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The Insidious Effects of Smiles on Social Judgments

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We propose that broad smiles increase perceptions of warmth but decrease perceptions of competence. These effects influence consumers' behavioral intentions and actual behaviors, and are moderated by level of consumption risk. Three studies, including one using data from Kickstarter.com, support these hypotheses.

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EXTENDED ABSTRACT

Smiles are widely used as a marketing tool to produce positive impressions. Sales assistants, restaurant servers, and store cashiers are often trained to smile when they interact with customers (Hennig-Thurau et al. 2006), probably because smiles positively influence interpersonal judgments in a myriad of ways. People who smile are perceived to be kinder, more sociable, more honest (Thornton 1943), more pleasant (Mueser et al. 1984), more carefree (Deutsch, LeBaron, and Fryer 1987), and more polite (Bugental 1986) than people who do not.

Such associations may lead one to believe that smiles always convey positive information and hence, the bigger the smile, the better. Indeed, research has documented that people deliberately intensify positive emotional displays to receive favorable social feedback (Andrade and Ho 2009). In this research, however, we caution that bigger and broader smiles sometimes bring forth undesirable consequences. Well-intended broad smiles are not always beneficial, and can even have a boomerang effect on consumers' judgments and behaviors.

THEORY AND HYPOTHESES

We integrate research in two areas – the stereotype content model (SCM) and the social-functional perspective on emotion – to develop our framework and hypotheses. The SCM proposes that interpersonal judgments are captured by two fundamental dimensions of social perception—warmth and competence—that likely reflect evolutionary pressures (Fiske 2002). In order to survive and reproduce, social animals must quickly determine others' intentions (e.g., to help or harm), and their ability to act on them. Warmth judgments reflect the first of the two dimensions, and typically include evaluations of kindness, friendliness, trustworthiness, and helpfulness (Aaker et al. 2010). Competence judgments relate to evaluations of the target's capability of carrying out his/her intentions, and include perceptions of effectiveness, intelligence, power, and skillfulness (Hoegg and Lewis 2011).

The social-functional perspective on emotion asserts that emotions have evolved to help facilitate social interactions by signaling important information about the expresser (Fridlund 1992; Keltner and Haidt 1999). People are able to make quick and spontaneous inferences from facial expressions to understand the expresser's internal emotional states and social intentions (Fridlund 1994; van Kleef et al. 2004). Smiles, in particular, are believed to have evolved to assist group living by facilitating cooperation among unrelated individuals (Owren and Bachorowski 2001). Smiles communicate positive intent, agreement, or assent, and are often used to encourage and support social interactions (Abe Beetham and Izard 2002).

Not only do facial expressions convey the expresser's emotions and intentions, but also the intensity of those feelings, with more intense facial expressions connoting more intense emotions and desires (Ekman, Friesen, and Ancoli 1980). Broad versus slight smiles may have different social consequences. Women with the most intense smiles in photographs are more likely to be married by age 27 (Harker and Keltner 2001) and people with more intense smiles in photos are less likely to divorce later in life (Hertenstein et al. 2009). This may be because, compared to slight smiles, broad smiles

deliver stronger signals that the expresser desires to make social connections, which increase the perception that the expresser is friendly and approachable. Hence, we propose that broad (vs. slight) smiles enhance warmth perceptions.

On the flip side, broad smiles may also signal that the individual is less competent. Research has connected broad smiles with reduced aggression, performance, and dominance—traits that help one achieve status and power (Dabbs 1997; Kraus and Chen 2013; Mazur and Booth 1998). For example, Dabbs (1997) found a negative relationship between smile intensity and dominance, which they define as "a quality that helps one win whatever one wants to win" (p. 46). These findings are in line with the competition hypothesis of smiling and laughter, which proposes that smiles function to implement social hierarchies and signal low motivation to compete for status (Mehu and Dunbar 2008). For instance, bared-teeth display in chimpanzees is often an indicator of submission and acceptance of subordinate status (de Waal and Luttrell 1985). Thus, a broad smile may suggest that the individual is content with the current situation (Fridlund 1994) and unmotivated to change or improve the status quo (Bodenhausen, Kramer, and Süsser 1994). Consequently, we hypothesize:

Hypothesis 1: *Compared to a slight smile, a broad smile will lead to higher perceptions of the marketer's warmth, but lower perceptions of the marketer's competence.*

We also propose a boundary condition—perceived consumption risk, or the magnitude and/or probability of experiencing adverse consequences after purchasing a product or service (Oglethorpe and Monroe 1987). When perceived risk is high, consumers are motivated to adopt strategies that help reduce the risk to a manageable level (Dowling and Staelin 1994). For example, high risk leads consumers to rely on familiar or well-known brands (Erdem 1998) and corporate reputations that signal product functionality and performance (Gürhan-Canli and Batra 2004). Similarly, we propose that when perceived risk is high, consumers should focus more on perceptions of competence (rather than warmth), because this trait reduces risk and increases consumer confidence that the marketer can successfully deliver the outcome.

On the other hand, when perceived risk is low, negative consequences of consumption are minimal (Oglethorpe and Monroe 1987) and consumers are less concerned about product or service failure (Gürhan-Canli and Batra 2004). Instead, they tend to focus on having a positive and satisfying consumption experience, which is largely dependent on employee helpfulness and friendliness (Surprenant and Solomon 1987; Tsai and Huang 2002). Taken together, we propose:

Hypothesis 2: *The effect of smile intensity on social judgments is moderated by the risk level of the consumption context such that (a) a broad (vs. slight) smile is more likely to enhance warmth perceptions when consumption risk is low (vs. high); (b) a broad (vs. slight) smile is more likely to undermine competence perceptions when consumption risk is high (vs. low).*

Research suggests warmth and competence perceptions are important predictors of consumers' behavioral responses (Aaker et al. 2010; Cuddy et al. 2007). As discussed above, consumers are likely to focus on the marketer's competence when perceived risk is high. Thus, compared to a slight smile, a broad smile, which signals lower competence, is expected to decrease consumers' intentions to purchase or use the product or service in a high-risk context. In contrast, low perceived risk is predicted to shift consumers' focus to warmth. Thus a broad (vs. slight) smile should increase consumers' behavioral intentions through enhanced warmth perceptions in a low-risk context.

> *Hypothesis 3:*   *Compared to a slight smile, a broad smile will lead to more favorable consumer behavioral responses through warmth perceptions when consumption risk is low, but less favorable consumer behavioral responses through competence perceptions when consumption risk is high.*

STUDY 1

Stimulus

We used photos of slight and broad smiles from a validated set of affective stimuli – the Montreal Set of Facial Displays of Emotion (MSFDE) created by Beaupré and Hess (2006). The MSFDE consists of digitally-morphed photos of facial expressions displaying different emotions at five levels of intensity. We selected two photographs from the MSFDE, with level 2 (slight) and level 5 (broad) smiles of the same displayer. Smiles in the two selected photos vary on the level of zygomatic major muscle movement, producing more or less intense smiles. The two photos are consistent in other appearance cues, such as head orientation (Farroni, Menon, and Johnson 2006), brow position (Sekunova and Barton 2008), and gaze direction (Adams and Kleck 2003).

Participants and Procedure

We recruited 123 individuals from Mturk (M_{age} = 31.28, ranging from 18 to 65; 55 females). Participants were shown one of the two photos and asked to report warmth and competence perceptions of the target (warmth: warm, kind, friendly, sincere; α = .94; competence: competent, intelligent, capable, skillful; α = .93; 1= not at all, 7 = very much so; Aaker et al. 2010; Cuddy Fiske and Glick 2007). Next, we collected data on two confound checks. Prior research suggests that smiles may vary in authenticity—the degree to which the smile is consistent with the expresser's internal feelings (Hennig-Thurau et al. 2006), and that smiles may influence the perceived attractiveness of the target (Mueser et al. 1984). To ensure our smile intensity manipulation did not inadvertently affect these variables, we asked participants to report smile authenticity and attractiveness of the target (Gorn et al. 2008; Mueser et al. 1984). Finally, participants responded to additional questions including a manipulation check of smile strength (1 = displays no smile, 7 = displays a broad smile; Barger and Grandey 2006) and demographics.

Results

We first conducted analyses on the manipulation and confound checks. Independent sample t-test showed that ratings of smile intensity were significantly higher when the target displayed a broad rather than a slight smile (M_{broad} = 5.28, M_{slight} = 4.61, t = 2.60, p = .01). Ratings of perceived authenticity did not differ across the two conditions.

A 2 (smile intensity) × 2 (social judgment) repeated-measures ANOVA revealed a significant interaction F (1, 121) = 26.90, p < .001. Planned contrasts showed that broad smiles elicited higher ratings of warmth (M_{broad} = 5.28, M_{slight} = 4.53; F (1, 121) = 23.28, p < .001), but lower ratings of competence (M_{broad} = 4.43, M_{slight} = 4.83; F (1, 121) = 6.29, p = .01). The same pattern of results was observed when we included smile authenticity and perceived attractiveness as covariates in the analysis, and the effects of covariates were not significant.

STUDY 2

Stimulus

We purchased and downloaded two stock photos from istock.com showing the same woman displaying a slight and a broad smile. We examined the zygomatic major movement in the two photos to ensure that the two smiles differed on intensity levels and were comparable to the level 2 and level 5 smiles in the MSFDE. In addition, we assessed and ensured the two photos were equivalent on other facial cues (e.g., head orientation, gaze direction). Participants were told the woman is a nutritionist. To manipulate consumption risk, the high-risk condition included a statement emphasizing the magnitude and probability of experiencing adverse consequences from nutrition coaching, "misleading advice or inappropriate dietary adjustment from a nutritionist could lead to serious health-related issues." This statement was omitted in the low-risk condition. A pretest (N=51) showed that the participants in the high (vs. low) risk condition, perceived the nutrition coaching service to be significantly riskier (M_{high} = 4.08, M_{low} = 3.38, t = 2.24, p < .05).

Participants and Procedure

Two-hundred and eighty-one participants (M_{age} = 36.29, ranging from 18 to 78; 155 females) were recruited from Mturk. Participants were randomly assigned to read the high or low-risk version of the nutrition coaching manipulation. Subsequently, they were asked to provide their zip codes so that they could ostensibly be matched with a local nutritionist. After a brief delay, participants were informed that the nutritionist they were matched with is trying to attract new customers. They viewed the nutritionist ad and reported their social judgments as well as intentions to use her services. Warmth and competence perceptions were measured using the same scales as study 1 (warmth: α = .94; competence: α = .96). Consumption intention was measured using a four-item scale (e.g., I am interested in the coaching program by this nutritionist; It is likely for me to pay for the coaching program offered by this nutritionist; 1= "strongly disagree" 7= "strongly agree"; α = .96; Dodds, Monroe, and Grewal 1991). Participants were asked if they would like to sign up for a special promotion package of the coaching program by leaving contact information. Sign-up behavior (present, absent) was used as a behavioral measure of consumption likelihood. Finally, we collected confound checks on perceived persuasive intent, perceived appropriateness of the persuasive attempt, smile authenticity, and target attractiveness.

Results

Social judgments

A 2 (smile intensity) × 2 (consumption risk) × 2 (social judgment) mixed ANOVA revealed a three-way interaction F (1, 277) = 3.93, p = .05, which persisted after controlling for potential confounds. In the low-risk condition, the interaction between smile intensity and social judgments was significant (F (1, 277) = 6.29, p < .01). Judgments of warmth were greater in the broad smile condition

than the slight smile condition (M_{broad} = 5.35, M_{slight} = 4.70; F (1, 277) = 7.31, p < .01). However, smile intensity did not impact perceptions of competence (M_{broad} = 4.64, M_{slight} = 4.43; $p.n.s.$). The interaction between smile intensity and social judgments was also significant in the high-risk condition, (F (1, 277) = 25.32, p < .01). However, competence was lower in the broad smile condition than the slight smile condition (M_{broad} = 4.40, M_{slight} = 5.08; F (1, 277) = 6.95, p < .01) and smile intensity had no effect on warmth perceptions (M_{broad} = 5.08, M_{slight} = 4.82; $p.n.s.$).

Consumer responses

A 2 (smile intensity) × 2 (risk level) between-subjects ANOVA revealed a two-way interaction on behavioral intention (F (1, 277) = 15.01, p < .01). In the low-risk condition, participants reported more favorable behavioral intentions in the broad smile condition (M_{broad} = 3.75, M_{slight} = 3.28; F (1, 277) = 3.28, p = .07). The opposite was true for the high-risk condition (M_{broad} = 3.35, M_{slight} = 4.37; F (1, 277) = 12.99, p < .01). Inclusion of covariates did not change the results (F (1, 277) = 12.07, p < .01).

Next, we analyzed the behavioral measure. A binary logistic regression was conducted that included smile intensity, risk, and their interaction as predictors. The smile intensity × risk interaction was significant (χ^2 (1) = 6.84, p = .01). Participants in the low-risk condition were more likely to sign up for the nutrition coaching program if the nutritionist displayed a broad smile (M_{broad} = 32.9%, M_{slight} = 19.2%; χ^2 (1) = 3.60, p = .05); those in the high-risk condition were more like to sign up if the nutritionist displayed a slight smile (M_{broad} = 17.9%, M_{slight} = 31.8%; χ^2 (1) = 3.28, p = .07). The interaction effect remained significant after including potential confounds as covariates.

Moderated mediation

A moderated mediation analysis (5,000 resamples; Hayes 2013) showed that, in the low-risk condition, the indirect effect of smile intensity on purchase intention through warmth perceptions was significant (efficient = .20, 95% [CI]: .07, .42), but the indirect effect through competence perceptions was not significant (efficient = .08, 95% CI: -.02, .22). In the high-risk condition, the indirect effect of the interaction on behavioral intentions through competence perceptions was significant (efficient = -.48, 95% CI: -.80, -.22), but the indirect effect though warmth perceptions was not (efficient = .15, 95% CI = -.14, .50).

Participants' sign up behavior showed similar effects. In the low-risk condition, the indirect effect of smile intensity through warmth perceptions was significant (efficient = .18, 95% [CI]: .00, .52), while the indirect effect through competence perceptions was not (efficient = .07, 95% CI: -.05, .34). In the high-risk condition, the indirect effect through competence perceptions was significant (efficient = -.24, 95% CI: -.57, -.04), but the indirect effect though warmth perceptions was not (efficient = .07, 95% CI = -.01, .29).

STUDY 3

To take our investigation out of the lab into a field setting, we collected data from Kickstarter.com, one of the world's largest crowdfunding platforms for creative projects. Many project creators on Kickstarter.com provide profile photos featuring themselves, which allow us to code the smile intensity level displayed in these photos. We collected publicly available panel data on projects in the "Technology" category, which had the largest number of projects (i.e., 924 projects) at the time of data collection (November 2014). A total of 393 projects included a clear headshot of a smiling creator.

Measurements

Smile Intensity

For each profile photo of the project creator, two coders independently classified the facial expression into one of three categories: 0 = no smile, 1= slight smile, and 2 = broad smile (Cupchik and Poulos 1984). As part of the training process, coders examined sample photos from the MSFDE (Beaupré and Hess 2006). The inter-coder reliability was .87 and differences in coding were resolved by a third coder.

Backer Behavior Driven by Competence Perceptions

Research on crowdsourcing identifies the desire to collect rewards as one of the primary motivations of backers (Cholakova and Clarysse 2015; Gerber and Hui 2013). When a Kickstarter creator is perceived as competent, backers have greater confidence that the creator will be able to successfully complete the project and deliver what is promised. As such, we anticipate that a slight smile, which leads to greater perceived competence than a broad smile, will lead backers to contribute more money to the project, hence increasing total pledged amount to the project and average pledged amount per backer.

Backer Behavior Driven by Warmth Perceptions

The desire to help others is another important motivation for backers to support crowdfunding projects (Gerber and Hui 2013). People's intention to provide help or social support to others is determined by a variety of factors (Becker and Asbrock 2012), including warmth (Cuddy et al. 2007). People tend to like and feel positive emotions toward individuals perceived as warm and friendly (Fiske et al. 2002), and are more likely to extend help or assistance to these individuals (Cuddy et al. 2007).

Consumers tend to balance the desire to help others with the desire to protect self-interest, and hence helping behavior is more likely to be observed when the cost associated with helping is relatively low (Wagner and Wheeler 1969). In Kickstarter, visitors can support a project by liking the project page on Facebook, which is a low cost way of helping the creator. Hence, we predict that a broad (vs. slight) smile in the profile photo, which elicits warmth perceptions, should be positively related to the number of shares a project receives on Facebook.

Backer Behavior Driven by Both Competence and Warmth Perceptions

Project creators on Kickstarter can set multiple reward categories, providing different rewards for backers pledging different amounts. On Kickstarter, an average required contribution for the first reward category is $7.97. The average required contributions for the second and third category are $27.1 and $98.6, respectively. Based on these statistics, we classified pledges lower than $25 as small contributions, pledges between $25 and $100 as medium contributions, and pledges higher than $100 as large contributions. As discussed earlier, a broad (vs. slight) smile is more likely to elicit low cost forms of helping behavior, and thus project creators wearing a broad (vs. slight) smile should receive a greater number of small-scale contributions as an indicator of social support. In contrast, compared to a slight smile, a broad smile may undermine the perceived competence of the project creator, which may lead to fewer large-scale contributions, which are likely viewed as investment on promising projects.

Results

Backer Behavior Driven by Competence Perceptions

When the creator displayed a broad (vs. slight) smile in the photo, the total amount pledged by backers plunged by more than 50% (M_{broad} = \$10947.72, M_{slight} = \$24519.93, t = -2.01, p = .05), and average contributions per backer was reduced by more than 30% (M_{broad} = \$96.12, M_{slight} = \$156.14, t = -2.19, p = .03).

Backer Behavior Driven by Warmth Perceptions. On the other hand, smile intensity positively predicts number of Facebook shares. A project page with a profile photo featuring a broad (vs. slight) smile received nearly twice as many Facebook shares (M_{broad} = 414.44, M_{slight} = 220.78, t = 1.87, p = .06).

Backer Behavior Driven by Both Competence and Warmth Perceptions

A 2 (smile intensity) × 2 (size of contribution) repeated-measures ANOVA revealed a significant two-way interaction (F (1, 200) = 7.41, p < .01). The number of small-scale contributions was significantly greater in the broad smile condition than in the slight smile condition (M_{broad} = 68.25, M_{slight} = 32.90; F (1, 200) = 3.79, p = .05). The opposite pattern was found for the number of large-scale contributions—broad smiles led to significantly lower number of large contributions than slight smiles (M_{broad} = 16.86, M_{slight} = 51.45; F (1, 200) = 5.14, p = .02).

Robustness checks

Given the correlational nature of this data, we took extra caution to rule out the possibility that the observed effects might be caused by factors other than smile intensity. To this end, we examined and ruled out the possibility that the results were due to, and (with the exception of funding goal) did not interact with, these control variables: creator gender, total funding goal, creator's entrepreneurial experience (whether the entrepreneur was an experienced or first-time project creator on Kickstarter.com), whether the project was promoted by Kickstarter as "staff pick," and whether the project had a video demonstration.

GENERAL DISCUSSION

Marketers routinely use facial expressions as a persuasion tool to engage customers, but little is known about how varying intensity levels of the same emotion expression can lead to differences in social judgments. Three studies revealed that brief exposures to facial expressions in still images are sufficient for consumers to form a preliminary impression of the marketer, and that, contrary to intuition, broader smiles do not always lead to more positive interpersonal judgments. Specifically, greater smile intensity enhances perceptions of warmth, but undermines perceptions of competence. This effect is bounded by level of consumption risk. The results of this research demonstrate that when it comes to smiles, bigger isn't always better.

REFERENCES

Aaker, Jennifer, Kathleen D. Vohs, and Cassie Mogilner (2010), "Nonprofits Are Seen as Warm and For-Profits as Competent: Firm Stereotypes Matter," *Journal of Consumer Research*, 37 (2), 224-37.

Abe, Jo Ann A., Michael Beetham, and Carroll E. Izard (2002), "What Do Smiles Mean? An Analysis in Terms of Differential Emotions Theory," in *An Empirical Reflection on the Smile*, ed. Millicent H. Abel, New York: Edwin Mellen, 83-110.

Adams, Reginald B. and Robert E. Kleck (2003), "Perceived Gaze Direction and the Processing of Facial Displays of Emotion," *Psychological Science*, 14 (6), 644-47.

Andrade, Eduardo B. and Teck-Hua Ho (2009), "Gaming Emotions in Social Interactions," *Journal of Consumer Research*, 36 (4), 539-52.

Barger, Patricia B. and Alicia A. Grandey (2006), "Service with a Smile and Encounter Satisfaction: Emotional Contagion and Appraisal Mechanisms," *Academy of Management Journal*, 49 (6), 1229-38.

Beaupré, Martin G. and Ursula Hess (2006), "An Ingroup Advantage for Confidence in Emotion Recognition Judgments: The Moderating Effect of Familiarity with the Expressions of Outgroup Members," *Personality and Social Psychology Bulletin*, 32 (1), 16-26.

Becker, Julia C. and Frank Asbrock (2012), "What Triggers Helping versus Harming of Ambivalent Groups? Effects of the Relative Salience of Warmth versus Competence," *Journal of Experimental Social Psychology*, 48 (1), 19-27

Bodenhausen, Galen V., Geoffrey P. Kramer, and Karin Süsser (1994), "Happiness and Stereotypic Thinking in Social Judgment," *Journal of Personality and Social Psychology*, 66 (4), 621-32.

Bugental, Daphne Blunt (1986), "Unmasking the 'Polite Smile' Situational and Personal Determinants of Managed Affect in Adult-Child Interaction," *Personality and Social Psychology Bulletin*, 12 (1), 7-16.

Cholakova, Magdalena and Bart Clarysse (2015), "Does the Possibility to Make Equity Investments in Crowdfunding Projects Crowd out Reward-based Investments?" *Entrepreneurship Theory and Practice*, 39 (1), 145-72.

Cuddy, Amy JC, Susan T. Fiske, and Peter Glick (2007), "The BIAS Map: Behaviors from Intergroup Affect and Stereotypes," *Journal of Personality and Social Psychology*, 92 (4), 631-48.

Cupchik, Gerald C. and Constantine X. Poulos (1984), "Judgments of Emotional Intensity in Self and Others: The Effects of Stimulus Context, Sex, and Expressivity," *Journal of Personality and Social Psychology*, 46 (2), 431-39.

Dabbs Jr, James M. (1997), "Testosterone, Smiling, and Facial Appearance," *Journal of Nonverbal Behavior*, 21 (1), 45-55.

de Waal, Frans and Lesleigh Luttrell (1985), "The Formal Hierarchy of Rhesus Macaques: An Investigation of the Bared-Teeth Display," *American Journal of Primatology*, 9 (2), 73-85.

Deutsch, Francine M., Dorothy LeBaron, and Maury March Fryer (1987), "What Is in a Smile?" *Psychology of Women Quarterly*, 11 (3), 341-52.

Dowling, Grahame R. and Richard Staelin (1994), "A Model of Perceived Risk and Intended Risk-Handling Activity," *Journal of Consumer Research*, 21 (1), 119-34.

Ekman, Paul, Wallace V. Freisen, and Sonia Ancoli (1980), "Facial Signs of Emotional Experience," *Journal of Personality and Social Psychology*, 39 (6), 1125-34.

Erdem, Tülin (1998), "An Empirical Analysis of Umbrella Branding," *Journal of Marketing Research*, 35 (3), 339-51.

Farroni, Teresa, Enrica Menon, and Mark H. Johnson (2006), "Factors Influencing Newborns' Preference for Faces with Eye Contact," *Journal of Experimental Child Psychology*, 95 (4), 298-308.

Fiske, Susan T., Amy J. C. Cuddy, Peter Glick, and Jun Xu (2002), "A Model of (Often Mixed) Stereotype Content: Competence and Warmth Respectively Follow from Perceived Status and Competition," *Journal of Personality and Social Psychology*, 82 (6), 878-902.

Fridlund, Alan J. (1992), "The Behavioral Ecology and Sociality of Human Faces," in *Emotion*, ed. Margaret S. Clark, Newbury Park, CA: Sage.

Fridlund, Alan J. (1994), *Human Facial Expression: An Evolutionary View*, San Diego, CA: Academic Press.

Friestad, Marian and Peter Wright (1994), "The Persuasion Knowledge Model: How People Cope with Persuasion Attempts," *Journal of Consumer Research*, 21 (1), 1-31.

Gerber, Elizabeth M. and Julie Hui (2013), "Crowdfunding: Motivations and Deterrents for Participation," *ACM Transactions on Computer-Human Interaction (TOCHI)*, 20 (6), 34:1-32.

Gorn, Gerald J., Yuwei Jiang, and Gita Venkataramani Johar (2008), "Babyfaces, Trait Inferences, and Company Evaluations in a Public Relations Crisis," *Journal of Consumer Research*, 35 (1), 36-49.

Gürhan-Canli, Zeynep and Rajeev Batra (2004), "When Corporate Image Affects Product Evaluations: The Moderating Role of Perceived Risk," *Journal of Marketing Research*, 41 (2), 197-205.

Harker, Lee Anne and Dacher Keltner (2001), "Expressions of Positive Emotion in Women's College Yearbook Pictures and Their Relationship to Personality and Life Outcomes across Adulthood," *Journal of Personality and Social Psychology*, 80 (1), 112-24.

Hayes, Andrew F. (2013), *An Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York: Guilford.

Hennig-Thurau, Thorsten, Markus Groth, Michael Paul, and Dwayne D. Gremler (2006), "Are All Smiles Created Equal? How Emotional Contagion and Emotional Labor Affect Service Relationships," *Journal of Marketing*, 70 (July), 58-73.

Hertenstein, Matthew J., Carrie Hansel, Alissa Butts, and Sarah N. Hile (2009), "Smile Intensity in Photographs Predicts Divorce Later in Life," *Motivation and Emotion*, 33 (2), 99-105.

Hoegg, Jo Andrea and Michael V. Lewis (2011), "The Impact of Candidate Appearance and Advertising Strategies on Election Results," *Journal of Marketing Research*, 48 (5), 895-909.

Judd, Charles M., Laurie James-Hawkins, Vincent Yzerbyt, and Yoshihisa Kashima (2005), "Fundamental Dimensions of Social Judgment: Understanding the Relations between Judgments of Competence and Warmth," *Journal of Personality and Social Psychology*, 89 (6), 899-913.

Keltner, Dacher and Jonathan Haidt (1999), "Social Functions of Emotions at Four Levels of Analysis," *Cognition & Emotion*, 13 (5), 505-21.

Kirmani, Amna and Rui Zhu (2007), "Vigilant against Manipulation: The Effect of Regulatory Focus on the Use of Persuasion Knowledge," *Journal of Marketing Research*, 44 (4), 688-701.

Kraus, Michael W. and Teh-Way David Chen (2013), "A Winning Smile? Smile Intensity, Physical Dominance, and Fighter Performance," *Emotion*, 13 (2), 270-79.

Mazur, Allan and Alan Booth (1998), "Testosterone and Dominance in Men," *Behavioral and Brain Sciences*, 21 (3), 353-63.

Mehu, Marc and Robin IM Dunbar (2008), "Naturalistic Observations of Smiling and Laughter in Human Group Interactions," *Behaviour*, 145 (12), 1747-80.

Mueser, Kim T., Barry W. Grau, Steve Sussman, and Alexander J. Rosen (1984), "You're Only as Pretty as You Feel: Facial Expression as a Determinant of Physical Attractiveness," *Journal of Personality and Social Psychology*, 46 (2), 469-78.

Oglethorpe, Janet E. and Kent B. Monroe (1987), "Risk Perception and Risk Acceptability in Consumer Behavior: Conceptual Issues and an Agenda for Future Research," *AMA Winter Marketers Educators' Conference*, 255-60.

Owren, Michael J. and Jo-Anne Bachorowski (2001), "The Evolution of Emotional Expression: A 'Selfish Gene' Account of Smiling and Laughter in Early Hominids and Humans," in *Emotions*, ed. Tracy Mayne and George A. Bonanno, New York: Guilford Press, 152-91.

Sekunova, Alla and Jason JS Barton (2008), "The Effects of Face Inversion on the Perception of Long-Range and Local Spatial Relations in Eye and Mouth Configuration," *Journal of Experimental Psychology: Human Perception and Performance*, 34 (5), 1129-35.

Surprenant, Carol F., and Michael R. Solomon (1987), "Predictability and Personalization in the Service Encounter," *The Journal of Marketing*, 51 (2), 86-96.

Thornton, George R. (1943), "The Effect upon Judgments of Personality Traits of Varying a Single Factor in a Photograph," *The Journal of Social Psychology*, 18 (1), 127-48.

Tsai, Wei-Chi and Yin-Mei Huang (2002), "Mechanisms Linking Employee Affective Delivery and Customer Behavioral Intentions," *Journal of Applied Psychology*, 87 (5), 1001-8.

van Kleef, Gerben A., Carsten KW De Dreu, and Antony SR Manstead (2004), "The Interpersonal Effects of Emotions in Negotiations: A Motivated Information Processing Approach," *Journal of Personality and Social Psychology*, 87 (4), 510-28.

Wagner, Carl and Ladd Wheeler (1969), "Model, Need, and Cost Effects in Helping Behavior," *Journal of Personality and Social Psychology*, 12 (2), 111-16.