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## **Finger Length Ratio and Attitudes Toward Several Product Categories**

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Recent studies have associated the second-to-fourth finger length ratio (2D:4D), a sexually dimorphic trait influenced by prenatal androgen exposure, to a wide range of abilities and dispositions. We tested if finger length ratio would correlate with attitudes towards product categories with a strong male penchant. We found significant or marginally significant correlations between finger length ratio and attitudes in Caucasians for four out of nine product categories preferred by males. Our study suggests that finger length ratios may be predictive of attitudes toward product categories possessing a strong sex specificity.

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## Finger Length Ratio and Attitudes toward Several Product Categories

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Recent studies have highlighted the relevance of physiology in understanding human behavior. For instance, Coates and Herbert (2008) have shown that higher levels of testosterone are correlated to male traders' profitability. Similarly, Saad and Vongas (2009) showed that men's testosterone levels increased while driving a luxurious sports car, suggesting a relationship between hormones and conspicuous consumption. Finger length ratio, a sexually dimorphic trait, is a marker of prenatal testosterone (Manning et al. 1998). The second-to-fourth finger length ratio (2D:4D) has been consistently correlated to a wide range of sexually differentiated phenomena, such as athletic ability (Manning and Taylor 2001), spatial ability (Loehlin, Medland, and Martin 2009), risk-taking behavior (Coates and Page 2009), sexual orientation (Manning, Churchill and Peters 2007) and aggression (McIntyre et al. 2007). Yet, little is known about the relationship between 2D:4D and consumption phenomena possessing a strong sex-specificity. One exception is the research conducted by Millet, Kobe (2007) wherein males with low 2D:4D placed in a subordinate condition exhibited greater future discounting rates than high 2D:4D individuals put in the same condition. Moreover, he found that 2D:4D moderates one's susceptibility to media violence. Specifically, individuals with lower digit ratios responded more aggressively and less cooperatively to aggressive music video than those with higher ratios. In the current research, we focus on the relationship between digit ratio and the attitudes that individuals hold toward specific products.

Using a sample of 240 university students, we tested the hypothesis that lower finger length ratio would correlate with attitudes towards product categories that have a strong male penchant. In addition, given that  $rel2$ , the length of the index finger relative to the sum of the lengths of all four fingers, has recently been shown to be more accurate than 2D:4D in discriminating between males and females (Loehlin, Medland, and Martin 2009), we propose that  $rel2$  will be more strongly correlated to individuals' product attitudes than will 2D:4D. Trained experimenters measured the lengths of right-hand fingers using digital callipers. Participants responded to several items, which assessed their attitude towards several product categories, namely cosmetics, electronics, pornography, clothing, movies genres (drama, action, science fiction, romance, animation and war), sports (hockey, boxing, synchronized swimming and gymnastics), and video-games genres (First-person Shooter, Real-time Strategy, Party-game, Platformer, and Life Simulator). Each product category possessed a valenced sex-specificity, namely male, female, or neutral. One-way ANOVAs revealed that nine product categories were significantly preferred by males (hockey, boxing, electronics, pornography, action movies, science fiction movies, war movies, First-person Shooter games and Real-time Strategy games), eight by females (drama movies, romance movies, party games, life simulator games, synchronized swimming, gymnastics, cosmetics, and clothing), and two were neutral (animation movies and platformer games). For example, pornography was deemed a male product category given that men held a more positive attitude toward it than did women ( $F=54.07$ ,  $p<.001$ ). All attitudinal items possessed reliability alphas above .80.

Regression analyses were conducted on both ethnically homogeneous (Caucasians only,  $n=132$ ) and heterogeneous samples (all ethnicities,  $n=133$ ). Two major findings were obtained. First,  $rel2$  was generally a better predictor of the collected product attitudes than 2D:4D. Second, we found significant ( $p<.05$ ) or marginally significant ( $p<.10$ ) correlations between  $rel2$  and product attitudes held by Caucasians for four out of the nine product categories preferred by males. For example, low  $rel2$  (i.e., indicative of higher exposure in uterus to testosterone) was associated with more positive attitudes towards electronics in the Caucasian sample ( $p=.006$ , Adjusted  $R^2=.055$ ). Similarly, low  $rel2$  was negatively correlated with attitudes towards pornography in Caucasians ( $p=.064$ , Adjusted  $R^2=.02$ ). Given that the relations were stronger with an ethnically homogeneous sample (Caucasians only), our results are in accordance with previous finger length ratio studies (Manning, Churchill, and Peters 2007), and reinforce the importance of controlling for ethnicity in future research on digit ratio. Moreover, this study suggests that finger length ratios may be predictive of attitudes toward products possessing a strong sex-specificity.

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