

GREEN LABELING PRACTICES

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ABSTRACT

This paper represents primary research that provides information and insight into consumers' perceptions of environmental labeling practices. Fifteen years after a previous study showing students regarding price as the most important factor in their choice, this study shows students viewing products with environmental seals in their packaging as equally important as price.

INTRODUCTION

Students have become increasingly aware of the threats on the environment. In 2005, this issue became even more prominent with the release of the movie "An Inconvenient Truth" by former Vice President Al Gore. Marketers have prescribed more societal consciousness and environmental awareness for the last 15 years (Boone & Kurtz, 2005). Issues like rapid generation of trash where projections suggest that American consumers will generate 40 percent more trash by 2010 with disposable packaging accounting for 30 percent, increasing pollution of air and water supplies, climate change, among others are taking center stage in schools and popular media (Ottman, 1992; Deveny, 1993; Taylor & Todd 1995). Marketers have responded by changing formulations of products as well as the packaging in order to minimize the impact of their products on the environment (CNN 2007). However, marketers have been cautioned to avoid "green marketing myopia" because possible backlash in green programs may consist of consumers believing the product to be inferior or the product may not really be that green to begin with (Ottman, Stafford, & Hartman 2006).

In 1996, Whitson and Henry conducted a study to determine whether respondents' will be influenced by the presence of seals and/or logos that certified that the laundry detergent was environmentally friendly. They had respondents go through a stack of 16 cards with different combinations of price, degree of concentration, whether detergent had regular or low suds formulas, the presence of phosphates, and the presence of either a green seal, a green cross or both. This study found that respondents fell into four distinct clusters. These were: Price Sensitive (46

percent), Package Convenience (11 percent), Environmentally Concerned (22 percent), and Symbolic Environmentally Concerned (10 percent). At the time, price was the most important factor and only the environmentally concerned respondents took the seals seriously in their product preference.

PURPOSE OF THE STUDY

This paper represents primary research that provides information and insight into consumers' perception of environmental labeling practices. This study replicates the Whitson and Henry (1996) study to see whether environmental awareness in the past twelve years have changed college students' perception regarding the value of environmental seals/logos in their choice of laundry detergents.

METHODOLOGY

This replication tries to adhere as closely as possible to the Whitson and Henry instrument. Price was determined to be \$4.49 and \$6.99. Box size at this time consists of concentrated and ultra concentrated. Suds was the same, i.e., regular suds and low suds. Phosphates and no phosphates was similar to the previous study. The green seal was used as well, however, green cross does not exist anymore. The authors, therefore, used the EPA Seal currently found in some product labels in the market.

Table 1 shows the Standardized Orthogonal Design for the various cards. A total of 16 cards were assembled according to that design. Students were from a public university in Southern California. This exploratory study had a sample consisting of 122 business students. Experimental stimuli were designed that required respondents to rank order their preferences in the laundry detergent product category. Respondents were given a deck of cards in which each card represented a hypothetical detergent. Respondents were asked to indicate how likely they were to purchase each detergent.

FINDINGS

The survey was conducted during the Summer and Fall quarters of 2008. Preliminary findings for 122 questionnaires analyzed showed that the sample

consisted of 47 percent males and 49 percent females. The majority (57 percent) were between the ages of 22-24 while 42 percent were between the ages of 17-21. Average household size was four and 88 percent did laundry at home. When asked who purchased detergents, only 33 percent of respondents did so. 57 percent of respondents did laundry once a week

TABLE 1
Standardized Orthogonal Design

Card	Price	Box Size	Suds	Phos.	Green Seal	EPA Seal
A	0	0	1	1	0	0
B	0	0	1	1	1	1
C	0	0	0	1	0	1
D	0	0	0	1	1	0
E	1	0	1	0	0	0
F	1	0	1	0	1	0
G	1	0	0	0	0	1
H	1	0	0	0	1	0
I	0	1	1	0	0	0
J	0	1	1	0	1	1
K	0	1	0	0	0	1
L	0	1	0	0	1	0
M	1	1	1	1	0	0
N	1	1	1	1	1	1
O	1	1	0	1	0	1
P	1	1	0	0	1	0

Price: 0 = Low (\$4.49); 1 = High (\$ 6.99)
 Box Size: 0 = Concentrated; 1 = Ultra
 Suds: 0 = With Suds; 1 = Low Suds
 Phosphates: 0 = Phosphates; 1= No Phosphates
 Green Seal: 0 = No Green Seal; 1 = Green Seal
 EPA Seal: 0 = No EPA Seal; 1 = EPA Seal

Table 2 shows the mean rank ordering of all the cards presented to 122 students.

CONCLUSION AND RECOMMENDATIONS

Laundry detergent was specifically chosen in the 1996 study because it represents an innocuous product that students considered a low involvement purchase. Marketers, on the other hand, are constantly searching for ways to improve their product offerings in the marketplace. Since environmental awareness seems to be gaining in importance, including seals and/or logos in labels might attract the environmentally conscious consumer. In 1996, price was found to be the most important factor. This study has found that although the lower price was more popular, students ranked those cards with the EPA seals as their top four preferences. The EPA seal is more popular than the

Green Seal, largely because it is better known as affiliated with a governmental agency.

Students were baffled about the issue of phosphates. They may not have known quite what it was, so it was not seen as a serious consideration. No clear patterns emerged for the variables box size and suds.

Further studies should include a more diverse sample as well as a larger sample size. This will allow for more complex statistical analysis.

TABLE 2
Mean Ordering of Cards

Rank	Card	Price	Box Size	Suds	Phos	Green Seal	EPA Seal
1 = 5.1	B	0	0	1	1	1	1
2 = 5.5	J	0	1	1	0	1	1
3 = 6.4	C	0	0	0	1	0	1
4 = 6.9	K	0	1	0	0	0	1
5 = 7.0	D	0	0	0	1	1	0
6 = 7.1	N	1	1	1	1	1	1
7 = 7.3	L	0	1	0	0	1	0
8 = 8.7	O	1	1	0	1	0	1
9 = 9.4	A	0	1	1	1	0	0
9 = 9.4	F	1	0	1	0	1	0
9 = 9.4	G	1	0	0	0	0	1
10 = 9.6	I	0	1	1	0	0	0
11 = 10	P	1	1	0	0	1	0
11 = 10	H	1	0	0	0	1	0
12 = 11	M	1	1	1	1	0	0
13 = 12	E	1	0	1	0	0	0

Price: 0 = Low (\$4.49); 1 = High (\$ 6.99)
 Box Size: 0 = Concentrated; 1 = Ultra
 Suds: 0 = With Suds; 1 = Low Suds
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 Green Seal: 0 = No Green Seal; 1 = Green Seal
 EPA Seal: 0 = No EPA Seal; 1 = EPA Seal

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