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The rubbish of marketing

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Abstract: One of the “by-products” of successful marketing, in the single-use packaged fmcg sector is litter. For example, in a recent Australian survey, empty coke cans were found in 91 per cent of the 983 towns and cities researched. In this paper, we begin to use marketing literature and practice to tackle what we see as a marketing problem – persuading consumers to change their behaviour and not drop litter. Firstly, we demonstrate that existing ways of capturing data about consumers’ littering behaviour and attitudes towards litter are flawed. Secondly, we propose and test a new, more realistic, “proxy” for littering behaviour and attitudes towards litter, “litter recall”. Finally, we investigate whether there are differences in values between those that are more likely to drop litter and those that are not. These findings are of use to researchers and practitioners interested in using marketing practice to develop, for example, more effective anti-littering campaigns.

Keywords Branded litter, Littering behaviour, Post-consumption, Fmcg’s, Consumer values

In an age of consumption and consumerism the marketing discipline has matured to the point where many organisations accept, as a given, the importance of being customer led and market focussed. Therefore, this is an opportune time to reassess the position of the subject within the broader field of management and critically reflect on the development and potential of marketing to make a contribution to future wellbeing.

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Nowhere is marketing practice more prevalent and sophisticated than in the fast moving consumer goods sector. Companies such as Procter and Gamble, Mars Group, Unilever and Coca Cola remain customer-led and market-focussed through marketing mix innovations such as single use packaging, new product development and new forms of promotion; all activities that form the backbone of “traditional marketing”, which is the focus upon micro-consumer behaviour at the pre-consumption stage. That is, getting consumers to recognise, recall and purchase the brand. Unfortunately, with this success comes an unwanted “externality” – litter, “the rubbish of marketing” – a very negative contribution to society’s wellbeing. Previous research by Roper and Parker (2006) highlighted the occurrence of “branded litter” in a city-centre environment, with empty Walker’s Crisps packets being the most common item of litter found. Similarly, in the *Keep Australia Beautiful Branded Litter Survey* 2007, empty Coke packaging was found in 91 per cent of the 983 sites researched. Over 50 tonnes of litter is collected in Edinburgh, Scotland each day through street bin collections and street cleaning (The City of Edinburgh Council 2007). According to a recent study the British drop more than 2.25 million pieces of litter each day (Symphony Environmental 2005). The above citations may be seen as an example of excessive consumption and even of the increasing commercialisation of public space (where the pavement or the gutter are alternative marketing communication channels), areas that marketing and its role in the creation of the consumer society is often criticised for (Schor and Holt 2000). The practice of marketing is lambasted for many other ills e.g. social competitiveness, creating artificial wants and needs and a negative impact upon indigenous cultures, not to mention global warming (Weitz and Wensley 2006). However, here we highlight an opportunity for marketing to work for the good of society. In this paper we begin to use marketing literature and practice to tackle what we see as a marketing problem – persuading consumers to change their behaviour *and not drop litter*.

LITTER DROPPING: A CONSUMER BEHAVIOUR PERSPECTIVE

Belch and Belch (2004) define consumer behaviour as “*the process and activities people engage in when searching for, selecting, purchasing, using, evaluating, and disposing of products and services so as to satisfy their needs and desires*” (p107). Most definitions of consumer behaviour include consumers’ post-consumption behaviour (containing reference to, for example, the usage of the product), nevertheless, compared to studies investigating consumers’ pre-purchase behaviour, there is very little available literature concerning disposal. Where they do exist, studies focus upon disposal behaviour (Bekin et al. 2007; Harrell and McConocha 1992), macro-environmental concerns, such as the exhaustion of landfill (Babu et al. 2007; Birtwistle and Moore 2007; Kassaye and Verma 1992), the economic “costs” of being green (Kassaye 2001) and ethical consumers (Bone and Corey 2000). There has been little application of marketing principles to the problem of litter, despite the disposal of empty packaging being a component of consumer behaviour (Jacoby et al. 1977)

Despite the relative lack of interest in litter disposal in marketing, environmental campaign groups in both the UK and Australia have engaged market research agencies to provide an analysis of litter dropping behaviour. In Australia, consultants Community Change (Curnow, Williams and Strecker 1997), commissioned by the Victorian Litter Action Alliance, identified nine types of littering behaviour; from “flagrant flinging” (used items are thrown or dropped with no apparent concern)

through to “brimming” (balancing litter on the edge of an already-full bin), in other words a typology of *how* people drop litter. Studies have also looked at *who* drops litter. As far back as 1968, Keep America Beautiful identified that twice as many males littered than females and that those under 35 years old were twice as likely to litter as those between 35-49 years old. By 1977, littering rates between males and females was found to be similar (Geller et al. 1976, 1977). Nevertheless, the relationship between age and litter-dropping behaviour appears consistent. The Symphony Environmental 2005 study identified that “16-24 year olds drop three times as much litter as the rest of the population”. Previous research has also tried to establish people’s attitudes towards litter. The Symphony Environmental 2005 study referred to above labelled Britain “a nation of hypocritical litter thugs” as 99 per cent of the study’s 1015 respondents thought people should dispose of their litter properly. Others have questioned the value of attitudinal surveys in determining the extent to which respondents choose statements that reflect their actual littering behaviour rather than choosing those they believe are socially acceptable responses (Curnow et al. 1997). This is an example of ‘social desirability bias’ or “*the wish for individuals to answer survey questions based not on their true feelings, but on the desire to present themselves in the most favourable manner possible based in what they perceive to be the social norms and mores of their region*” (Smith 2006; p. 917). There is precedent for this in questioning respondents on environmentally friendly behaviour. Lyons et al. (2002) state that two-thirds of respondents claim to recycle wherever possible whereas the government target for the amount of recycling is to reach a goal of 30% by 2010. This may explain why it is not only those that *do not* drop litter who think that it should be disposed of correctly. If we are going to use marketing techniques and tactics to try and change consumers’ litter-dropping behaviour it is important to be able to measure it. This leads us to our first two hypotheses relating to self-reported litter dropping behaviour and attitudes to litter.

*H₁ There will be no difference in self-reported litter dropping behaviour between those that are very **unlikely** to drop litter and those that are more **likely** to drop litter*

*H₂ There will be no difference in attitudes towards litter between those that are very **unlikely** to drop litter and those that are more **likely** to drop litter*

If survey data based on self-reported behaviour and attitudes is not reliable, then a different approach is needed to gather more accurate information about who drops litter. Again, turning to marketing practice, there are more techniques in marketing research than questions prompting self-reported behaviour and attitudinal statements. For example, in advertising research, respondents are asked to name brands that they have seen advertising messages from in the last seven days (unprompted recall), “*recall tests are designed to test the impression particular advertisements have made on the memory of the target audience*” (Fill 2005; p.480). This is a method that could be adapted to litter. We would expect those individuals who are genuinely concerned about litter (in other words have a stronger ‘attachment’ to it) to recall seeing it.

*H₃ Those **that are more concerned** about litter are more likely to recall seeing litter*

In order to be effective any policy or practical interventions designed to stop people littering need to target litter droppers as “*without people litter would not exist*” (Campbell 2007, p6).

However, if we wish to really understand a person and their behaviour then we need to understand their values.

Values are our basic convictions about what is right and wrong; they are stable and enduring and will vary between generations, regions and cultures. Multiple disciplines including psychology, sociology and cultural anthropology have suggested that values may underlie much individual and collective behaviour (Munson and McQuarrie, 1988). Values can be personal or social. "*Social values define normal behaviour for a society or group whereas personal values define normal behaviour for an individual*" (Engel, Blackwell and Miniard 1995). However, we must recognise that the group to which we belong will have a substantial influence on the construction of our personal values.

Rokeach (1968) discusses the relationship between beliefs, attitudes and values. He discusses the prominent space that the study of social attitudes has held in the study of social psychology and makes the case that the value concept should receive prominence over that of attitude. In justifying his view he states that the value concept has very strong motivational components, that value is a determinant of attitude as well as behaviour and is a more economical tool for analysis as an individual has far fewer values than attitudes. Rokeach (p159) defines the terms stating that "*an attitude is a package of beliefs consisting of interconnected assertions to the effect that certain things about a specific object or situation are true or false.*" However, values "*have to do with modes of conduct and end states of existence,*" they are "*an enduring belief that a specific mode of conduct or end state of existence is personally or socially preferable to alternatives.*" Once recognised, therefore a value will guide action for developing and maintaining attitudes towards objects or situations. Whereas an attitude represents several beliefs focussed upon an object or situation, a value "*is a single belief that transcendentally guides actions*" (p160). Attitudes are therefore derived from values, a value being a benchmark to direct actions, attitudes, comparisons, evaluations and justifications of both ourselves and others. Clawson and Vinson (1978) elaborate on this definition stating that values may prove to be one of the most powerful explanations of, and influences on consumer behaviour.

Individual values do not exist in isolation; of course, they are placed along with all other values the individual may have in a value system. The concept of a value system suggests that some values are more important than others – that there is a rank-ordering of values along a continuum. An individual's value system is a learned organisation of rules for making choices and resolving conflicts between two or more modes of behaviour or two or more states of existence.

Values have been used in consumer research in two main ways; in value hierarchies and/or value instrumentality assessments. Values instrumentality focuses on the means-ends chain attempting to link values to behaviour. Much of this work is very much based on relating the desire for certain product attributes to particular value systems of individuals. The expectation is that differential value orientations will directly lead to predilection for particular products and brands (e.g. Vinson et al. 1977; Reynolds 1985). The benefit of the value hierarchy method is that it allows researchers to describe quantitatively the values of many diverse groups and contrast these values with people from other groups. The most widely used method of calculating value hierarchies in consumer research is the Rokeach Value Survey (Rokeach 1973). This scale has been utilised to assist studies using values to profile different cultural groups, sub-cultures, social classes as well as assist in market segmentation exercises (Munson and McQuarrie 1988).

The Rokeach Value Survey (RVS) distinguishes the two sets of values mentioned,

instrumental and terminal and supplies 18 items of each, for example - helpful, honest, imaginative (instrumental values i.e. preferable modes of behaviour), and terminal values (desired end-states of existence) e.g. a world at peace, a world of beauty, equality. The values in each hierarchy are rank-ordered in terms of their importance to the individual's life. The RVS is therefore a series of goals and ways of behaving that respondents are asked to rank in order of importance. Using the median rank allows the overall rank order of values for a sample to be determined (Kamakura and Mazzon 1991).

Vales are an established component of consumer behaviour research, used to explain/explore differences in beliefs and attitudes, “*standards for human life in general*” (Munson and McQuarrie 1988; p.282) and, of particular relevance to littering behaviour, Williams’ notion of values as standards of conduct. This leads us to our final hypothesis:

*H₄ There will be a difference in values between those that are very **unlikely** to drop litter and those that are more **likely***

METHODOLOGY

In order to understand more about litter-droppers and litter dropping behaviour, this paper researches two diverse groups of people. Firstly, Master’s students were surveyed at a major UK Business School. These students, form part of the demographic group of 16-24 year olds who previous research has found are *most likely to litter* (www.encams.org), (n=58). Secondly, employees of ENCAMS (n=43) were similarly surveyed. ENCAMS (Environmental Campaigns) is a not for profit charity with approximately 120 employees who campaign directly to the public. They are best known for their “Keep Britain Tidy” campaign which has been running in various guises for more than 50 years. ENCAMS employees surveyed here ranged from environmental surveyors (people that survey town and city centres assessing the quantity and impact of litter) to managers, who contribute to the formation of policy and legislation relating to litter. The ENCAMS group, therefore, represented people who were likely to be concerned about litter and are therefore, *most unlikely to litter*.

The research was conducted in three parts. Firstly respondents were shown a series of five pictures (an example of which is shown in Figure 1). Each picture showed an urban scene and contained litter (of various quantities). Respondents observed the pictures for 10 seconds before being given 30 seconds to write, in as much detail as they could, what they had seen in the picture. Following this the next picture was

FIGURE 1 Example picture



shown and this process repeated until respondents had produced written comments on all 5 pictures.

The second phase of the study was to establish the values of the two groups. The Rokeach Value Survey (RVS) was utilised in order to assess the two sets of values, instrumental and terminal. Respondents were issued with a values survey and were requested to put their instrumental and terminal values in rank order from 1 to 18. Following this, respondents answered a short questionnaire requesting information on their attitudes towards litter and their self-reported littering behaviour together with demographic information (age, gender, nationality, employment status and level of educational attainment).

RESULTS AND DISCUSSION

For H_1 (there will be no difference in self-reported litter dropping behaviour between those that *are very unlikely* to drop litter (ENCAMS) and those that are *more likely* (students)) respondents were asked to choose between a number of statements describing their litter dropping behaviour. See Table 1.

A chi-square test was computed and showed no significant difference ($p = <.005$) between the two groups across the four statements ($p = .067$). H_1 is therefore supported.

For H_2 (there will be no difference in attitudes towards litter between those that are very unlikely to drop litter (ENCAMS) and those that are more likely (students)) respondents answered four attitudinal statements on a 10 point scale from disagree strongly (0) to agree strongly (10). See Table 2.

An independent samples t-test for equalities of means was conducted across the two groups. There was no significant difference between the groups ($p = <.005$).

TABLE 1 Self-reported litter behaviour

	Respondent		Total
	ENCAMS	Student	
I have never littered	6	17	23
I have littered (but not today)	35	33	68
I have littered today	1	2	3
I am unsure if I have ever littered	1	6	7
Total	43	58	101

TABLE 2 Attitudes towards litter

	Students	ENCAMS	p
People would drop less litter if there were more bins available	7.90	6.74	.070
I think litter is a serious problem in most urban areas	8.02	7.33	.106
It is important that people do not litter	9.00	9.09	.750
Littering is a form of anti-social behaviour	7.19	8.33	.022

in each of the 4 attitudinal statements. Therefore, H_2 is supported. H_1 and H_2 demonstrate the futility of including such measures, even though “*surveys of public attitudes and interviews have been used as an accepted means of assessing anti-littering interventions*” (New South Wales Littering Behaviour Interventions 1998). There is surely evidence of social desirability bias at work here. It is interesting that 29% of the student cohort denied ever having dropped litter whereas only 14% of the ENCAMS group claimed the same. That is, the cohort comprising the age group known to be the most prolific litterers claim to be better behaved in this regard than those whose job it is to identify litter and prevent its occurrence.

In relation to H_3 (those that are more concerned about litter are more likely to recall seeing litter); respondents were asked to record in their own words what they had seen after being shown each photograph. For example, in relation to photograph in Figure 1, responses included “*TESCO metro on left - shopping precinct (sic). On PO Box by phone box there is a McDonald's cup and a burger wrapper*” and “*Market Street, entrance of Clinton, Tesco Express a man standing with two shopping bags, a telephone cabinet*”. In many cases, respondents went into quite a lot of detail about what they saw in the picture, “*(a) picture of Market Street in central Manchester by the doorway to the Arndale Centre and entrance of Urban Outfitters. People are waiting and browsing along the street. A pillar or lamp post is blocking the view*”. In total, our 101 respondents used 10,481 words to describe the 5 pictures (equating to, on average 21 words per respondent per photograph). All these responses were entered into a spreadsheet, ad verbatim, and a new variable category was created for each photograph, the value of 1 was assigned when the respondent mentioned litter (or any synonyms), such as in the first response referred to above. Conversely, the value of 0 was assigned where the respondent had not mentioned seeing litter, such as in the second response.

A total “recall litter” score was computed for each respondent, ranging from 0 (did not recall seeing litter in any photo) to 5 (recalled seeing litter in all photos). An independent samples t-test for equalities of means was conducted across the two groups (ENCAMS employees and students). The mean recall litter score for ENCAMS employees was 2.44 and for students was 0.53 ($p = .000$). H_3 is also therefore supported. Even though ENCAMS employees and students saw exactly the same photographs, and wrote, on average, the same amount of description about each photograph, they recalled seeing different things. To illustrate, when shown the last photograph (Figure 2) an ENCAMS manager responded “*Quiet road near offices, litter in channel (front of photo on double yellow lines)*” whereas a student, shown

FIGURE 2 Photograph 5



the same photograph, responded “*a quiet road with double yellow line and clear road markings*”. Each respondent recalled seeing the road, commenting upon how quiet it was and seeing double yellow lines. Even though the litter (in this case a crushed can of Red Bull) is in the foreground of the picture by the side of the double yellow lines both respondents recalled seeing, only the ENCAMS manager mentioned litter.

In the future, researchers may wish to use the “recall litter” item as a proxy for attitudes towards litter and/or litter-dropping behaviour as it appears to generate a more realistic result. For example, in our survey students were nearly three times more likely than the ENCAMS managers to have reported that they had ‘never littered’, even though they were in the age group of those that drop three times more litter than the rest of the population! In this case, it is likely that our student respondents were under reporting their litter dropping behaviour due to the social unacceptability of littering; an example of the social desirability bias (Nancarrow and Brace 2000). Finally, for H_4 (there will be a difference in values between those that are very unlikely to drop litter and those that are more likely to drop litter), all respondents were asked to rank their terminal and instrumental values (Rokeach 1973) in order of importance to them (1 = most important; 18=least important). See Table 3 below. An independent samples t-test for equalities of means was conducted across the two groups (ENCAMS employees and students). For those values marked by an asterisk (*) a significant difference was found. (Recognition $p = .002$; Helpful $p = .004$). According to Rokeach and Ball-Rokeach (1989), “*it is safe to assume that a difference of three or more ranks is significant or highly significant*” (p.780). Those values that are placed more than three ranks apart by ENCAMS personnel and students are identified by a cross (+). According to the Rokeach and Ball-Rokeach method, we

TABLE 3 Ranking of terminal and instrumental values (ENCAMS and students)

	Ranking of Terminal Values		Ranking of Instrumental Values	
	ENCAMS	Students	ENCAMS	Students
1	Happiness	Happiness	Honest	Honest
2	Family Security	Family Security	Loving+	Responsible
3	Freedom	Freedom	Responsible	Broadminded
4	Friendship	Friendship	Cheerful	Cheerful
5	Self Respect	Self Respect	Helpful*+	Independent
6	Harmony	Comfortable	Broadminded	Loving+
7	Pleasure	Pleasure	Independent	Ambitious+
8	Comfortable	Wisdom	Polite+	Capable
9	Wisdom	Harmony	Capable	Intellectual
10	Peace+	Exciting	Courageous	Self-controlled+
11	Love	Accomplishment	Intellectual	Helpful*+
12	Exciting	Recognition*+	Forgiving	Polite+
13	Accomplishment	Love	Ambitious+	Courageous
14	Equality	Peace+	Imaginative	Imaginative
15	Beauty	Equality	Logical	Forgiving
16	Recognition*+	National security	Self-controlled+	Logical
17	National security	Beauty	Clean	Obedient
18	Salvation	Salvation	Obedient	Clean

identify significant differences between 2 terminal values (peace and recognition) and 5 instrumental values (loving, helpful, polite, ambitious and self-controlled).

As the instrumental values are “*preferable models of behaviour*” (Munson and McQuarrie, 1988; p. 381) then they are closer, or more representative, of actual behaviour. Given that we expected to find a difference in actual litter dropping behaviour between the two groups (ENCAMS and students) then this difference may be reflected in their different instrumental values.

Nevertheless, despite some differences, mainly in instrumental values, both groups have exactly the same “top 5” terminal values. This is despite differences in age, nationality, employment status and qualifications across the two groups – all factors previous research has demonstrated should impact upon peoples’ values (Rokeach and Ball-Rokeach 1989).

To persuade students to not drop litter, anti-littering campaigns that are targeted to their values may be more effective. Campaigns relating to recognition (reinforcing/threatening status) or ambition (e.g. successful people don’t drop litter) may be more appropriate in targeting this group that are more likely to litter.

CONCLUSIONS AND FUTURE RESEARCH

By investigating a social problem (litter) by drawing from existing consumer behaviour literature, this paper demonstrates “the potential of marketing to make a contribution to future wellbeing”. We feel marketers should make some attempt to solve a problem they have had some role in creating. In particular, this paper has demonstrated that to further our understanding of littering behaviour, a more creative approach to research needs to be taken. Self-report and attitude data is unreliable but “recall litter” is likely to be a more reliable proxy measure. ENCAMS (the “Keep Britain Tidy” Group) have already requested to use our new measure in their campaign evaluations. ENCAMS run a number of high-profile, anti-litter media campaigns each year. To quantify its proxy value, future research may include using a similar method as was used in New South Wales, Australia whereby one set of researchers observed the behaviour of litterers and binnners (people who disposed of their litter in a bin). Another set of researchers then interviewed those that had been observed, however, as both sets of researchers were in contact by two-way radio it was possible to link each respondent to their previous behaviour (although this was done post-interview, to reduce the possibility of interviewer bias). If behavioural observations of respondents were made before being exposed to the “recall litter” measure, we would be able to quantify the exact explanatory power of this proxy measure.

The fact that over one-third of our sample did not recall seeing any litter at all (even when it was very prominent in the picture) demonstrates a real practical marketing challenge. How do we get consumers to see this *product*? If they are not noticing litter, then perhaps it has become an accepted part of the streetscape. As de Coverly et al. (2003; p. 5) note “*waste is regarded as an inevitable consequence of the society in which we live*”. Socialisation against litter campaigns have a “don’t drop litter message”; this may not be effective if consumers are ‘immune’ to it. Organisations, such as ENCAMS, may need to concentrate their advertising budget on raising awareness of the occurrence of litter. These are all directions for future research and we encourage more researchers to get involved in the area of litter and marketing, thereby contributing to future wellbeing.

REFERENCES

- Babu, B. R., Parande, A. K. and Basha, C. A. (2007), "Electrical and Electronic Waste: A Global Environmental Problem", *Waste Management & Research*, Vol. 25, No. 4, pp. 307-319.
- Belch, G. E., and Belch, M. A. (2001), *Advertising and Promotion: An Integrated Marketing Communications Perspective*, 5th Edition: New York, NY: McGraw-Hill.
- Bekin, C., Carrigan, M. and Szmigin, I. (2007) "Beyond Recycling: 'Commons-friendly' Waste Reduction at New Consumption Communities", *Journal of Consumer Behaviour*, Vol. 6, No. 5, pp. 271-286.
- Birtwistle, G. and Moore, C. M. (2007), "Fashion Clothing - Where Does it all End Up?" *International Journal of Retail & Distribution Management*, Vol. 35, No. 3, pp. 210-216.
- Bone, P. F. and Corey, R. J. (2000), "Packaging ethics: Perceptual Differences Among Packaging Professionals, Brand Managers and Ethically-interested Consumers", *Journal of Business Ethics*, Vol. 24, No. 3, pp. 199-213.
- Campbell, F. (2007), "People who Litter," *ENCAMS Research Report*, Wigan: Environmental Campaigns Ltd
- Clawson, C. J. and Vinson, D.E. (1978) "Human Values: A Historical and Interdisciplinary Analysis." In Hunt, H. K. (ed.) *Advances in Consumer Research*, Vol. 5, No. 1, pp. 396-402.
- Curnow, R. C, Williams, E and Streker, (1997), "Observing National Litter Behaviour" , Paper published in proceedings of *WASTECH 1997 Conference, Melbourne*.
- Community Change Consultants Report, (1998), *What Works: New South Wales Littering Behaviour Interventions*.
- De Coverley, E., O'Malley, L. and Patterson, M. (2003), "Hidden Mountain: The Social Avoidance of Waste", *International Centre for Corporate Social Responsibility Research Paper Series*, Nottingham University Business School.
- Engel, J. F, Blackwell, R. D. and Miniard, P. W. (1995), *Consumer Behaviour*, 8th Edition, Fort Worth: Dryden Press.
- Fill, C., (2005), *Marketing Communications*, 4th Edition, Harlow: FT Prentice Hall.
- Geller, E. S., Witmer, R.A. and Orebaugh, A.L., (1976), "Instructions as a Determinant of Paper-disposal Behaviors," *Environment and Behaviour*, Vol. 8, No. 3, pp. 417-438.
- Geller, E.S., Witmer, R.A. & Tusso, M.E., (1977), "Environmental Interventions for Litter Control," *Journal of Applied Psychology*, Vol. 62, No. 3, pp. 344-351.
- Harrell, G. D. and McConacha, D. M. (1992), "Personal Factors Related to Consumer Product Disposal Tendencies," *The Journal of Consumer Affairs*, Vol. 26, No.2, pp. 397-417.
- Jacoby, J., Berning, C. K. and Dietvorst, T. F. (1977), "What about disposition", *Journal of Marketing*, Vol. 41, No.2, pp.22-28.
- Kamakura, W. A. and Mazzon, J. A. (1991) "Value segmentation: A model for the measurement of values and value systems", *Journal of Consumer Research*, Vol. 18, No. 2, (Sept), pp. 208-218.
- Kassaye, W. W. (2001), "Green Dilemma," *Market Intelligence and Planning*, Vol. 19, No. 6, pp. 444-455.
- Kassaye, W. W. and Verma, D. (1992), "Balancing Traditional Packaging Functions with the New 'Green' Packaging Concerns," *SAM Advanced Management Journal*, Autumn, Vol. 57, No. 4, pp. 15-25.
- "Keep Australia Beautiful Branded Litter Survey", (May 2007). McGregor Tan Research, Project No. 6584, published September 2007.
- Lyons, E., Uzzell, D. and Storey, L. (2002), "Surrey Waste Attitudes & Actions Study," Department of Psychology, University of Surrey, Available at: <http://www.psy.surrey.ac.uk/Research/download/WasteReport.pdf> [Accessed 11th August 2008].
- Munson, J. M. and McQuarrie, E. F. (1988), "Shortening the Rokeach Value Survey for use in Consumer Research," *Advances in Consumer Behaviour*, Vol, 15, No. 1, pp. 381-386.
- Nancarrow, C. and Brace, I. (2000), "Saying the 'Right' Thing: Coping with Social Desirability

- Bias in Marketing Research”, *Bristol Business School Teaching and Research Review* 1, pp. 8-16.
- New South Wales Littering Behaviour Intentions, (1998), “*What Works*”, published by Beverage Industry Environmental Council.
- Reynolds, T. J. (1985) “Implications for value research: A macro vs. micro perspective”, *Psychology and Marketing*, Vol. 2, No. 4, pp. 297-305.
- Rokeach, M. (1968), *Beliefs, Attitudes and Values*, San Francisco: Jossey-Bass,
- Rokeach, M. (1973), *The Nature of Human Values*, New York: The Free Press.
- Rokeach, M and Ball-Rokeach, S. J. (1989) “Stability and Change in American Value Priorities, 1968-1981”, *American Psychologist*, Vol. 44, No. 5, pp. 775-784
- Roper, S. and Parker, C. (2006), “How (and Where) the Mighty Have Fallen: Branded Litter,” *Journal of Marketing Management*, Vol. 22, No. 5, pp. 473-487.
- Schor, J. B. and Holt, D. B. (2000), “*The Consumer Society Reader*”, New York: New Press.
- Smith, W. W. (2006), “Social Desirability Bias and Exit Survey Responses: The Case of a First Nations Campground in Central Ontario, Canada”, *Tourism Management*, Vol. 28, No. 3, pp. 917 -919
- Symphony Environmental Study (2005), “Britain a Nation of Hypocritical Litter Thugs,” Available at: http://www.degradable.co.uk/downloads/media/Release_Litter_190705.pdf [Accessed 29th February 2008].
- The City of Edinburgh Council (2007), “What a Difference a Day makes to the Environment”. Available at: http://www.edinburgh.gov.uk/internet/internet_homepage/Council_news/What%20a%20Difference%20a%20Day%20Makes%20to%20the%20Environment%20-%2024%20May%202007 [Accessed 31st May 2007].
- Vinson, D. E., Scott, J. E. and Lamont, L.M. (1977) “The Role of Personal Values in Marketing and Consumer Behaviour, *Journal of Marketing*, Vol. 44, April.
- Weitz, B. and Wensley, R. (2006) “*Handbook of Marketing*”, London: Sage.
- Williams, R.M. (1968) “Values”. In Sills, E. (ed.) *International Encyclopaedia of the Social Sciences*, New York: McMillan.
- <http://www.encams.org/campaigns/sub.asp?sub=27> [Accessed on 6th August 2008].

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