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# Celebrity Endorser Attractiveness, Visual Attention, and Implications For Ad Attitudes and Brand Evaluations: a Replication and Extension

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A PLS-SEM analysis based on eye tracking and survey data showed that attitudes toward the ad for print advertisements fully mediated the relationship between evaluations of endorser attractiveness and brand attitudes. Further, visual attention to the endorser influenced endorser attractiveness for one ad and ad attitudes for a second ad.

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# Celebrity Endorser Attractiveness, Visual Attention, and Implications for Ad Attitudes and Brand Evaluations: A Replication and Extension

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#### EXTENDED ABSTRACT

Previous research finds a positive and significant impact of endorser attractiveness on attitudes toward the ad, brand attitudes, and purchase intentions (Amos, Holmes, and Strutton 2008; Kahle and Homer 1985; Liu, Huang, and Minghua 2007; Silvera and Austad 2004). However, we suggest that an analysis of celebrity endorser attractiveness remains incomplete without considering an important previous stage of information processing, visual attention directed towards the endorser. Although attention is a crucial first step in any positive consumer response (Aribarg, Pieters, and Wedel 2010; Milosavljevic and Cerf 2008), according to our best knowledge, no study so far has examined how visual attention to the endorser is related to endorser attractiveness and attitudes toward the ad.

Based on previous research (Silvera and Austad 2004; Kamins 1990; Amos et al. 2008), we hypothesize that evaluations of endorser attractiveness have a positive influence on attitude toward the ad. Further, when controlling for brand familiarity (Campbell and Keller 2003), we expect attitude toward the ad to fully mediate the relationship between perceived celebrity attractiveness and attitude toward the brand (Kahle and Homer 1985; Shimp 1981; Till and Busler 2000). Finally, based on previous research on visual attention (Armel, Beaumel, and Rangel 2008; Fang, Singh, and Ahluwalia 2007; Grimes and Kitchen 2007; Maughan, Gutnikov, and Stevens 2007), we hypothesize that visual attention for the endorser has a positive influence on perceived celebrity endorser attractiveness.

In order to test these relationships, we analyzed recordings from eye tracking (Patalano, Juhasz, and Dicke 2010; Wedel and Pieters 2000) and responses from a survey from 81 undergraduate students studying at a private university in Northern Mexico. Participants saw four print advertisements (two target and two filler ads) that we had scanned for the purpose of this study in the following order on the screen: Target ad 1 (L'Oreal), filler ad 1 (Nivea), filler ad 2 (Porsche), and target ad 2 (Baume & Mercier). After seeing each ad for 15 seconds, participants responded questions related to ad and brand attitudes (Campbell and Keller 2003), brand familiarity (Kent and Allen 1994; Machleit, Allen, and Madden 1993), and endorser attractiveness (Ohanian 1990).

We used PLS-SEM to analyze our data (Ringle, Wende, and Will 2005). Important psychometric properties of our scales, such as composite reliability (Nunnally and Bernstein 1994), indicator reliability (Hair, Ringle, and Sarstedt 2011), convergent validity (Bagozzi and Yi 1988), and discriminant validity (Fornell and Larcker 1981) were overall satisfying. Supporting our first hypothesis, the effect of endorser attractiveness on ad attitudes was positive and statistically significant for L'Oreal ( $\beta$ =.55, t=9.30, p<0.001) and for Baume & Mercier ( $\beta$ =.65, t=8.18, p<.001). Endorser attractiveness explained 30 percent of the variance of attitude toward the ad for L'Oreal and 46 percent for Baume & Mercier. Further, in support of predictive relevance, the cross-validated redundancy measures Q<sup>2</sup> for attitude toward the brand from the SmartPLS blindfolding procedure were larger than zero (.22 for L'Oreal and .32 for Baume & Mercier).

A mediation analysis with bootstrapping (Preacher and Hayes 2008; Zhao, Lynch, and Chen 2010) showed that attitude toward the ad fully mediates the relationship between endorser attractiveness and attitude toward the brand for both the L'Oreal and the Baume & Mercier ad. Specifically, the indirect effect from endorser attractive-

ness to attitude toward the brand via the attitude toward the ad mediation was .33 for L'Oreal and .39 for Baume & Mercier. To estimate the significance of the indirect effects, we followed Hair et al. (2014) by calculating the standard deviations for the 5,000 estimations of the indirect effects from the bootstrapping procedure. The SD for the indirect effects were .057 for L'Oreal and .095 for Baume & Mercier, and the t-values were 5.77 (p<.001) and 4.12 (p<.001), respectively. Further, when including the mediator in the model, the previously significant influence of endorser attractiveness on attitude toward the brand became nonsignificant (ns).

The influence of visual attention on endorser attractiveness was positive and statistically significant for the L'Oreal ad ( $\beta$ =.25, t=2.68, p<.01), but not for the Baume & Mercier ad ( $\beta$ =.05, t=.47, ns). Consequently, the R2 values for the endogenous variable, attitude toward the ad, were very small for Baume & Mercier (R2=.003) and slightly higher for L'Oreal (R2=.06). Further, the cross-validated redundancy measures Q<sup>2</sup> from the blindfolding procedure were close to zero for Baume & Mercier (Q2=.005) and somewhat higher for L'Oreal (O2=.04). Thus, visual attention explained a small part of the variance in endorser attractiveness for the L'Oreal ad, but not for the Baume & Mercier ad. However, although for the Baume & Mercier ad, visual attention did not have a statistically significant influence on endorser attractiveness, it did have a positive and statistically significant influence on attitude toward the ad ( $\beta$ =.17, t=2.11, p < .05). Our interpretation of these findings is that the relationship between visual attention on the one hand and endorser attractiveness and other, attitude-based variables on the other hand may depend on the specific characteristics of the endorser used in the advertising.

We acknowledge that due to time consuming and cost-intensive research procedures when using eye tracking methodology, an important limitation of this study is its relatively small sample size. Hair et al. (2014) suggest that in order to detect an R<sup>2</sup> of .10 with a statistical power of 80% at the 5% significance level, a sample size of 110 is needed for PLS-SEM, which is clearly above our sample of 81 participants in this study. Further, a larger sample size would have allowed accounting for unobserved heterogeneity (Sarstedt and Ringle 2010) and the use of holdout samples to evaluate the robustness of the results (Hair et al. 2012).

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