

Can McDonald's Food Ever Be Considered Healthful? Metacognitive Experiences Affect the Perceived Understanding of a Brand

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Web Appendix

THE PERCEIVED UNDERSTANDING MEASURE: EXPERIMENT 1

The first two items were adapted from an existing, validated psychological measure concerning the perceived coherence of social targets (Susskind et al. 1999). The remaining items were developed with a focus on brand representations. The internal consistency of the perceived understanding measure was high (mean $\alpha = .91$), ranging from .74 to .94 depending on the brand.

In an exploratory factor analysis using the principle axis factoring method (common factor analysis), one factor yielded an eigenvalue greater than one (3.73) and accounted for 74.65% of the explained variance. The factor loadings for individual scale items on this single factor are in the table below. All of the items loaded highly and positively on this factor, suggesting that these items measure a single construct.

Items	Factor Loading (Component 1)
1. To what extent do you think the characteristics of Hallmark are coherent? (1: <i>Not at all coherent</i> – 7: <i>Very coherent</i>)	.800
2. To what extent do you view Hallmark as an integrated brand? (1: <i>Not at all integrated</i> – 7: <i>Very integrated</i>)	.911
3. To what extent does Hallmark give you a concrete image about what this brand is like? (1: <i>Not at all concrete</i> – 7: <i>Very concrete</i>)	.892
4. To what extent do you think it is easy to explain your impression of Hallmark to other people? (1: <i>Not at all easy</i> – 7: <i>Very easy</i>)	.891
5. To what extent do you easily categorize what Hallmark is? (1: <i>Not at all easy</i> – 7: <i>Very easy</i>)	.630

FACIAL EXPRESSION MANIPULATION: EXPERIMENT 1

In the contracting instruction condition, to induce metacognitive difficulty, participants were given the following cover story:

In this particular experiment, we are interested in the tension that can be caused by working on a survey questionnaire. In order to test this, we have therefore developed a method to find out if people are prone to tenseness caused by this type of work. We would like you to simulate tension by making the facial

expression depicted below. To make this face, you should contract your brow by moving your eyebrows toward the center of your forehead as depicted in the photographs.

They were then instructed to keep their face arranged in this way until instructed to stop.

CONTENT ANALYSIS OF LISTED CHARACTERISTICS: EXPERIMENT 1

This analysis was based on information integration research (Andersen 1974). In this method, all of the characteristics that participants generated were pooled as a list and individually scaled for their typicality to the brand. Two judges rated how typical the characteristic was for the brand (1= *not at all typical* and 9=*very typical*). The inter-judge reliability was high ($r = .82$) and the scores were averaged to produce the typicality score for each characteristic. For example, for Hallmark, characteristics such as “more expensive brand” (8) and “celebration” (8) were rated higher on typicality, whereas “kick knacks” (1.5) and “stuffed toys” (2) were rated lower. For American Greetings, such characteristics as “all occasions” (9) and “online e-cards” (8) were rated higher whereas “cliché” (3) and “feminine” (2) were lower. The average typicality score for each participant’s list did not differ as a function of facial expression ($M_{\text{contracting vs. control}} = 6.65$ vs. 6.34; $F(1, 79) = 2.35, p = .13$), brands ($M_{\text{HM vs. AG}} = 6.63$ vs. 6.35; $F(1, 79) = 1.89, p > .17$) or their interaction ($F < 1$).

CONTENT ANALYSIS OF LISTED CHARACTERISTICS: EXPERIMENT 2

The same analysis of listed characteristics was conducted as in Experiment 1. The inter-judge reliability was $r = .63$. The characteristics that participants generated for American Greetings were judged more typical to the brand than for Hallmark ($M = 6.26$ vs. 5.75), perhaps because participants have more detailed knowledge structures and more idiosyncratic experiences with the established brand. More importantly, there were no other significant effects – including facial expression ($M_{\text{contracting vs. control}} = 5.90$ vs. 6.11 ; $F(1, 175) = 1.31$, NS) or misattribution cue condition ($M_{\text{noise vs. no noises}} = 6.13$ vs. 5.88 ; $F(1, 175) = 1.79$, NS).

VALIDATION OF THE TIME PRESSURE MANIPULATION: EXPERIMENT 4

A separate study ($n = 41$) was conducted to validate the time pressure manipulation. Participants responded to the key dependent measures in the normal print/no claim version of the survey. Two items were used to check the time pressure manipulation: “*What do you think about the time given to complete this survey?* [1: *Very Short*, 7: *Very Long*]” and “*When you completed this survey, to what extent did you feel you were hurrying versus taking your time?* [1: *I was really hurrying*, 7: *I was really taking my time*].” Perceptions about the amount of time to complete the survey did not differ based on the time pressure instruction ($M_{\text{Time pressure vs. No pressure}} = 5.15$ vs. 5.52 , $F < 1$). However, validating the manipulation, when people received the time pressure instructions (vs. no time pressure instructions), they felt more hurried ($M = 4.10$ vs. 5.00 , $F(1, 39) = 4.06$, $p = .05$). That is, although the actual time was identical, people in the time pressure condition felt significantly more rushed.