

The Psychological Effects of Empowerment Strategies on Consumers' Product Demand
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WEB APPENDIX

PILOT STUDY

One objective of Study 3 is to test the proposed "empowerment – product demand" effect in a systematically different product category. First, we assume that the product category examined in Studies 1 and 2 (Threadless T-shirts) is self-expressive or delivers social value. This social value "reflects the utility derived from a product category's ability to enhance social self concept" (Sweeney and Soutar 2001, p. 211). It appears likely that T-shirts are used by consumers – and in particular by the populations studied – as a means of expressing themselves and communicating their social identity, thereby satisfying social needs such as the need for approval (e.g., Michaelidou and Dibb 2006). One might challenge whether the findings from Studies 1 and 2 related to product demand would also hold for products of potentially lower social relevance (as empowerment might be less important and its effects weaker in this context).

Second, we assume that T-shirts are highly hedonic in nature (cf. Michaelidou and Dibb 2006). This means that such products are purchased predominantly for pleasure and they satisfy experiential needs (e.g., it is fun and enjoyable to purchase, own and use such products). For our research context, scholars most importantly suggest that consumers are *less* price-sensitive and more eager to pay a premium for highly hedonic products (Wakefield and Inman 2003). In a vein similar to the arguments above, this leads to the question of whether the findings from Studies 1 and 2 can be generalized to product categories where consumers pay less attention to hedonic benefits. From this perspective, the specific benefit of empowerment is clearly more hedonic (i.e., having an impact and assuming psychological ownership of the outcome) than utilitarian (i.e., the

product provides better functions and performance), and one might question whether the effects on product demand (WTP) would hold for *less* hedonic products, also because consumers tend to be generally more price-sensitive in such categories.

Third, these two arguments might also lead to the general conclusion that T-shirts constitute a product category where emotions/feelings are highly relevant to purchase decisions (Michaelidou and Dibb 2006). What about product categories where emotions and feelings are generally less relevant? All of these considerations challenge the likelihood of replicating our findings in such domains. On the other hand, however, one could argue that empowerment and the related feelings (i.e., having an impact and assuming psychological ownership of the outcome) might even change the nature of the underlying products – that is, by making them more hedonic, increasing their social value, or making emotions more pronounced, etc. Overall, research has suggested that consumers' need and quest for more control and participation in the marketplace may be independent of the specific characteristics of the product category (Holt 2002). In turn, this would suggest that the effects on WTP could very well be generalized to such product categories. Studying such a systematically different product domain might therefore constitute an interesting and potentially important complement to Studies 1 and 2.

We chose to study breakfast cereals as a product category in Study 3 because it appears to be distinct from T-shirts in terms of the variables discussed. We tested our conjectures in a small pilot study ($n = 28$) using a within-subject design. In the pilot study, undergraduate students were exposed to pictures of a set of T-shirts (from Threadless) as well as a set of cereals (from the company Mycereal) and asked to complete a short questionnaire containing established scales to measure the degree to which the respective products render social value, are perceived to be hedonic (and utilitarian), and are perceived to be "emotional" (i.e., whether emotions are important to the purchase decision).

The products' potential social value is measured using four items based on seven-point Likert scales (where 1 = strongly disagree and 7 = strongly agree). The items are as follows: "Products in this category would help me to feel accepted," "Products in this category would improve the way I am perceived," "Products in this category would make a good impression on other people," and "Products in this category would give their owners social approval" (items taken from Sweeney and Soutar 2001; alphas > .77). Hedonism is measured using five seven-point semantic-differential scales with the anchors "not fun/fun" [1;7], "not exciting/exciting," "not delightful/delightful," "not thrilling/thrilling," and "unenjoyable/enjoyable." (Utilitarianism is also measured using five seven-point semantic-differential scales with the anchors "ineffective/effective" [1;7], "unhelpful/helpful," "not functional/functional," "unnecessary/necessary," and "impractical/practical") (items for hedonism and utilitarianism are taken from Voss, Spangenberg, and Grohmann 2003; alphas > .76). Finally, the degree to which emotions are important in consumer purchase decisions is measured using the following two seven-point Likert scales (where 1 = strongly disagree and 7 = strongly agree): "Emotions are not important in the purchase decision" and "The purchase decision is based on little feeling" (items are reverse-scaled; based on Ratchford 1987; alphas > .65; r 's > .48).

A comparison of means between T-shirts and cereals clearly supports our predictions. First, we find that consumers assign significantly higher social value to T-shirts ($M = 4.14$) than to cereals ($M = 2.03$; $p < .001$). Second, T-shirts ($M = 4.85$) are associated with significantly higher levels of hedonism compared to cereals ($M = 3.06$; $p < .01$). (In contrast, however, we find that our respondents perceive both product categories to be similarly utilitarian; T-shirts: $M = 4.82$; cereals: $M = 4.46$; *n.s.*). Third, emotions appear to be significantly more relevant to the purchase decision for T-shirts ($M = 5.02$; $p < .001$) than in the case of cereals ($M = 2.86$).

CONTROL VARIABLES (STUDY 1)

TABLE W1

	Group 1 (n = 76)	Group 2 (n = 73)	Group 3 (n = 60)	Group 4 (n = 55)	Differences (ANOVA) ³
Control variables	M (SD)	M (SD)	M (SD)	M (SD)	F- (<i>p</i> -)value
Product evaluation (5 sample T-shirts) ¹	2.74 (.93)	2.85 (.91)	2.78 (.79)	2.67 (.93)	.444 (.72)
Company evaluation ¹	2.92 (1.02)	2.88 (1.04)	2.97 (.90)	2.67 (1.00)	.976 (.40)
Income ¹	2.27 (1.70)	2.38 (1.58)	2.17 (1.46)	2.07 (1.45)	.424 (.74)
Product evaluation (5 final T-shirts) ²	2.22 (.99)	2.29 (.84)	2.37 (.85)	2.08 (.94)	1.032 (.38)

¹ Measured before treatment (*time 1*)

² Measured after treatment (*time 2*)

³ Across all of the control variables, no significant differences were identified between the groups (based on post-hoc tests [LSD]).

CONTROL VARIABLES (STUDY 2)

TABLE W2

	Group 1 (n = 65)	Group 2 (n = 63)	Differences (ANOVA)
Control variables	M (SD)	M (SD)	F- (<i>p</i> -)value
Product evaluation (5 sample T-shirts) ¹	3.55 (.90)	3.70 (.91)	.906 (.34)
Company evaluation ¹	3.40 (.86)	3.32 (.88)	.288 (.59)
Income ¹	2.73 (1.24)	2.98 (1.24)	1.112 (.29)
Product evaluation (4 final T-shirts) ²	3.74 (.73)	3.58 (.79)	1.395 (.24)

¹ Measured before treatment (*time 1*)

² Measured after treatment (*time 2*)

CONTROL VARIABLES (STUDY 3)

TABLE W3

	Group 1 (n = 59)	Group 2 (n = 50)	Group 3 (n = 51)	Group 4 (n = 43)	Differences (ANOVA)
Control variables	M (SD)	M (SD)	M (SD)	M (SD)	F- (<i>p</i> -)value
Product evaluations (1 sample cereal mix) ¹	3.92 (.97)	3.80 (.91)	3.62 (1.09)	3.79 (.93)	.848 (.47)
Company evaluations ¹	3.72 (.77)	3.86 (.76)	3.82 (.70)	3.58 (1.10)	.981 (.40)
Income ¹	2.47 (1.67)	2.76 (1.57)	2.94 (1.66)	3.08 (1.68)	1.140 (.34)
Product evaluations (3 final cereal mixes) ²	3.35 (1.07)	3.01 (1.08)	3.38 (.88)	2.98 (1.10)	2.149 (.09)

¹ Measured before treatment (*time 1*)

² Measured after treatment (*time 2*)

CONTROL VARIABLES (STUDY 4)

TABLE W4

	Group 1 (n = 69)	Group 2 (n = 65)	Group 3 (n = 74)	Group 4 (n = 72)	Differences (ANOVA)
Control variables	M (SD)	M (SD)	M (SD)	M (SD)	F- (<i>p</i> -)value
Product evaluation (1 sample mix) ¹	3.48 (1.09)	3.76 (.97)	3.49 (1.10)	3.71 (1.07)	1.338 (.26)
Company evaluation ¹	3.23 (.88)	3.17 (.78)	3.15 (.73)	3.31 (.80)	.560 (.64)
Income ¹	4.09 (2.07)	4.00 (2.02)	4.19 (2.14)	3.56 (1.99)	1.329 (.27)
Product evaluation (3 final mixes) ²	4.11 (.77)	3.89 (.82)	3.98 (.80)	3.85 (.85)	1.347 (.26)

¹ Measured before treatment (*time 1*)

² Measured after treatment (*time 2*)

REFERENCES

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