FACIAL APPEARANCE, GENDER, AND CREDIBILITY IN TELEVISION COMMERCIALS

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ABSTRACT: The facial appearance of television spokespersons and the trustworthiness and expertise of the appeals delivered by them were independently rated. Babyfaced persons and females delivered communications which were less expert, but more trustworthy, than those communications delivered by maturefaced persons and males. These effects were independent of the spokespersons' perceived age, attractiveness, and amount of smiling. The findings are consistent with past research which has demonstrated that babyfaced people are perceived as less knowledgeable, but more honest, than those who are maturefaced.

Research has repeatedly demonstrated that perceivers attribute child-like traits to adults who exhibit a babyish facial appearance. More specifically, men and women who are babyfaced are deemed to be more honest, submissive, and warm, but less intellectually astute, than those who are maturefaced (Berry & Brownlow, 1989; Berry & McArthur, 1985; 1986; Keating, 1985; McArthur & Apatow, 1983-1984; Zebrowitz & Montepare, 1990). These perceptions of babyfaced people hold true for perceivers of various cultures (Keating, Mazur, & Segall, 1981; McArthur & Berry, 1987) and ages (Keating & Bai, 1986; Montepare & Zebrowitz-McArthur, 1989), and they are independent of the perceived age and attractiveness of target stimuli.

The tendency for people to attribute childlike psychological qualities to adults with a childlike facial appearance has been explained as an "overgeneralization" effect (Berry & McArthur, 1986). Because it is so adaptive for the facial features of infants and children to specify their non-

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menacing and dependent qualities, these qualities are also detected in adults with similar features. Thus, adults with large, round eyes, and small chins are perceived to be weak, naive, honest, and submissive—just as are the children whom they resemble.

Although this body of research is interesting in its own right, it has been noted (e.g., Berry & McArthur, 1986; Schmitt, 1987) that it lacks ecological validity. Specifically, it is important to consider whether facial appearance experts a predictable influence in contexts where complex social information in addition to facial information is available to perceivers. It is also necessary to examine whether these effects obtain in a non-laboratory context.

mation is provided to perceivers. continues to impact impressions in a predictable manner when other inforwere maturefaced applicants with equivalent credentials. While both of judged as more qualified for a job requiring warmth and nurturance than that babyfaced people, who are perceived as warm, were more likely to be whereas babyfaced men are seen as naive, and thus apt to be negligent males are seen as shrewd, and thus more able to commit a crime of intent, McArthur, 1988). These results were attributed to the fact that maturefaced these studies were simulations, the results suggest that facial babyishness leged crime was intentional rather than negligent (Berry & Zebrowitzthe conviction rate for maturefaced defendants was higher when the alhigher when the crime was one of negligence rather than intent, whereas demonstrated that the conviction rate for babyfaced male defendants was McArthur and her colleagues. An experiment involving a simulated trial nations has been addressed in a recent set of studies by Zebrowitz-Zebrowitz, Tennenbaum, and Goldstein (1990) have further demonstrated The generalizability of babyface effects to informationally complex sit-

As noted previously, it is also important to consider whether facial appearance exerts a predictable influence on people's perceptions and behavior in a non-laboratory situation. One situation where facial appearance and impressions are important is the television commercial, where advertisers spend a good deal of time and money finding the "ideal" spokesperson to promote a product. The present research addresses the question of whether actors and actresses are cast into commercials on the basis of their facial appearance.

Television commercials typically have one of two bases of credibility: trustworthiness or expertise. Trustworthy appeals typically utilize a spokesperperson who is a product-user, whereas expert appeals utilize a spokesperson who is an authority (Atkins & Block, 1983; McArthur & Resko, 1975).

Trustworthiness has been defined as the degree to which a source is judged to be honest and communicating that which is believed to be most valid (McGuire, 1985). Expertise is the extent to which a source is perceived to have valid information (Hovland, Janis, & Kelley, 1953), and to be aware of the facts regarding an issue (McGuire, 1969).

seen as intellectually astute, may be viewed as expert. Therefore, it was or actress appears as a spokesperson, the basis of credibility will be trust expertise more than trustworthiness. Conversely, when a habyfaced actor son in a commercial, the basis of credibility for that commercial will be predicted that when a maturefaced actor or actress appears as a spokesperspokespersons. Facial appearance may also play a role in determining the tise, while the reverse would be true for commercials featuring male worthiness more than expertise. viewed as trustworthy. On the other hand, maturefaced people, who are babyishness increases perceived honesty, babylaced people may be type of commercial in which an actor or actress is cast. Because facial featuring female spokespersons would be trustworthiness more then experthese findings, it was predicted that the basis of credibility for commercials ically cast as authoritative experts (McArthur & Resko, 1975). Based on likely to be portrayed as trustworthy product users while males are typtrustworthy or expert? Gender might be one such quality. Females are most What qualities of actors might influence whether they are perceived as

Method

Commercial Sample

Television commercials were videotaped during weekday broadcasts on three major networks. In order to obtain a wide variety of commercials, morning, afternoon, and evening time slots were sampled. Only commercials which utilized one or two adult actors and actresses who had speaking parts were included in the final sample.

Advertisements with children or known celebrities as spokespersons were not included. Celebrities were excluded from the sample both because judges may have already formed impressions of celebrities due to their exposure in the media and because research has indicated that commercials utilizing celebrities as spokespersons have different bases of credibility from those which use unknown actors and actresses (Atkins & Block, 1983). The final sample consisted of 150 commercials; sixty featured male spokespersons and 90 featured female spokespersons.

Communication Coding

Typewritten transcripts containing verbalim dialogue and the general scenario of each commercial were prepared. References to the communicator's age and gender were omitted to reduce the possibility that this information would influence subsequent ratings. A sample transcript is provided in the Appendix. Classification of the type of appeal used in the communications was based on whether the spokesperson appeared primarily to be an authoritative expert or primarily a trustworthy product user. This type of criterion has been used in past research to distinguish types of commercial appeals (Friedman & Friedman, 1979; McArthur & Resko, 1975). The instructions provided to coders incorporated the definitions of trustworthiness (McGuire, 1985) and expertise (Hovland, Janis, & Kelley, 1953):

An expert appeal comes from a spokesperson who appears to be knowledgeably communicating information that is objective and valid. More often than not, an expert is presented as a knowledgeable person who has all the facts. Expert spokespersons tend to give 'factual' evidence on behalf of a product. Thus, they may use statistics, scientific information, doctor's reports, and the like. If expert spokespersons are product users, it is because they have all the facts about it and believe those facts.

A trustworthy appeal comes from a spokesperson who appears to be sincerely and honestly communicating information he or she believes in. More often than not, a trustworthy appeal uses a spokesperson who is a product user. This person is either seen using the product or acting as though he or she uses the product regularly and will continue to do so. Trustworthy spokespersons tend to give "testimonial" evidence on behalf of a product. Thus, they may talk about what they as product users like and believe. If trustworthy spokespersons report facts about a product, these are based primarily on their use of it and their personal belief in its value.

Two coders (one male, one female) were paid a nominal fee to complete the transcript coding. Each went through a sample of five commercial transcripts with the experimenter, discussing the aforementioned criteria for classification. They then individually read a subset of 95 of the total 150 transcripts in a random order and judged the type of appeal in each communication. Due to the fact that communications could have elements of both expertise and trustworthiness, judges rated the degree to which each appeal was expert and trustworthy on seven-point scales with endpoints labelled "very expert"/"not at all expert" and "very trustworthy"/"not at all trustworthy."

Spokesperson Facial Appearance Ratings

A separate group of two male and eight female judges were paid a nominal fee to rate the appearance of spokespersons in soundless color videotapes of the commercials in one of four orders. Each judge individually reviewed a sample of five commercials with the experimenter until he or she was comfortable with the procedure, and then made the remainder of the ratings unassisted. Each judge was provided with a list indicating who was the spokesperson in each commercial. The videotapes were played without sound so that the spokespersons' vocal qualities and the content of the communication would not influence judges' ratings. Seven-point scales were used for judgments of each communicator's facial maturity (endpoints labeled "babylaced"/"maturefaced") and attractiveness (endpoints labeled "very attractive"/"very unattractive"). In addition, raters judged the range in which they estimated each communicator's age to fall from six age spans (16–20, 21–30, 31–40, 41–50, 51–60, and 60) + years).

Spokesperson Affect Ratings

Two additional coders (one male, one female) viewed soundless color videotapes of the commercials and rated the amount of smiling by each spokesperson. These data were collected in order to determine whether smiling was confounded with gender and/or baby/accedness. Since baby-faced people are perceived as warm, they may smile more often than their maturefaced counterparts, and this, rather than facial structure per se, could account for any differences in the types of communications they were assigned. The videotapes were played without sound so that neither linguistic nor paralinguistic cues would influence the ratings. Judgments were made on 7-point bi-polar scales (endpoints labelled "not smiling at all"/"smiling a lot"),

Results

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Acceptable inter-rater agreement was revealed for communication expertise (r(93) = +.75), and for communication trustworthiness (r(93) = +.68), both ps < .001). Therefore, one judge completed the ratings of the remaining transcripts. For the entire sample, the mean expertise judgment was M = 2.70 (s = 2.06), while the mean communication trust-

TABLE 1

Correlations Between Communication Credibility Ratings and Perceived Spokesperson Age, Attractiveness, and Smiling

	Credibility Measure	1easure
Appearance Variable	Trustworthiness	Expertise
Age"	39***	.35***
Altractiveness ^b	.27***	17*
Smiling ^b	.19*	19*
p < 0.00 $p < 0.00$		School and Special Paper

Note. Degrees of freedom vary due to missing data. The label provided represents the high end of a scale. All p values reported are two-tailed.

worthiness rating was M = 4.60 (s = 1.94). The facial maturity, age and attractiveness judgments were also highly reliable (alphas = .80, .93 and .94, respectively), as were ratings on the smiling measure (r(146) = .74, p < .001). Thus, a mean rating was computed for each spokesperson for each of these dimensions and used in subsequent analyses. For the entire sample, the mean rating of age (M = 3.13, s = 1.09), attractiveness (M = 4.78, s = 1.09), and smiling (M = 4.61, s = 1.96) demonstrated that, in general, the spokespersons were neither overly young or old, nor very attractive or very unattractive.

The Relationship of Facial Appearance and Gender to Credibility

In order to determine whether babyfaced and maturefaced spokespersons delivered different types of communications, spokespersons were split into high (babyfaced) and low (maturefaced) groups based on a median split of their mean babyfaced rating.' The median split was calculated within gender since the median for males (Mdn = 3.7) was lower than that

TABLE 2

Mean Ratings of Communication Trustworthiness and Expertise for Babyfaced and Maturefaced Male and Female Spokespersons

		Spokesperson	person	
Male Female Dependent Measure Babyfaced" Maturefaced" Babyfacedh Maturefaced	R Babyfaced ^a	Male I ^a Maturefaced ^a	Fer Babyfaced ^h	Female d ^b Matureface
Communication	in Manhara	Marchal Bellaysill		
Expertise	3.18	4.39	1.64	2.44
Trustworthiness	4.21	2.96	5.50	4.98
'n = 28 'n = 44	Schools and Sea	specifical property		
'n = 45 Note: The label provided represents the high end of the scale.	ided represents	the high end of th	e scale.	

for females (Mdn = 4.1). This facial maturity factor was crossed with spokesperson gender and two 2 (Spokesperson Face Type) X 2 (Spokesperson Gender) analyses of covariance employing perceived spokesperson age, attractiveness, and amount of smiling as covariates were conducted with communication expertise and trustworthiness as dependent measures. Perceived spokesperson age, attractiveness, and smiling were covariates in these analyses since all three of these variables were significantly correlated with communication trustworthiness and expertise (see Table 1).

As predicted, maturefaced spokespersons (M = 3.19) were given communications independently judged as more expert than those given to habyfaced spokespersons (M = 2.24), F(1,138) = 8.28, p = .01 (see Table 2). The predicted main effect for gender also emerged, as males (M = 3.79) delivered communications independently rated as more expert than those delivered by females (M = 2.04, F(1,138) = 13.37, p < .001. These effects were independent of the perceived age, attractiveness, and amount of smiling exhibited by the spokespersons. The interaction of face type and gender did not approach significance, F(1,138) < 1, indicating that the predicted effect of spokesperson facial appearance was not qualified by gender of the spokesperson.

^{&#}x27;Correlational analyses between mean facial babyishness ratings and communication trustworthines and expertise were considered but rejected due to low variability in the mean facial babyishness scores. Thus, a median split by facial appearance was used to form a babyfaced and maturefaced group within each gender.

gender was not significant, F(1,138) < 1. males (M = 3.59), I(1,138) = 10.43, $\rho < .01$. These effects were indewas the case for communication expertise, the interaction of face type and pendent of the age, attractiveness, and smiling of the spokespersons.' As females (M = 5.24) were given more trustworthy communications than maturefaced spokespersons (M = 4.21), F(1,138) = 6.39, p = .01, and munications independently judged as more trustworthy than those given to As predicted, babyfaced spokespersons (M = 5.00) were given com-

Discussion

to use facts and figures to argue a point, and that females are more emostereotype that males are more logical and objective, and thus more likely trustworthy than those delivered by females. This corresponds to the sex cerning the nature of gender roles in commercials (e.g., McArthur & Resko, tional, and thus more likely to use personal testimonials (Deaux, 1985). 1975), males delivered communications that were more expert and less their maturefaced counterparts. Consistent with other investigations conappeals that were less expert and more trustworthy than those delivered by perceived as more naive and honest, babyfaced spokespersons delivered Consistent with previous research demonstrating that babyfaced people are ence the type of commercial communications they are chosen to deliver. The results of this study reveal that actors' facial maturity and gender influ-

not convincing, their product will not sell. It would thus be interesting to television producers have real consequences: If their casting choices are males 'fit the part' for trustworthy communications. The decisions made by on the tacit or explicit assumption that maturefaced people and males are guided by whether the actors' facial appearance and gender reinforce determine whether the favored combinations of facial appearance or gen-'look right' delivering expert messages, whereas babyfaced people and fethe image of credibility in the commercial copy. Producers seem to operate These findings indicate that television producers casting commercials

maturefaced female communicators are viewed as more expert but less suasive than other combinations. Some evidence to suggest that they may persuasive message (Brownlow, 1989). trustworthy than babyfaced female communicators delivering the same lievable to perceivers (Berry & Zebrowitz-McArthur, 1988), and that der and credibility documented in the present study are in fact more perlus person which is consistent with the person's facial maturity is more bebe is provided by research demonstrating that information about a stimu-

ecological validity of past research findings. It also reveals that the docugets and real-world casting decisions could be accurately predicted from tionship between the perceived babyfacedness of dynamic, televised tarperceptions of people varying in facial babyishness. The fact that the relabehaviors of social influence agents as they occur naturally in the world nally, this study demonstrates that much can be learned by observing the mented impact of facial babyishness on impressions can be extended in a trait ratings of babyfaced targets depicted in static photographs affirms the idity of past research utilizing static facial photographs to assess differential McArthur, 1986; Schmitt, 1987) who have questioned the ecological val-(cf. McGuire, 1973). predictable manner to complex decisions made outside the laboratory. Fi-The results of this study address the concerns of those (e.g., Berry &

References

- Atkins, C., & Block, M. (1983). Effectiveness of celebrity endorsers. Journal of Advertising Research, 23, 57-61.
- Berry, D. S., & Brownlow, S. (1989) Were the physiognomists right? Personality correlates of facial habyishness. Personality and Social Psychology Bulletin, 15, 266-279.

 Berry, D. S., & McArthur, L. Z. (1985). Some comprenents and consequences of a habyface. Journal of Personality and Social Psychology, 48, 312-323.
- Berry, D. S., & McArthur, L. Z. (1986). Perceiving character in faces: The impact of age
- related craniofacial changes on social perception. Psychological Bulletin, 100, 1-16. Berry, D. S., & Zebrowitz-McArthur, L. (1988). (1988). What's in a face? Lacial maturity and the attribution of legal responsibility. Personality and Social Psychology Bulletin, 14
- Brownlow, S. (1989). The interactive effects of facial appearance and credibility information on attitude change. Unpublished doctoral disseration, Brandeis University.
- Deaux, K. (1985). Sex and gender. Annual Review of Psychology, 16, 49-81
- Friedman, H. H., & Friedman, L. (1979) Endorser effectiveness by product type. Journal of
- Hoyland, C. I., Janis, J. L., & Kelley, H. H. (1953). Communication and persuasion. New Haven, CT: Yale University Press. Advertising Research, 23, 57-61.
- Keating, C. F. (1985). Gender and the physiognomy of dominance and attractiveness. Social Psychology Quarterly, 48, 61-70.

communication trustworthiness $(\ell(1,144) < 1, \text{n.s.})$. Similarly, smiling was only a marginally significant covariate in the analysis for expertise $(\ell(1,144) = 2.96, p = .09)$, but it had no significant effect on communication trustworthiness $(\ell(1,144) = 1.61, \text{n.s.})$. to credibility. Indeed, perceived age was a significant covariate both in the analysis for communication expertise $(I(1,144) = 18.20, \rho < .001)$ and communication trustworthiness expertise ANACOVA (I(1,144) = 3.21, $\rho = .08$), although it had no significant effect for (l(1,144) = 14.02, p < .001). Percoived attractiveness achieved marginal significance in the perceived spokesperson age, attractiveness, and smiling, the latter three variables were related While the effects of facial appearance and gender on credibility were independent of

Keating, C. L., & Bai, D. L. (1986). Children's attributions of social dominance from facial cues. Child Development, 57, 1269-1276.

Keating, C. F., Mazur, A., & Segall, M. H. (1981). A cross-cultural exploration of physiog-nomic traits of dominance and happiness. *Ethology and Sociobiology*, 2, 41–88.

McArthur, L. Z., & Apatow, K. (1983-1984). Impressions of babyfaced adults. *Social Cognition*, 2, 315-342.

McArthur, L. Z., & Berry, D. S. (1987). Cross-cultural agreement in perceptions of babyfaced

McArthur, L. Z., & Resko, B. G. (1975). The portrayal of men and women in American televiadults. Journal of Cross-Cultural Psychology, 18, 165-192.

sion commercials. Journal of Social Psychology, 97, 209-219.

McCoure, W. J. (1969). The nature of attitudes and attitude change. In G. Lindzey & L. Aronson (Eds.), The handbook of social psychology, Vol. 3 (pp. 136-314). Reading, MA: Ad

dison-Wesley.

McCuire, W. J. (1973). The yin and yang of progress in six ial psychology: Seven koam. Journal of Personality and Social Psychology, 26, 446-456.

McGuire, W. J. (1985). Attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology, Vol. 2 (pp. 233-346). Hillsdale, NJ: Lawrence Erlhaum

Montepare, J. M., & Zebrowitz-McArthur, L. (1989). Children's perceptions of adults with babylaces. Perceptual and Motor Skills, 69, 467-472.

Schmitt, B. 11. (1987) The ecological approach to social perception: A conceptual critique Journal for the Theory of Social Behavior, 17, 261-278.

Zebrowitz, L. A., & Montepare, J. M. (1990). Impressions of babyfaced and maturefaced indi-viduals across the lifespan. Unpublished manuscript, Brandeis University. Zebrowitz, L. A., Tennenbaum, D., & Goldstein, L. (1990). The impact of job applicants' lished mansucript, Brandeis University. facial maturity, sex, and academic achievement on hiring recommendations. Unpub-

Appendix

Sample transcript

(Spokesperson talks to pet dog)

"C'mon, don't hold a grudge. I didn't know that Alpo beef-flavored dinner cost the same as those other dry dog foxds. I never even looked! I mean, who would have thought that Alpo, the one with more meat protein than ten pounds of sirloin, cost the same as those others. Tell you what; you forgive me, and I'll forget what you did to my shoes.