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Understanding the effectiveness of product placement: The roles of placement congruency and information processing

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Congruency vs. Incongruency.

Incidental vs. Deliberate Processing.

Processing. Two items were used to measure if the instructions indeed produced different types of information processing as intended. These two items were analyzed separately, because one item measured the involvement with the plot whereas the other measured the awareness of the placement in the program. Because participants in all the four conditions were asked to focus on the plot throughout their viewing, the involvement with the plot was not expected to differ between two different information processing conditions. These two different processing conditions would only influence participants' awareness of the placement. Thus, the scores on both items were submitted to a 2 (Congruency: Congruent vs. Incongruent) x 2 (Information processing: Incidental vs. Deliberative) ANOVA, separately. As intended by the manipulation, there was a significant main effect of information processing on the awareness of the placement, $F(1, 93) = 124.8$, $p < .01$. No other effects were significant. This indicated that the manipulation took effect because the participants in the deliberative processing condition were more aware of the product placement ($M = 4.06$) than were the participants in the incidental processing condition ($M = 2.42$). Also as expected, the main effect of information processing on participants' involvement with the plot was not observed ($F < 1$). No other effects were significant.

Placement. Two items were used to measure if the two products, *Tide* soap and *Dentyne* chewing gum, were good proxies of the congruent placement and incongruent placement, respectively. These two items were merged (Cronbach's $\alpha = 0.78$) and submitted to a 2 (Congruency: Congruent vs. Incongruent) x 2 (Information processing: Incidental vs. Deliberative) ANOVA. The results showed that there was a significant main effect of the placement, $F(1, 93) = 322.77$, $p < .01$. This suggested that as intended by the manipulation,

Tide was considered to fit the plot well and come out as expected in the context of the plot (M=3.77) than was Dentyne (M=2.08). No other effects were significant.

Recall

For free recall, the number of participants who listed the focal product, *Tide* or *Dentyne*, was recorded for each condition (see Table 1.1). A chi-square (χ^2) test showed that there were significantly more participants in the incongruent condition (68.2%) than the congruent condition (31.8%) who recalled the focal product without any aid, χ^2=5.82, p<.05. Hence H1a was supported. H1a was further tested for aided recall. The number of participants who recognized seeing the focal product was recorded for each condition (see Table 1.2). A chi-square test indicated that there were significantly more participants in the incongruent condition (63.9%) than the congruent condition (36.1%) who remembered seeing/hearing the focal product, χ^2= 4.74, p<.05. Hence H1a was also supported under the aided recall. These findings suggest that when product was placed in an unexpected fashion, more people tend to recall it or remember seeing/hearing it compared to when the product was placed in an expected fashion.

The effect of information processing depth on recall was also tested. For free recall, incidental processing tended to elicit higher product recall (M=61.4%) than did deliberate processing (M=38.6%), however, the effect was not significant, χ^2=2.27, n.s. The same pattern also occurred in the aided recall condition. See table 1.2. Hence, H1b was not supported. It was expected in H1c that a stronger effect of product placement on recall would emerge under the incidental processing condition than under the deliberative processing condition. A chi square test showed that the effect of product placement on

unaided or aided recall did not differ significantly between incidental processing and the deliberative processing conditions, $\chi^2 < 1$. Thus, H1c was not supported either.

Attitude

For the focal product, an attitude index was created by averaging participants' scores on the two attitudinal items (Cronbach's $\alpha = 0.65$), and submitted to a 2 (Congruency: Congruent vs. Incongruent) x 2 (Information processing: Incidental vs. Deliberative) ANOVA. There was a significant main effect of the type of product placement on attitudes, $F(1, 93) = 14.99$, $p < .01$, suggesting that the product in the congruent condition elicited more favorable attitudes (M=3.44) than the product in the incongruent condition (M=2.96). See Table 2.1. Thus, H2a was supported. There was also a significant main effect of the processing type on attitudes, $F(1, 93) = 51.74$, $p < .001$, suggesting that the participants in the deliberative processing condition had more favorable attitudes toward the products than participants in the incidental processing condition.

Further, these main effects were qualified by a marginally significant interaction effect, $F(1, 93) = 3.45$, $p = .06$. This suggested that the effect of product placement (congruent vs. incongruent) on attitude was moderated by the information processing type. One-way ANOVA was conducted in each information-processing condition to disintegrate the 2-way interaction. The results showed that the effect of product placement on product attitudes was significant in the incidental processing condition, $F(1, 93) = 14.86$, $p < .05$, and not significant in the deliberative processing condition, $F(1, 93) = 2.31$, n.s. Specifically, in the incidental processing condition, congruently placed product elicited more favorable attitudes (M= 3.12) than did incongruently placed product (M=2.44). Thus, H2c was supported. This implies that participants' attitudes are affected by the placement type only

Babin, Laurie A., and Sheri Thompson Carder (1996), "Viewers' Recognition of Brands Placed within a Film," *International Journal of Advertising*, 15, 140-151.

[illegible]

Balasubramanian, Siva K. (1994), "Beyond Advertising and Publicity: Hybrid Messages and Public Policy Issues," *Journal of Advertising*, 23 (December), 29-46.

[illegible]

[illegible]

[illegible]

Duke, Charles R., and Les Carlson (1993), "A Conceptual Approach to Alterative Memory Measures for Advertising Effectiveness," *Journal of Current Issues and Research in Advertising,* 15 (2), 1-14.

Fitzsimons, Gavan J., Wesley J. Hutchinson, and Patti Williams (2002), "Non-Conscious Influences on Consumer Choice," *Marketing Letters*, 13(3), 269-279.

[illegible]

Nelson, Michelle R. (2002), "Recall of Brand Placements in Computer/Video Games," *Journal of Advertising Research*, 42 (2), 80-92.

Shapiro, Stewart, and H. Shanker Krishnan (2001), "Memory-Based Measures for Assessing Advertising Effects: A Comparison of Explicit and Implicit Memory Effects," *Journal of Advertising*, 30(3), 1-13.

Shapiro, Stewart, Deborah J. Macinnis, and Susan E. Heckler (1997), "The Effects of Incidental Ad Exposure on the Formation of Consideration Sets," *Journal of Consumer Research*, 24 (June), 94-104.

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Product Attitude as a Function of Placement Congruency and Information Processing

	Information Processing		
Product Congruency	Incidental	Deliberate	Mean
Congruent	3.12	3.76	3.44
Incongruent	2.44	3.52	2.96
Mean	2.77	3.64	3.21

Table 3.1

General Attitudes toward Product Placement as a Function of Placement Congruency and Information processing

General Attitude	Factor	F Value
Placing products in TV programs, Realistic, and Acceptable if obvious (α=0.67)	Placement	0.343
	Processing	0.93
	Placement x Processing	0.46
Viewers subconsciously influenced	Placement	1.23
	Processing	0.44
	Placement x Processing	0.92
Acceptable if aware of its presence	Placement	0.007
	Processing	3.145*
	Placement x Processing	2.21
Prefer to see real brands in programs	Placement	0.19
	Processing	0.93
	Placement x Processing	0.46
I buy brands that I see	Placement	0.21
	Processing	0.67
	Placement x Processing	3.22*

Note: * $p<0.05$

Table 3.2
Table 3.2

Episode Knowledge/Familiarity as a Function of Placement Congruency and Information processing

Knowledge/Familiarity	Factor	F Value

Seinfeld left $1500 at the laundry	Placement		1.90
	Processing		1.90
	Placement x Processing		1.90
Add sand in washing machine	Placement	0.61	
	Processing		0.61
	Placement x Processing		0.12
Return to the old job	Placement		0.05
	Processing		1.68
	Placement x Processing		0.008
Sherry wore a purple dress	Placement		1.02
	Processing		2.45
	Placement x Processing		1.20
Jerry paid the fine	Placement		1.70
	Processing		0.51
	Placement x Processing		0.23
Fan of Seinfeld; Watched this Episode earlier; and Follow the reruns of *Seinfeld* (α=0.86)	Placement	3.31	
	Processing		0.16
	Placement x Processing		1.68