<td>0.06</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>n</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- Indicates IM is partialled from the correlation.
- SD, standard deviation; IM, impression management; SCP, socially conscious purchasing; FP, frugal purchasing; COTR, conformity–tradition; MVS, material values scale; SP (P)MV, socio-political (post)materialism; SVS, Schwartz Value Survey; NA, not applicable.
- Demographic variables (except for age and income) were dichotomized as follows: sex (0 = male, 1 = female), marital status (0 = not married, 1 = married/dwelling as married), education (0 = no level 4/5 qualification, 1 = level 4/5 qualification) and working status (0 = not working, 1 = working).
- Reliability coefficients are on the diagonal.
- n = 250. The 10 cases excluded during SVS scale construction were excluded from all analyses. Other missing values were imputed by mean substitution (one each on IM, SP MV, age and education; two on SP PMV; and five on income).
conducting a systematic survey of the value antecedents of two relatively under-researched behavioural domains, evidencing marked differences between these motivations within the general public. The particular importance of universalism and socio-political postmaterialism for socially conscious purchasing suggests that socially conscious consumer behaviour, like its ecological counterpart, is an expression of people’s pro-social and pro-environmental values. The reported post-World War II shift from socio-political materialist to postmaterialist values, which has purportedly led to growing public concern about ‘New Politics’ issues like the environment and gender equality (e.g. Inglehart, 1977, 1990; Inglehart and Welzel, 2005), plays itself out in socially conscious buying choices. Socially conscious consumer behaviour addresses social justice critiques of consumerism to a degree. However, as defined and operationalized in this research, this type of behaviour may, to some extent, be consistent with consumerism in that it does not necessarily entail consuming less. Indeed, socially conscious purchasing and frugal purchasing were uncorrelated. The negative relationship between socially conscious purchasing and personal materialism indicates that socially conscious purchasing is linked somewhat with anti-consumerist motivations on a personal level. In addition, socio-political materialism was a negative predictor of socially conscious purchasing, however, its influence was weak, suggesting that socially conscious purchasing does little to challenge people’s perceptions of the importance of consumption growth at the macro scale.

In comparison with socially conscious purchasing, frugal purchasing related more strongly (negatively) to personal materialism. And although personal materialism relates negatively to universalism, however, its influence was weak, suggesting that socially conscious purchasing does little to challenge people’s perceptions of the importance of consumption growth at the macro scale.

### Table 4 Summary of sequential regression analysis for values and demographics predicting consumer behaviours

<table>
<thead>
<tr>
<th></th>
<th>Socially conscious purchasing</th>
<th>Frugal purchasing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>t-score</td>
</tr>
<tr>
<td>Step 1&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM</td>
<td>0.11</td>
<td>1.82</td>
</tr>
<tr>
<td>Step 2A (Schwartz Value Survey)&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM</td>
<td>0.02</td>
<td>0.35</td>
</tr>
<tr>
<td>Universalism</td>
<td>0.33</td>
<td>4.11</td>
</tr>
<tr>
<td>Benevolence</td>
<td>0.10</td>
<td>1.29</td>
</tr>
<tr>
<td>Conformity–tradition</td>
<td>–0.04</td>
<td>–0.44</td>
</tr>
<tr>
<td>Security</td>
<td>–0.20</td>
<td>–3.00</td>
</tr>
<tr>
<td>Power</td>
<td>0.01</td>
<td>0.08</td>
</tr>
<tr>
<td>Achievement</td>
<td>–0.06</td>
<td>–0.89</td>
</tr>
<tr>
<td>Hedonism</td>
<td>0.02</td>
<td>0.30</td>
</tr>
<tr>
<td>Stimulation</td>
<td>–0.01</td>
<td>–0.08</td>
</tr>
<tr>
<td>Self-direction</td>
<td>–0.16</td>
<td>–2.23</td>
</tr>
<tr>
<td>Step 2B (materialism)&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM</td>
<td>0.05</td>
<td>0.72</td>
</tr>
<tr>
<td>Full MVS</td>
<td>–0.14</td>
<td>–2.12</td>
</tr>
<tr>
<td>SP MV</td>
<td>–0.16</td>
<td>–2.43</td>
</tr>
<tr>
<td>SP PMV</td>
<td>0.25</td>
<td>3.75</td>
</tr>
<tr>
<td>Step 2C (demographics)&lt;sup&gt;d&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM</td>
<td>0.25</td>
<td>4.22</td>
</tr>
<tr>
<td>Sex</td>
<td>–0.10</td>
<td>–1.60</td>
</tr>
<tr>
<td>Age</td>
<td>0.05</td>
<td>0.71</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.20</td>
<td>3.24</td>
</tr>
<tr>
<td>Education</td>
<td>0.09</td>
<td>1.48</td>
</tr>
<tr>
<td>Working status</td>
<td>–0.07</td>
<td>–0.98</td>
</tr>
<tr>
<td>Income</td>
<td>–0.35</td>
<td>–4.75</td>
</tr>
</tbody>
</table>

<sup>a</sup>For socially conscious purchasing: F = 3.31, R² = 0.01, NS; for frugal purchasing: F = 18.80, R² = 0.07, P < 0.001.

<sup>b</sup>For socially conscious purchasing: F = 6.22, R² = 0.21, P < 0.001; for frugal purchasing: F = 4.65, R² = 0.16, P < 0.001.

<sup>c</sup>For socially conscious purchasing: F = 7.89, R² = 0.11, P < 0.001; for frugal purchasing: F = 12.33, R² = 0.17, P < 0.001.

<sup>d</sup>Regression was not conducted for socially conscious purchasing because all zero-order correlations were insignificant. For frugal purchasing: F = 10.24, R² = 0.23, P < 0.001.

IM, impression management; MVS, material values scale; SP (P)MV, socio-political (post)materialism; NS, not significant.

Demographic variables dichotomized as for Table 3. n = 250. The 10 cases excluded during SVS scale construction were excluded from all analyses. Other missing values were imputed as for Table 3.
and social justice considerations do not appear to be the main motivations for frugal consumption among the general public. Frugality is not primarily an ‘ethically conscious’ choice, ‘intentionally responsive to social and ecological conditions’ of ‘excessive and unfair consumption and production’, as championed by Nash (2000, p. 169). As such, frugality is yet to be fully developed as a moral challenge to consumerism.

There are some parallels between these findings and social psychological research on energy consumption. Household energy use is primarily related to income and household size, rather than to psychological variables such as pro-environmental attitudes and obligations (Gatersleben et al., 2002; Abrahamse, 2007). As Jensen (2002, p. 171) has noted, ‘environmental awareness in everyday life is not achieved through a small consumption of energy and water, but from demonstrating a respect for the environmental agenda, e.g., by buying green products . . . [making it] possible for the light saving bulb to give far more social recognition than cancelling the holiday, or moving to a smaller house in the name of the environment, which would instantly stamp the family as “sanctimonious” or “strange” ’. Likewise, Connolly and Prothero (2003) found that consumers understand pro-environmental activities in terms of practices such as recycling and purchasing green products, and not in terms of reducing levels of consumption. Lastovicka et al. (1999) and Fujii (2006) also found that resource-saving behaviours were predicted by positive attitudes towards frugality rather than by environmental concern.

**Limitations and future research**

The low response rate and the educational bias in the sample notwithstanding, confirmation of the majority of the study hypotheses gives confidence in the findings of the research. Further studies with a broader range of respondents would build confidence in the generalizability of the results.

As is well known, self-reported behaviours are not actual behaviours. Rather, they reflect people’s perceptions and beliefs about their behaviours (Gatersleben et al., 2002). Thus, for example, the frugal purchasing scale is really about the extent to which people consider (and represent) themselves to be frugal. The study findings suggest that frugal consumer behaviour is somewhat susceptible to social desirability bias. In contrast, socially conscious consumer behaviour, like ecologically conscious consumer behaviour (Kaiser et al., 1999), appears to be largely uncontaminated by SDR. Despite the shortcomings of the socially conscious and frugal purchasing scales (and self-reported behaviour measures in general, e.g. Schwarz, 1999), the results of the study clearly underscore the importance of understanding the motivations for pro-social intention-orientated behaviour in order to encourage it (Stern, 2000, p. 408). An extension of the research could be to examine actual consumption patterns and their relationships to self-reported behaviours. Future research could also develop more complex models of socially conscious and frugal consumer behaviours, such as Stern et al. (1999) have done in the case of ecologically conscious consumer behaviour.

**Broad implications of the research**

If sustainable consumption requires not just consuming differently but also consuming less, the findings of this research provide little grounds for complacency. On the basis of the demographic and value antecedents of frugal consumer behaviour, the factors that may most strongly facilitate the adoption of more frugal ways of living seem to be a decrease in personal materialism and/or a decrease in household income – whether voluntarily (e.g. down-shifting) or involuntarily (e.g. a recession). Given that values are purported to be a product (although not exclusively) of socialization, a values shift may take some years. Other options are the development of community discourses that link frugality more strongly with the value priorities of a particular culture or cultural group. In the present case, these include high benevolence, security and universalism, and low power value priorities. Using other theoretical frameworks, one could also invoke the ways in which consumption practices may symbolize identification with particular social groups (e.g. Dittmar, 1994), and/or simply be socially normative in particular socio-historical contexts (e.g. Shove, 2003). For example, Bekin et al. (2007) have examined how, in alternative consumption communities, frugality is valued and collectively facilitated and promulgated, even to the point of serving as a means of social distinction.

While it may be possible for shifts such as these to occur more broadly than just among the radical few, in a culture in which people are perhaps more reliant than ever before on consumption for the fulfillment of various social and psychological goals (e.g. Jackson, 2006a), the barriers to negotiating such changes in meaning are marked. As Campbell (1994, p. 518) has noted, ‘consumerism probably reflects the moral nature of contemporary existence as much as any other widespread moral practice; significant change here would therefore require no minor adjustment to our way of life, but the transformation of our entire civilization’. In the final analysis, in a world of finite limits, sustainability may well entail forced or voluntary restraints on consumption. Exploring the motivational basis for restraint thus remains a challenge to all who seek to understand consumer behaviour.

---

**References**


Values and sustainable consumer behaviours

M. Pepper et al.


