

THE CREDIBILITY OF PHYSICALLY ATTRACTIVE COMMUNICATORS: A REVIEW



W. BENOY JOSEPH

W. Benoy Joseph is assistant professor of marketing at Cleveland State University. He received his doctorate from the Ohio State University in marketing and consumer research. His B.S. and MBA degrees are from the University of Dayton. Before entering academics, he worked in advertising, promotion, and publicity for NCR Corporation in Dayton, Ohio. His research interests and recent publications are in the areas of source credibility, personality, and industrial/organizational marketing.

Communications regarding this paper should be sent to Professor W. Benoy Joseph, Department of Marketing, Nance College of Business Administration, Cleveland State University, Cleveland, Ohio 44115.

ABSTRACT

This review summarizes experimental evidence from advertising and related disciplines on the effects of physically attractive communicators and models on opinion change, product evaluation, source perception, and recall, among other dependent measures. The evidence indicates that attractive (vs. unattractive) communicators consistently are liked more, are perceived in more favorable terms, and have a positive impact on the products with which they are associated. Source attractiveness is also related positively to agreement although the effects appear to be less consistent, especially when the communicator is female. The review includes a critical assessment of previous studies and presents specific directions for future research.

Advertisers have long recognized the value of using physically attractive models and actors in advertising. In a content analysis of print ads from 1950 to 1971, Sexton and Haberman (29) reported an increase of 21 percent in the use of "decorative" female models. Within this trend, the incidence of models being classified as "obviously alluring" advanced from 10 percent in 1951 to 27 percent in 1971.

More recent reports from the advertising industry suggest that physically attractive models, especially female, remain much in demand: "Beauty may be only skin deep but, for many an advertiser, that's deep enough to make a considerable impression on consumers in categories as diverse as cosmetics and automobiles, or liquor and cigarettes." (12: S-14) Evidently, advertisers believe that the beautiful are also credible, and that physically attractive sources can contribute to a communication's effectiveness. However, the empirical evidence, to date, on the persuasive advantages of using highly attractive communicators is both modest and far from conclusive.

Does physical attractiveness enhance a communicator's credibility? Does beauty connote competence or trustworthiness? Can the presence of a physically attractive communicator facilitate message recall or changes in attitude or behavior? How do audiences perceive physically attractive sources? What impressions do consumers form about the product or message? Can source physical attractiveness be a persuasive liability? These questions have theoretical as well as managerial significance, and a small but growing body of evidence has begun to suggest some answers. This paper presents an overview of research findings on the perceptual and persuasive effects of communicator physical attractiveness. The overview summarizes mostly experimental evidence from the literature of advertising, marketing, social psychology, and related disciplines.

Defining Physical Attractiveness

Physical attractiveness has not been an easy variable to define since it was commonly believed that if beauty is in the eye of the beholder, few could agree on what is beautiful. However, this problem has not deterred researchers from defining the construct operationally or from investigating its various effects on interpersonal interaction. Physical attractiveness is usually determined empirically by having a representative panel of "judges" (selected from the population to be eventually studied) rate the physical appearance or attractiveness of one or more stimulus persons. Thus, if a significant number of judges rate or designate a stimulus person to be high on physical attractiveness, then for the purposes and context of the investigation, that stimulus person is defined as being physically attractive (3). Whether the deciding factor in the judges' decision is a person's hair color or the shape of his or her nose is not usually a matter of concern. Stimulus persons receiving the highest and lowest mean ratings are then selected to represent high

and low levels of physical attractiveness in subsequent experiments. The validity of this method has been confirmed with evidence from several studies which have shown that physical attractiveness ratings of stimulus persons tend to be remarkably consistent regardless of the judge's sex (18), age (6), geographical region, and socio-economic class (15).

It is useful to note that most of the research on physical attractiveness has been concentrated on facial attractiveness. Facial cues may not be the sole determinants of a person's physical attractiveness, but person perception research indicates that they may be the most influential dimensions of a person's physical appearance. For example, Mehrabian (21) has estimated that, in any interaction or communication, verbal and vocal cues respectively account for only 7 percent and 38 percent of the total impact; however, facial cues account for 55 percent of the total impact. Even if these proportions are inexact, they are illustrative of the paramount role that facial characteristics—including a source's physical attractiveness—can play in influencing audience perceptions and attitudes.

PERSON PERCEPTION EFFECTS

In an important marketing review of the theoretical literature in person perception, Wackman has noted that research regarding the meanings assigned to cues or combinations of cues—in terms of the characteristics ascribed to persons or communicators exhibiting such cues—is almost nonexistent in the person perception literature:

... little is known regarding the meanings assigned to the configurations of cues that a stimulus person presents. For example, if a stimulus person wears a white coat and glasses, does the perceiver think the person is a medical expert? Does the combination of middle-age woman and a Scandinavian accent mean that the stimulus person is an expert on the subject of coffee? In short, there is presently no 'vocabulary' for identifying the meanings communicated by combinations of cues in terms of such traits as expertise, aggressiveness, trustworthiness, and so on (33: 207).

How do audiences perceive physically attractive models and communicators? Experimental investigations in impression formation provide several clues with valuable implications for advertising and marketing communications. The evidence indicates that physical attractiveness is an important and pervasive source of influence in a variety of interpersonal situations, including heterosexual liking (2) task evaluation (19), peer popularity in children (10), and impression formation (11, 22). A common finding that emerges from these studies is the presence of a physical attractiveness stereotype—a tendency to consistently attri-

bute more positive qualities to people who are physically attractive rather than unattractive. For example, Dion *et al.*, (11) showed that college men and women expected physically attractive people of both sexes to possess more socially desirable traits (e.g., strength, sexual warmth, sensitivity, kindness, poise, modesty, and better character) than unattractive persons. Physically attractive people were expected also to lead "happier" and more "fulfilling" professional and personal lives than unattractive people. These findings corroborate earlier findings by Miller (22) who noted significant effects for physical attractiveness on 15 of 17 dimensions of a personality assessment scale. Miller concluded:

A consistent pattern emerges, that of the unattractive person being associated with the negative or undesirable pole of the adjective scales and the highly attractive person being judged significantly more positively (22:242).

Miller also found in a second study (23) that persons low in physical attractiveness were perceived to be more "external" along Rotter's (28) internal-external control dimension than those who were either moderate or high in physical attractiveness. Miller interpreted his findings as suggesting that physically attractive persons are likely to be perceived as individuals who are "masters of their fate," who behave with a sense of purpose and out of their own volition, whereas unattractive individuals are more likely to be seen as "coerced and generally influenced by others or by environmental conditions" (23:108). Miller's findings have important implications in terms of source credibility. If physically attractive sources are perceived to have an internal locus of control, they may also be perceived as individuals who are not easily influenced or manipulated by others, and whose opinions spring from independent thinking and personal convictions, all of these being qualities which denote greater source credibility.

The pervasiveness of the physical attractiveness stereotype has been affirmed in a variety of settings. In a nursery school setting, Dion and Berscheid (10) found direct evidence that a child's physical attractiveness is associated with his popularity. The children believed, for example, that aggressive, antisocial behavior was more characteristic of the unattractive boys than the attractive boys. Attractive children, regardless of sex, were perceived to be more independent, more likely to enjoy doing things alone, more self-sufficient, and more capable of accomplishing what they wanted than unattractive children. Other studies have demonstrated that children of kindergarten age can distinguish differences along at least one dimension of physical attractiveness—body build—and at this age, they have begun to express an aversion for certain body types, particularly those characterized by chubbiness (13, 20). Evidently,

certain appearance factors begin to have fundamentally evaluative connotations even at the preschool level. This suggests that a budding physical attractiveness stereotype is manifested at an early stage in the development of human social interactions.

The tendency to impute favorable traits to the physically attractive have been found to extend even to the evaluation of their performance on objective tasks. Landy and Sigall (19) had male college students evaluate the quality of an essay that was written supposedly by an attractive or unattractive female college freshmen; others evaluated the essay without knowledge of the author's appearance. The results indicated that the writer's ability and her work were evaluated most favorably when she was attractive, intermediately when her appearance was unknown, and least favorably when she was unattractive. But upon studying the interactions between objective essay quality and the "irrelevant" characteristic of writer attractiveness, the researchers found that whereas a well-written essay was evaluated about equally by subjects in both the attractive and unattractive conditions, a poorly-written essay was evaluated more favorably when the writer was attractive than when she was unattractive. These interactions led the researchers to speculate:

...if someone's work is competent, personal characteristics are less subject to influence evaluations of that work than when the quality of the work is relatively poor. Thus, if you are ugly you are not discriminated against a great deal as long as your performance is impressive. However, should performance be below par, attractiveness matters: You may be able to get away with inferior work if you are beautiful (19:302).

Extended to the advertising context, these findings imply that a model's physical attractiveness would be unimportant if the product he or she is promoting already has a strong brand image or clearly observable benefits. However, if the product does not possess these obvious advantages—and few products do—then various "irrelevant" cues, including a model's physical attractiveness, may become salient in influencing the consumer's response to the product and the ad.

PERSUASION EFFECTS

Since the general evidence on perception effects still points to the myriad social advantages that tend to be conferred on those who are physically attractive, it would seem only logical that source physical attractiveness should facilitate persuasion. Yet the evidence to date on the persuasive impact of this communicator characteristic has been equivocal. Investigations utilizing male sources (31, 14) have shown generally positive relationships between source

attractiveness and attitude change. However, the majority of studies with female sources (e.g., 4, 16, 24) have either failed to obtain significant attractiveness main effects or obtained interactions between attractiveness and other variables.

It must be noted that the models utilized in all of the opinion change studies (summarized in Table 1) were portrayed as spokesmen who gave opinions or endorsed a view. The active role of the communicator model should not be confused with the passive role of the "decorative" or functionless model (reviewed in a later section of this paper). Although both model types are common in advertising, studies using decorative models predominate in the advertising literature. Most of the opinion change studies in the following section are from the mass communication literature. They may appear, at first glance, to have only marginal relevance to advertising communications. Yet, the similarities are too strong, and the advertising literature too meager, for us to ignore the evidence that is being reported in other disciplines.

Male Sources

In an experimental setting which was designed to simulate a television broadcast, Snyder and Rothbart (31) tested the persuasive effects of source physical attractiveness with an audience of high school and college age males and females. Experimental subjects listened to a tape-recorded, one-sided 5-minute message advocating lower speed limits for highways while they viewed a slide projection of a middle-aged male who was physically attractive or unattractive. As predicted, opinion change was found to be greater under the attractive condition than under the unattractive or unpictured conditions. This effect was explained in terms of a liking hypothesis. Attractive sources are liked more than unattractive sources because we become socialized by the mass media to associate more positive values with physically attractive others. Hence, message acceptance occurs because of a "tendency to model the attitude and opinion statements of those whom we like." (31:385) Surprisingly, no significant differences were obtained between attractive and unattractive speakers on perceived honesty, competence, dominance, personal effectiveness and personal success. Source attractiveness also had no effect on recall.

Subsequent studies by Horai *et al.*, (14) and Chaiken (7) have confirmed the persuasive advantages of using male communicators who are physically attractive. Horai and her colleagues investigated the effects of physical attractiveness and expertise of adult male sources on opinion agreement among ninth-grade females. The evidence supported the authors' hypotheses that attractiveness and expertise would have significant positive main effects but no interaction effects. Attractive sources were liked more than unat-

TABLE 1

Summary of Methods & Findings of Persuasive & Advertising Effects of Source Physical Attractiveness

Study	Subjects	Source	Message/ Medium	Source Presentation	Attractiveness Levels Manipulated	Other Variables Manipulated	Dependent Measures	Attractiveness Main Effects	Inter- actions
Snyder & Bothbart (1971)	High-school Males & Fe- males	Middle-aged Males	Lower high- way speed/ limb/Tape recording	Slide Projection of still photo- graphs to vin- ylate television broadcast	2 (High/low)		1. Agreement 2. Source Expertise 3. Trustworthiness 4. Intelligence 5. Honesty 6. Liking 7. Recall	.001 n.s. n.s. n.s. n.s. .10 n.s.	
Horn et al (1974)	Junior High School stu- dents, White 9th Grade Females	College- age Males	Value of a brood, gen- eral educa- tion in high school/Print	Photograph	3 (High/low/ none)	Source Ex- posure	1. Agreement 2. Liking for Source 3. Recall	.01 .05 n.s.	n.s. n.s. n.s.
Chaiken (1979)	Male and Female Col- lege Under- graduates	College- age Males & Females	Why meat should be banned at breakfast & lunch in college dining rooms/Spoken	In-person; Target subjects interviewed on campus by source	2 (High/low)	Sex of Source -Reverer	1. Agreement 2. Perceptions 3. Friendliness 4. Knowledge	.05 .06 .07 n.s.	
Mills & Aranson (1985)	College Males	College- age Female	Value of a general educa- tion in college/Spoken	In-person, class- room discussion setting	2 (High/low)	Over/Covert Desire to Influence Others	1. Agreement 2. Liking for Source 3. Various favor- able traits (e.g. neat, af- fectionate, etc.)	n.s. .001 .05	.06
Blaw et al (1974)	White Male College Undergradu- ates	College- age Females	New names for campus buildings, classrooms, Vandalized voice over	Video tape	2 (High/low)	Race of Source (White/ Black)	1. Agreement 2. Recall	n.s. n.s.	.05 n.s.
Joseph (1977)	Male and Female College Undergradu- ates	College- age Females	Decipherability of easy vs. multiple choice tests in a college course/Tape recording	Slide pro- jections of still photo- graphs to simulate publicity film	3 (High/medium/ low)	Source Expertise	1. Opinion change 2. Liking for Source 3. Trustworthiness 4. Qualification 5. Dynamism 6. Perceived Sim- ilarity to Source 7. Recall	n.s. .001 n.s. n.s. .001 n.s. n.s.	.05 .05 n.s. .05 .05 -
Wolcott & Ruch (1981)	Male College Freshmen	College- age Females	Mandatory jail sentence for drunken drivers/Print	Photograph	2 (High/low)	Subject's Machi- velianism	1. Attitude Change	.05	.05

tractive ones, but attractiveness, again, had no effect on recall.

The Snyder and Rothbart and the Horai *et al.* studies are significant because they demonstrate that source attractiveness can be a potent source of influence even when the source is considerably older than members of his audience.

Chaiken (7) tested the relation between communicator attractiveness and persuasion in a field setting with communicators of both sexes. College student subjects were approached individually by an attractive or unattractive communicator and asked to complete an opinion survey after the communicator had stated that he or she was in a campus group favoring a campus-wide ban on meat at breakfasts and lunches. Subjects completed various attitudinal and perception measures as well as a behavioral measure (signing a petition). Chaiken found support for her prediction that communicator attractiveness, regardless of the communicator's sex, will have a positive effect on agreement and behavioral compliance. Overall, female subjects expressed greater agreement than did male subjects (even though a control group showed that opinions regarding the meat issue did not differ on the basis of sex) and a larger proportion of female (vs. male) subjects agreed to sign the petition. Whereas attractive sources were perceived as somewhat friendlier than unattractive ones, no differences were obtained on ratings of communicator knowledgeability.

Chaiken's study is unusual as well as important because it attempted also to explain the attractiveness effect by testing the hypothesis that attractive and unattractive individuals may differ in communication and persuasive skills. Data gathered from communicator-subjects during earlier sessions confirmed these expectations: Attractive communicators were found to be more fluent, to speak faster, and to have higher SAT scores and grade point averages, and more positive self concepts than unattractive communicators.

Female Sources

With the exception of Chaiken's (7) and Widgery and Ruch's (34) results, the experimental evidence on the attractiveness-persuasion relationship for female sources can be best characterized as equivocal.

In one of the earliest studies to be published in this area, Mills and Aronson (24) hypothesized that an overt, frankly-stated desire to influence would actually enhance the effectiveness of a communicator who is physically attractive, whereas in the case of an unattractive communicator, an overtly stated desire to influence would inhibit effectiveness. The authors found consistent if marginally significant support for the first part of the hypothesis. An overt desire to persuade increased the effectiveness of a communication when the source was physically attractive. In the case of the unattractive communicator, however, an overtly stated

desire to influence proved to be neither a liability nor an asset when compared with the covert condition.

Although Horai and her associates (14) had found no interactions between source attractiveness and source expertise when the source was male, Joseph (16) hypothesized that attractiveness would have a stronger impact on opinion change when source expertise is low. Male and female subjects listened to an opinion about multiple choice versus essay examinations as they watched a female "source" (rated independently as being high, medium, or low in physical attractiveness) in a mock publicity film about "college students of the seventies." Source expertise was also systematically varied. Although no attractiveness main effects were obtained on agreement, Joseph found a significant interaction effect on a measure of test preference, as predicted: When the source was expert, her physical attractiveness made little difference in terms of subjects' preferences; however, when she was inexperienced, subjects agreed more with the high attractive source than with the medium or low attractive source. Apparently, when objective or task-related source characteristics (e.g., expertise) are weak, subjects resort to "irrelevant" cues (such as physical attractiveness) to form opinions.

Source perception measures revealed significant attractiveness main effects on source credibility, liking, and perceived source-receiver similarity. But in contrast to the evidence on attractiveness stereotypes, physically attractive sources were perceived to be neither more qualified nor more trustworthy than unattractive sources. A highly significant attractiveness main effect was obtained on the "dynamism" component of source credibility. This finding was interpreted as being an indicator of the greater arousal or attention value that attractive communicators possess when compared to their less attractive counterparts. The implication for advertisers seeking to improve the attention value of their commercial messages is obvious.

Although the evidence so far on female sources points to a tenuous link between source attractiveness and persuasion, the Chaiken study (7) and a recent investigation by Widgery and Ruch (34) suggest that the link may be less tenuous than it first appeared. Widgery and Ruch tested the effects of source physical attractiveness and receiver Machiavellian tendency on attitude change. Subjects read a persuasive message which favored stiff jail sentences for all drunken drivers. The message was accompanied by a picture of a physically attractive or unattractive female source. High and low Machiavellian subjects were assigned randomly to the two attractiveness conditions. From pre and postmeasures of attitude toward the message, the researchers found the attractive sources to be more persuasive, overall, than the unattractive sources. The researchers also obtained a significant interaction effect as predicted: while low Machiavellian subjects were greatly influenced by the attractive source, high Machiavellians

were not. This effect was explained as a tendency among high Machiavellians to resort more to the rational rather than emotional merits of a communication.

ADVERTISING EFFECTS OF "DECORATIVE" MODELS

Only a handful of studies have presented experimental evidence on the communications effects of model attractiveness in advertising. Of the four studies reviewed in this section (see Table 2), two (30, 32) deal with the advertising effects of sexually appealing female models in ads, rather than physical attractiveness per se. Even though a "sexy" person may also be esthetically pleasing—and some researchers have used the terms interchangeably (e.g., 9)—a distinction must be made between models who are pleasing in physical appearance and models who (regardless of their physical attractiveness) are erotic because of their clothing, posture, movement, or other nonverbal or verbal cues.

Using mock print ads, Baker and Churchill (1) tested the effects of model physical attractiveness (for both male and female models), product type (coffee versus perfume/cologne/after shave lotion), and subjects' sex on evaluations of the ad and on purchase intentions. The researchers predicted a significant main effect for model attractiveness and expected male model ads to receive higher ratings from females and female model ads to receive higher ratings from males. Baker and Churchill obtained attractiveness main effects only on evaluations of the ad's esthetic attributes. For the ads with female models, the researchers found significant interaction effects between model attractiveness and product type as well as a 3-way interaction between attractiveness, product type, and sex of subject: neither product type nor physical attractiveness had any effect on female subjects' purchase intention scores but male subjects were affected by the female model's attractiveness. The direction of the effect on male subjects was moderated by the type of product. When the product was attractiveness-unrelated (coffee), the female model produced much higher intention scores when she was *unattractive* than when she was attractive; when the product was attractiveness-related (cologne), the attractive female model produced higher intention scores than her unattractive counterpart. In sum, Baker and Churchill's results suggest that the generality of the physical attractiveness-persuasiveness effect may be limited by the type of product or topic being advocated, the sex of the receiver, and the sex of the source.

Chestnut and his associates (9) used print ads from national magazines to test the effect of a model's presence in an ad on brand recognition. Decorative model ads included an attractive female who was "unnecessary for the ad's display of the product." (9:12) Control ads did not include models but focused on a picture of the product.

Male college students viewed either the model or control ads and were administered two types of recognition tests (one consisting of a recognition of a sampling of either the model or the control ads, and the other, the recognition of brand names only). The researchers found that attractive model (vs. control) ads had little influence upon the recognition of brand name information. However, recognition of the entire ad was higher under the model conditions. The authors explained this effect in terms of "perceptual processing" (27): Decorative models, by being noticed and remembered, facilitate recognition of the entire ad, even if they do not enhance recall of all elements of the ad's contents.

Smith and Engel's (30) and Steadman's (32) investigations on the advertising effects of "sexy" models have only limited theoretical relevance to the physical attractiveness literature. Yet, they are worth noting because they offer practical implications for advertisers who may wonder about the benefits of using sexually attractive models. Smith and Engel tested the effects of the presence or absence of a physically attractive but partially clad female model on subject perceptions of an automobile, which was presented in a photographic montage. The results indicated that both male and female readers of the model ad perceived the car to be more appealing, lively, youthful, and better designed than did readers of the control ad. The model also influenced subjects' ratings of the car's objective characteristics. Experimental (vs. control) subjects perceived the car to be higher priced, faster, less safe, and higher in horsepower. In sum, the evidence clearly showed that a model's attractiveness (or "sexiness") can favorably influence a product's image.

Steadman (32) studied the effect of sexual illustrations on brand recall with 12 mock advertisements (one half consisting of pictures of products with brand names and the other half including photographs of females in "various stages of undress"). The results indicated that immediate recall (measured one day later) was not affected by the type of picture used in the ad. However, delayed recall measures (taken seven days later) showed that the erotic ads actually inhibited recall as compared to the non-erotic ads. Steadman also reported that subjects with favorable attitudes toward sexually suggestive advertising had more correct brand recalls from the sexual ads than did those with less favorable attitudes.

It must be noted that, with the exception of the Baker and Churchill study (1), all of the advertising studies in this review had utilized experimental manipulations consisting of either a pictured model or no picture. Regardless of whether the independent variable being manipulated was model attractiveness (9) or model sexiness (30, 32), there is a question as to whether a picture/no picture manipulation represents an adequate test of the attractiveness (or sexiness) effect or whether the results are confounded by the very

TABLE 2
Summary of Methods & Experimental Findings of Persuasive/Advertising Effects of "Decorative" Models in Ads

Study	Subjects	Model	Message/ Medium	Model Presentation	Variables Manipulated			Dependent Measures	Significant Results	
					Attractiveness Levels	Other	Inter- action		Main Effects	Inter- action
Baker & Churchill (1977)	Male & Female College Undergraduates	College-Aged Males & Females	Ads for Coffee, Perfume, Cologne or After-Shave/Print	Photograph mounted on "test" advertisement	2 (High/low)	1. Sex of Subject 2. Product Type	1. Ad Effectiveness (Attitude to Ad) Male Models: Affect Cognition Conation Female Models: Affect Cognition Conation	.01 n.s. n.s. n.s. .01 n.s. n.s. .05	n.s. n.s.	.01 n.s.
Chenaut <i>et al</i> (1977)	Male College Undergraduates	Females	Ads from national magazines, projected on screen	Ads from national magazines showing attractive models	2 (Pictured-attractive/not pictured)	Type of recognition Test (entire ad vs. brand name only)	1. Ad Recognition 2. Brand Name Recall	n.s. n.s.	.05	
Smith & Engst (1968)	Middle-class Adults	Young Adult Females	Photographic Montage of an Automobile, Print	Picture of a partially-clad Female	2 (Pictured vs. not pictured)	Sex of subject	1. Car's design 2. Estimated price 3. Estimated top speed 4. Car's attractiveness	.01 .01 .05 .01		
Stradman (1969)	Males	Young Adult Females	Product Photographs with Brand Names/Print	Photograph of partially-clad Females	2 (Pictured vs. not pictured)	—	1. Immediate Recall 2. Delayed Recall (7 days)	n.s. .05		

presence or absence of a pictured model, independent of the models attractiveness or sex appeal. Each of these studies would have been strengthened if the experimental manipulations had involved more than just one level of attractiveness or sexiness (26).

SUMMARY & CONCLUSIONS

How effective are physically attractive communicators? The evidence reviewed from seven opinion change and four advertising experiments suggests that attractive models contribute in limited but important ways toward increasing a communication's effectiveness. Specifically, studies have shown that receivers make more favorable evaluations of the ad (1) as well as the product being advertised (30) when attractive models are used in the advertisement.

The most consistent finding in terms of source perception deals with liking: physically attractive communicator: are liked more than unattractive communicators (31, 14, 16). Even though liking for a source does not always produce immediate changes in attitude, its importance as an antecedent of social influence has been confirmed in a wide range of studies (5). As congruity theory (25) might predict, if a person has a positive attitude toward a communicator, he or she will also evaluate that communicator's message in positive terms.

But in contrast to the favorable attractiveness stereotypes that have been noted consistently in person perception studies (10, 22), the opinion change studies indicate that these stereotypes do not extend necessarily to perceptions of source credibility. While attractive sources have been perceived by receivers to be more "dynamic" and more similar to them than unattractive sources (16), they are not generally perceived to be more expert, trustworthy, honest, knowledgeable or intelligent (31, 16).

Does model attractiveness or sexiness enhance message recall? The evidence on recall is highly consistent in answering no to this question. However, attractive models may facilitate recognition of an ad (9).

The evidence on persuasive effects indicates that physical attractiveness may be a significant determinant of opinion change. However, its impact (at least in the case of female communicators) tends to be weakened, or occasionally even reversed, when other cues are present. For example, attractive female communicators appear to be no more effective than unattractive communicators when they are described as expert (16), or when their manipulative intent is disguised (24). And in at least two instances, attractiveness has been found to be a persuasive liability: one, when the communicator was a black female and the receivers were white college males (4) and two, when the advertised product was obviously unrelated to attractiveness (1).

The inconsistencies in the evidence may lead us to conclude, perhaps, that source attractiveness—contrary to

advertiser intuitions—is not a particularly important or robust source of interpersonal influence. But considering the limited number of studies that comprise the attractiveness-persuasion literature, especially in advertising, it would be premature to accept the null hypothesis. Indeed, Chaiken offers an interesting alternative interpretation, based on the laboratory nature of previous research:

... the implicit demands of the psychology laboratory may often lead subjects to adopt highly logical modes of cognitive functioning and, as a consequence, to underutilize attractiveness information in forming their opinions (7: 1395).

If Chaiken's hypothesis is correct, communicator physical attractiveness, then, may prove to be a potentially effective source of influence after all. But many questions remain concerning the specific effects of this ubiquitous source characteristic.

DIRECTIONS FOR FURTHER RESEARCH

The laboratory nature of previous studies and the preponderance of student subjects suggest that future research on communicator/model attractiveness must include more field investigations and employ subjects from nonstudent populations. Research is also needed to identify the differential impact of three or more levels of source attractiveness. This is useful from an advertising perspective because, while much of the previous research is based on a two-level manipulation of attractiveness (with attractiveness limited by the relatively prosaic standards of college yearbook portraits), advertisers need to know if there is an optimal level of attractiveness that will maximize one or more advertising goals. This means that future investigations must include models who represent intermediate as well as extreme levels of physical attractiveness. A special problem worth investigating within this context is the effectiveness of using highly unattractive models (e.g., a severely undernourished child or a handicapped person) in ads and direct mail appeals of charitable organizations.

We also need to know more about how source attractiveness interacts with other source, message, medium, and receiver characteristics. For example, research is needed to test the generality of the interaction effects noted by Baker and Churchill (1) between model attractiveness and products which are attractiveness-related or unrelated. One useful framework for such a test is presented by Peterson and Kerin (26). Their framework suggests that models in ads play roles which vary in terms of a "product-model congruency" continuum (26:62). Low congruency is the *exploitive* end of the continuum, represented by "cheese-cake" advertisements in which the model only serves a titillating function (e.g., a partially nude female model in

an ad for handtools directed to male consumers). At the other extreme, high congruency is represented by a model in a *communicative* role whose presence is integral to the advertising message (e.g., a partially nude female model in an ad for pantyhose). In the middle of the continuum, the model fills a *decorative* role which is neither strictly communicative nor exploitive (e.g., a demurely dressed female in an ad for men's cologne, directed at consumers of either sex).

As the black and Hispanic segments become more important in the U.S. consumer market, model selection for cross-cultural advertising campaigns will become more challenging. For example, Chapko (8) has reported a gradual darkening of the skin tone of black models in ads directed toward black audiences. And when Kerin (17) compared test ads with black female models who were made up to look either Negroid or Caucasian, he found that product quality was associated with Negroid features when the subjects were black females, and with Caucasian features when the subjects were white females. Even though neither of these studies addresses directly the issue of model attractiveness, they suggest interesting directions for future research in cross-ethnic communications, particularly with designs that can test the interactions between a model's physical attractiveness, race, and sex, and the race and sex of consumer subjects.

Finally, research is needed to test alternative theoretical explanations of the mechanisms which underlie the attractiveness effect. Although some social scientists (e.g., 3) have dismissed the possibility of a general theory of physical attractiveness, the importance of this cue in first time and brief encounters cannot be overlooked. But most of the research to date has not been oriented to theory testing. Is the attractiveness effect a result of heightened arousal, distraction, classical conditioning, identification with the attractive source, cognitive consistency, or attractiveness-induced liking? As the underlying mechanisms are elucidated, we will be better able to appreciate the practical benefits and limitations of using physically attractive models and communicators in advertising and other types of mass communication.

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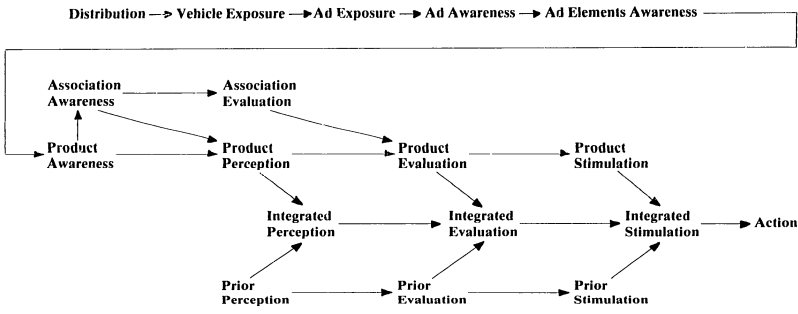
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NOTE: Please note the following changes to be made in the Preston article in issue 11-2. You might want to refer to the original article and make the needed changes.

THE ASSOCIATION MODEL OF THE ADVERTISING COMMUNICATION PROCESS

IVAN L. PRESTON

FIGURE 1
The Association Model



On the first line in Figure 1, which originally appeared on page 4, the spelling of vehicle is corrected and Non-Product Awareness has been changed to Ad Elements Awareness.

On original page 5, under Association Evaluation, the first reference to Association Awareness should say Association Evaluation.