The Effect and Moderation of Gender Identity Congruity: Utilizing “Real Women” Advertising Images

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ABSTRACT

The present article examines the predictive ability of gender identity congruity in explaining women's responses to advertising appeals. The contributions of the article are twofold: (1) to demonstrate whether advertisements that are congruent with female consumers’ gender identities elicit strong positive responses and (2) to identify the factors that moderate/mediate the impact of gender identity congruity on consumer responses to advertisements. The research findings provide evidence of the ability of gender identity congruity to elicit positive responses to advertising appeals. The relationship between gender identity congruity and responses to the advertisement is mediated by advertising involvement. The moderating roles of national culture, physical concern, and physical view are also supported. Overall, the congruity theory provides a powerful framework to examine consumer responses to gender portrayals in advertising. © 2009 Wiley Periodicals, Inc.
The Financial Times recently reported that Nike is jumping on the “real women bandwagon,” using more ordinary women as opposed to flawless models in their advertising campaigns. Along with Nike, many companies have identified that some women experience negative effects by comparing themselves to highly attractive models in advertising, producing a negative impact on advertising effectiveness (Bower & Landreth, 2001). Increasingly, advertising practitioners are going to great lengths to design advertisements with female images that women consumers can easily identify with. On this basis, determining whether female advertising images that are congruent with female consumers’ self-concepts can improve advertising effectiveness is a timely endeavor.

Gender identity congruity refers to the extent to which correspondence is achieved between the configuration of a gender portrayal in an advertisement and the configuration specified by a consumer’s schema or beliefs (Orth & Holancova, 2004). According to the principle of cognitive consistency, individuals value harmony among their thoughts, feelings, and behavior and are willing to maintain consistency between these elements (Osgood & Tannenbaum, 1955). Given recent evidence relating to the negative impact of idealized female images, achieving gender identity congruity may be particularly germane in advertising to female target markets.

Researchers have examined the positive impact of the congruity between consumers’ self-concept and advertising appeals on attitude and purchase intention (Hong & Zinkhan, 1995) and between self-concept and brand image on the liking of the brand (Dolich, 1969) and on purchase intention (Landon, 1974). As gender identity is an important dimension of one’s self-concept, it is reasonable to expect that increasing the amount of gender-congruent information contained in an advertisement will facilitate the processing of this information and even improve the rating of the arguments (Worth, Smith, & Mackie, 1992). Surprisingly, existing research in advertising has paid little attention to the impact of gender identity congruity on advertising effectiveness (for a review, see Wolin, 2003). Thus, the present study examines the unique predictive ability of gender identity congruity in explaining women’s response to advertising (Jaffe, 1991, 1994). The contributions of this article are twofold: (1) to demonstrate whether advertisements that are congruent with female consumers’ gender identities elicit strong positive reactions and (2) to identify the factors that moderate/mediate the impact of gender identity congruity on female consumer responses to advertisements.

GENDER IDENTITY CONGRUITY IN ADVERTISING

From Gender Identity to Gender Identity Congruity

Biological gender has been extensively utilized in segmentation studies (Dommeyer, 2008; Huhmann & Mott-Stenerson, 2008; Putrevu, 2008; Barone, Palan, & Miniward, 2004; Brunel & Nelson, 2003; Meyers-Levy & Sternthal, 1991), as this criterion meets several of the requirements for successful implementation: easy to identify, easy to access, and large enough to be profitable (Putrevu, 2004). However, biological segmentation ignores different psychological orientations within one gender (Fischer & Arnold, 1994). Psychological scales to address gender identity exist in the psychology literature—for example, Bem’s...
Sex Role Inventory (1974, 1991) or the Personal Attribute Questionnaire (Spence, Helmreich, & Stapp, 1975). Yet the majority of marketing-oriented studies consider gender a binary variable (Wolin, 2003), ignoring the potential impact of psychological gender identity on consumer responses to advertisements.

Gender has been conceptualized in various ways, principally relating either to the origins or associations of the construct: These could be biological and social (Meyers-Levy, 1988), institutional (Coltrane, 1989; Risman, 1998), moral (Gentry, Suraj, & Jun, 2003), or a combination encompassing socialization, interaction, and institutional organization (Risman, 1998).

Two alternative conceptualizations of gender are evident in the literature. According to the selectivity hypothesis scheme, gender is conceptualized as gender roles. Men and women adhere to alternative gender roles: Males are guided by self, agentic goals, while women pursue other, communal concerns (Meyers-Levy, 1988). Drawing on this conceptualization of gender, recent research has shown that men are sensitive to issue capability in decisions that are driven by the achievement of gains due to their agentic orientation, whereas women, due to their communion orientation, are sensitive to issue capability in decisions that are driven by the prevention of losses (He, Inman, & Mittal, 2008).

The selectivity hypothesis highlights significant gender differences in advertising processing: Men use a schema-based strategy, whereas women use a detailed processing strategy (Meyers-Levy & Maheswaran, 1991) and engage in more comprehensive (Carsky & Zuckerman, 1991), elaborate (Meyers-Levy, 1989; Meyers-Levy & Sternthal, 1991), and subjective (Prakash & Flores, 1985) processing.

This unidimensional, bipolar conception of gender, correlated with biological gender, has been challenged by the conceptualization of gender identity as the psychological gender traits of masculinity and femininity. According to this view, masculinity and femininity are regarded as orthogonal constructs coexisting in varying degrees within the same individual (Bem, 1974; Stern, Barak, & Gould, 1987). Feminine gender identity is defined by traits such as expressiveness and emotionalism and is guided by a communal orientation. Masculine gender identity is defined by traits such as independence and activity and is directed by an agentic orientation (Bem, 1974; Gainer, 1993; Spence & Helmreich, 1978). The key difference between this conceptual definition and the selectivity hypothesis is that individuals of the same gender exhibit varying degrees of masculine and feminine traits. For example, a woman may exhibit both high feminine and high masculine traits or a man may exhibit high feminine and low masculine traits.

Examining the impact of individuals’ gender identity on their preference for a portrayal congruent with their inner gender identity may prove more fruitful in explaining advertising effectiveness than other gender differences such as gender role norms. In social psychology, the consistency principle argues that individuals are motivated toward cognitive consistency and are willing to change their beliefs, attitudes, perceptions, and actions to achieve harmony among their thoughts, feelings, and behaviors (Osgood & Tannenbaum, 1955). Thus, it is reasonable to expect that individuals will have a more favorable attitude toward advertisements that express a gender identity that is congruent with their own.

Three research streams enhance understanding of the role of congruity between an individual’s gender identity and the gender identity expressed in advertising portrayals: schema theory, social identity theory, and congruity
theory. Schema theory (Markus, Crane, & Siladi, 1982) identifies four gender self-schemas: masculine schematics, feminine schematics, low androgynous and high androgyous. In this perspective, individuals differ significantly in the nature of their knowledge structures about gender and in how gender is incorporated into their self-concept (Markus et al., 1982). Thus, individuals, independently of their biological gender, will display either strong masculine traits and low feminine traits, strong feminine traits and weak masculine traits, both strong masculine and strong feminine traits, or both weak masculine and weak feminine traits. This theory provides useful insights for research on psychological gender identity. However, as gender schema theory has not generally been supported in consumer behavior research (Gentry & Haley, 1984; Kahle & Homer, 1985), alternative theories such as the social identity perspective and the congruity framework need to be considered. They make it possible to go beyond gender identity itself and to examine the consequences of gender identity congruity on advertising response.

In the context of gender advertising portrayals, congruity refers to the match between the stimulus and the member of a specific category, following which members of the in-group (for instance, individuals with a feminine identity) associate the product with their gender group rather than with the out-group (for instance, individuals with a masculine identity) (Maldonado, Tansuhaj, & Muehling, 2003). It is also defined as the extent to which structural correspondence is achieved between the entire configuration of a gender portrayal and the configuration specified by a person’s schema or beliefs (Orth & Holancova, 2004).

From a congruity perspective, it is expected that increasing the amount of congruent information contained in an advertisement should facilitate processing of this information and even improve the rating of the arguments (Worth, Smith, & Mackie, 1992). Concretely, this can be achieved by using the portrayal of an individual whose traits are congruent with those of the target audience (for instance, a product positioning emphasizing values such as assertiveness and independence will stimulate gender identity congruity for female respondents with a masculine profile). Surprisingly, only very recently have researchers started to examine consumer response to gender portrayals in a congruity framework (Orth & Holancova, 2004), leaving a gap in the literature (Wolin, 2003) which the present study intends to address.

**Gender Identity Congruity and Advertising Involvement**

Using meta-analytic procedures, editions of Psychology & Marketing, Journal of Consumer Research, Journal of Advertising Research, Journal of Advertising, Journal of Marketing, and Journal of Marketing Research between 1984 and 2005 were screened to identify relevant articles related to gender identity congruity in advertising portrayals. Forty-nine articles were retained based on key words such as: biological gender, gender identity, gender role, or alternative gender-related constructs. Of these, 65% used biological gender to conceptualize gender while only 20% of authors explored the psychological gender identity of their respondents (e.g., Fischer & Arnold, 1994; Jaffe, 1994). The remaining 15% focused on alternative concepts such as female autonomy (Ford & LaTour, 1993). The findings of the literature review indicate that no research has investigated the impact of gender identity congruity on advertising involvement, despite the explanatory power of the construct on behavior (Zaichkowsky, 1985).
Advertising involvement is defined as a person’s perceived relevance of the advertisement based on inherent needs, values, and interests (Zaichkowsky, 1985). The personal relevance of the stimulus object that defines involvement (Clarke & Belk, 1979; Petty & Cacioppo, 1981) has three major antecedent factors: the characteristics of the person, which thus includes the “self”; the characteristics of the stimulus; and the characteristics of the situation. Therefore, the interaction of the stimulus and the individual is an antecedent of advertising involvement. As gender identity congruity occurs when the individual and the stimulus interact to bring into salience an individual’s gender identity as part of the self-image, gender identity congruity should be an antecedent of advertising involvement. This is supported by the nomological network of relationships among involvement antecedents, state properties, related constructs, and consequences (Andrews, Durvasula, & Akhter, 1990). The degree to which the stimulus has ego-related significance is identified as an antecedent of involvement. As gender identity plays an important part in defining the self-concept, gender identity congruity can be regarded as a likely antecedent of involvement toward an advertising stimulus. This leads to the following hypothesis:

**H1:** Gender identity congruity will be positively associated with advertising involvement.

**Gender Identity Congruity, Advertising Involvement, and Attitudinal and Behavioral Outcomes**

At the individual level, gender identity is believed to influence cognitive processes as well as attitudinal and behavioral variables. Previous research shows gender identity, as opposed to biological gender, demonstrates a unique predictive ability in explaining women’s response to advertising (Jaffe, 1991, 1994) as well as product involvement (Fischer & Arnold, 1994). Some authors have also found a relationship between individuals’ levels of masculinity or femininity and that of their chosen products or brands (Aiken, 1963; Fry, 1971; Morris & Cundiff, 1971; Vitz & Johnson, 1965).

As noted earlier, however, little is known about the impact of gender identity congruity on attitudinal and behavioral outcomes (Schmidt, Leclerc, & Dube Rioux, 1988). The congruity theory posits that the degree and direction of an attitude will both vary in the direction of increased congruity within a subject’s cognitive schema (Meyers-Levy, Louie, & Curren, 1994). In this respect, the processing and interpretation of advertising appeals may be influenced by the centrality of gender in the self-schemas of the consumer being exposed to the advertisement (Hogg & Garrow, 2003).

In particular, schema congruity should yield strong affective reactions. Positive feelings may be activated by a gender-congruent advertisement due to the central and affective aspect of gender in the individual’s self-concept, independently of the information on which the positive affect is based (Worth, Smith, & Mackie, 1992). In the same way, emotions have been found to mediate the influence of the degree of advertising portrayal incongruity on attitude toward the advertisement and toward the brand itself (Orth & Holancova, 2004).

According to the congruity theory, advertising portrayals that are congruent with consumer self-schemas should generate more positive attitudes than incongruent portrayals (Orth & Holancova, 2004). Past research has examined the
impact of matching the gender of the advertising model, using biological gender, but has resulted in conflicting findings.

Consequently, research needs to examine the congruity theory at a more abstract level, taking into account the psychological definition of gender identity. Attempts to look at the influence of women's gender ideology (Jaffe & Berger, 1994) and desire to work (Barry, Gilly, & Doran, 1985), along with research examining the influence of the degree of congruity between a modern or traditional positioning of the advertisement and the psychological gender identity of the female respondent (Jaffe, 1991), pave the way for a study examining the effectiveness of the congruity framework. Additionally, the study of the influence of the degree of congruity between self-ratings of masculinity and femininity (Markus, 1977) and the description of a product in an ad as masculine or feminine (Worth, Smith, & Mackie, 1992) confirm this as a valuable avenue for research. They demonstrate experimentally that products described in gender terms that are congruent with subjects' views of themselves as either masculine or feminine are preferred to products described in gender-schema–discrepant terms (Worth, Smith, & Mackie, 1992). Based on these findings, gender identity congruity is likely to have an impact on the consumer's attitude toward the ad and purchase intent for the product advertised. A question that has not been examined in previous research is whether this impact of gender identity congruity on attitudinal and behavioral variables is mediated by advertising involvement.

The concept of consumer involvement has received widespread attention in the marketing domain over the last 30 years. Conceptualized and measured in a variety of ways, consumer involvement is rooted in Allport's (1943) and Sherif and Cantril's (1947) seminal treatments of ego involvement and can be generally defined as personal importance or relevance of a product category (Feick, Coulter, & Price, 2003; Higie & Feick, 1989). While it is obvious that certain product classes generate greater involvement as a whole than other classes, it is important to recognize that individuals will vary in their degree of involvement in particular products or advertising content. These individual differences will make some people more interested, concerned, or involved in the consumer decision process (Kassarjian, 1981; Slama & Tashchian, 1985).

At an individual difference level, involvement is perceived to mediate cognitive processes and overt behaviors (Celsi & Olson, 1988; Park & Hastak, 1994; Petty & Cacioppo, 1986). While product and situation differences in involvement have been found to have a moderating role (Mantel & Kardes, 1999; Wright & Lynch, 1995), due to the relative ease of manipulating these factors in laboratory experiments (Celsi & Olson, 1988), empirical results suggest that involvement effects operate more dramatically at the within-subject level with a mediating role (Mano & Oliver, 1993; Rahtz & Moore, 1989).

Involvement is an individual, internal state of arousal with intensity, direction, and persistence properties. The consumer's internal state of arousal determines how he/she responds to stimuli, such as advertisements or products (Andrews, Durvasula, & Akhter, 1990). Andrews, Durvasula, and Akhter (1990) provide a nomological network of relationships among involvement antecedents, state properties, related constructs, and consequences. Several antecedents of involvement are identified, including the degree to which the stimulus has ego-related significance. As gender identity is a significant dimension of the self-concept, gender identity congruity can be regarded as a likely antecedent of involvement toward advertising stimuli. One consequence of involvement that
has been discussed (Andrews, Durvasula, & Akhter, 1990) is its impact on persuasion in the form of greater central attitude change and enduring change predictive of actual behavior. On the basis of this predicted pattern of theoretical relationships, the congruity between one's gender identity and the gender identity portrayed in an advertising stimulus is likely to enhance attitudinal and behavioral responses through the mediation of advertising involvement. H2 and H3 posit:

H2: A positive relationship will exist between gender identity congruity and consumer attitude toward the advertisement; this relationship will be mediated by advertising involvement.

H3: A positive relationship will exist between gender identity congruity and consumer purchase intention; this relationship will be mediated by advertising involvement.

Moderators of Gender Identity Congruity: National Culture, Physical Concern, and Physical View

Drawing a more comprehensive understanding of individual behavior requires examining both micro-individual and macro-cultural antecedents. Individuals do not only have intrinsic individual tastes and predispositions; they are also shaped by a specific cultural background, which has an influence on their behavior (Lee & Briley, 2002; Malshe & Gentry, 2004; Triandis, 1989). The main characteristic of culture is its commonality to members of cultural groups, identified as clusters with well-defined boundaries (Hall, 1966). Culture may be conceptualized at several levels, language and nationality being the most widespread segmentation criteria (Dawar & Parker, 1994). Nationality is often used as a surrogate for culture (Hofstede, 2001; Money, Gilly, & Graham, 1998; Nakata & Sivakumar, 1996; Yoo & Donthu, 2002; Yung & Miracle, 2004), as it can be easily identified. Members of the same national group often share a similar history, language, and a related system of values (Dawar & Parker, 1994). Values may be defined as beliefs that transcend specific situations or consumer-related contexts, guide selection, or evaluation of behavior and are ordered by importance to form a system of value priorities (Steenkamp, Hofstede, & Wedel, 1999; Rokeach, 1973).

Hofstede (1980) identifies five dimensions of national culture: power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity, and long- versus short-term orientation. These are aggregate national values or mental programming that are developed in early childhood and reinforced in schools and organizations. Masculinity and femininity reflect gender identity characteristics and hence are relevant in comparing issues related to gender identity across countries. As Hofstede (1980) states: “The masculinity-femininity dimension relates to people’s self-concept: who am I and what is my task in life?” (Hofstede, 1980, p. 32). There has, however, been little research in marketing studying the relationships between culture and gender identity. The only research identified compared the content of advertisements using content-analytic procedures (Al-Olayan & Karande, 2000; Browne, 1998; Maynard & Taylor, 1999; Milner & Colins, 2000).
National cultural priorities should, however, have an impact on attitudes at the individual level. The interactions between individual and cultural variables give rise to positive or negative social reinforcement mechanisms (Steenkamp, Hofstede, & Wedel, 1999). National culture provides a broader understanding of consumer decision-making processes, as it adds a macro-cultural element to a micro-individual framework. Hofstede (2001) identifies national cultural masculinity as the degree to which the values of a society are defined by assertiveness versus nurturance. Societies defined by a more masculine orientation give more importance to wealth, success, ambition, material objects, and achievement, whereas societies defined by a more feminine orientation place greater emphasis on people, helping others, preserving the environment, and equality (Hofstede, 2001).

The choice of culture as a moderator is particularly relevant in the present study, as national cultural masculinity and gender identity are related concepts. National cultural masculinity is expected to reinforce the masculine traits of gender identity. As the masculine trait may be associated with a need for congruity, individuals belonging to a masculine culture may tend to look for portrayals that activate their affiliation feelings. Indeed, the “similarity effect” is more effective with men than with women (Venkat & Ogden, 2002). In comparison, the feminine trait may be more associated with a perpetual need for change and for self-enhancement. Women are typically less satisfied with their bodies than males and try to bridge the gap between their perception of themselves and ideal models featured in the ads by buying the product advertised (Venkat & Ogden, 2002). Therefore, individuals belonging to a feminine culture may look for aspirational portrayals in ads and thus may have a lower tendency to look for congruent advertising portrayals. H4, therefore, states:

**H4:** National cultural masculinity moderates the effect of gender identity congruity on attitudinal and behavioral variables. The positive effect of gender identity congruity on attitudinal and behavioral consequences will be stronger when national cultural masculinity is higher.

Physical vanity is a key consumer trait within Western culture and arguably across the world (Burton, Netemeyer, & Lichtenstein, 1995). Physical appearance has played an increasingly important role in shaping consumers’ self-identity (Wang & Waller, 2006). Netemeyer, Burton, and Lichtenstein (1995) define physical vanity as a construct that comprises two distinct components: “(1) a concern for physical appearance and (2) a positive (and perhaps inflated) view of physical appearance” (Netemeyer, Burton, & Lichtenstein, 1995, p. 612).

Physical vanity is widely recognized as part of the self-concept and as a powerful variable influencing consumer behavior (Wang & Waller, 2006). Due to differences in traditional social roles ascribed to men and women, to perceived usefulness of physical attractiveness for women in acquiring social power, and to the greater impact of attractiveness on status for women than for men (Burton, Netemeyer, & Lichtenstein, 1995), concern about physical attractiveness has traditionally been higher among women than among men (Jackson, 1992; Rodin, Silberstein, & Streigel-Moore, 1985). A substantial body of empirical evidence has lent support to the notion that women are likely to be more concerned about appearance than men. For example, Aune and Aune (1994) established that women spend more time managing their appearance than men, regardless of
their ethnic background. Furthermore, research has shown that women tend to display significantly higher public body consciousness than men (Miller, Murphy, & Buss, 1981). Pliner, Chaiken, and Flett (1990) found that women aged from 10 to 79 years old were all more concerned about their physical appearance and body weight than men. Consequently, Burton, Netemeyer, and Lichtenstein (1995) concluded that women tend to have a higher physical concern than men.

More recently, the blurring of gender roles has caused a surge in men’s attention to their physical appearance, as male consumers have started to embrace more feminine values (Feature Analysis, 2005). Complex male consumers now tend to adopt both effeminate “metrosexual” values alongside more traditional masculine themes. The “metrosexual” is defined as an urban male with a strong aesthetic sense who spends a great deal of time and money on his appearance and lifestyle (AC Nielsen Global Services, 2004). However, in spite of these evolutions in gender roles, physical concern remains a predominantly feminine trait. Many male consumers despise the feminization of society and hold in contempt grooming products targeted to men. Even male consumers who have adopted metrosexual standards do not want to be regarded as effeminate. Recent findings provide robust support for the view that physical concern is still more important for women than for men (Wang & Waller, 2006). In a cross-cultural test of the vanity construct, women in both the U.S. and China were found to be more concerned about their physical appearance than were men. Analysis of gender effects on several behavioral measures relating to appearance concern also indicated that women in both countries used a greater variety of grooming products, reported more frequent usage of grooming products, and spent more money on the purchase of grooming products than men.

On the basis of the above findings, physical concern can be classified as a feminine trait. In other words, physical concern reinforces the femininity of gender identity. Therefore, individuals who display a high level of physical concern tend to be less satisfied with their body image and are more likely to long for ideal models of beauty in advertising portrayals and for aspirational products that promise to bridge the gap between their actual gender identity and the ideal image of the advert (Venkat & Ogden, 2002). Concern about their appearance may drive such individuals to try and hide their actual inner gender identity. Consequently, they may react more positively to ad portrayals that reflect the gender identity they aspire to, as opposed to their actual gender identity. For instance, a woman concerned about her physical appearance may wish to mask a masculine gender identity by purchasing products that reflect a feminine gender identity (i.e., the wolf in sheep’s clothing phenomenon). As a result, she may be attracted to ad portrayals that reflect a feminine image, even though this is incongruent with her actual gender identity. Contrarily, individuals who are less concerned about their physical appearance are more likely to react positively to gender-congruent portrayals. As they are not excessively concerned about the need to improve their appearance, or by the necessity to hide their inner gender identity, they are more likely to respond positively to advertising portrayals that activate their own gender identity and create gender identification by bringing their gender identity into salience (Maldonado, Tansuhaj, & Muehling, 2003). H5a posits:

**H5a:** Physical concern moderates the effect of the degree of gender identity congruity on attitudinal and behavioral variables. The positive effect of
gender identity congruity on attitudinal and behavioral consequences will be weaker when physical concern is higher.

Physical view is the second element that constitutes physical vanity. A low physical view may be at the origin of negative behaviors such as eating disorders (Rodin, Silberstein, & Streigel-Moore, 1985). Past research has examined the moderating impact of biological gender on self-perception of appearance (Burton, Netemeyer, & Lichtenstein, 1995). However, there is no research investigating how physical view acts as a moderator of gender identity congruity. As already mentioned, women tend to have higher physical concern than men and are also more likely to have a lower perception of their appearance, and thus a lower physical view than men (Burton, Netemeyer, & Lichtenstein, 1995). Women feel that there is greater cultural pressure and expectation for women to be attractive than for men. Harter (1990) has identified several factors that may have contributed to less positive perceptions of physical appearance among women. These include women’s less favorable body image, greater self-consciousness, more negative attitudes toward their gender, and the importance of appearance for women’s societal success. Hence, while physical concern may be characterized as a feminine trait, physical view may be conceptualized as a masculine trait, because a man’s physical view of his personal appearance is likely to be greater than a woman’s. Based on the need for congruity associated with masculinity, H5b posits:

**H5b:** Physical view moderates the effect of gender identity congruity on attitudinal and behavioral variables. The positive effect of gender identity congruity on attitudinal and behavioral consequences will be stronger when physical view is greater.

Figure 1 summarizes the nomological network of gender identity congruity and indicates the impact of gender identity congruity in advertising on the

![Figure 1. A nomological network of gender identity congruity.](image-url)
consumer’s attitude to the advertisement and purchase intent. This shows the moderating impact of national culture, physical concern, and physical view, along with the mediating impact of advertising involvement.

METHODOLOGY

Sample and Design

Data were collected among female respondents from the U.S., the U.K., and France. Countries were selected on the basis of comparable economic development and advertising channel structure but also represent different cultural patterns. While all three countries are individualistic Western cultures, they differ considerably in terms of their degree of masculinity/femininity, the national cultural dimension of interest in this study (Hofstede, 1985, 2001). The U.S. has the highest degree of masculinity, whereas France has the highest degree of femininity.

A survey was administered using two methods: electronic and mall intercept. E-mail address lists for each country were purchased from Experian, a leading international information provider. The lists provided a stratified random sample of geographically diverse female consumers, within age-defined strata, based on Experian’s extensive databases. An e-mail letter was delivered to 1000 addresses in each of the three countries with a hypertext Web address link to the questionnaire inserted. An average response rate of 25% was achieved, comparable with similar surveys (Kaplowitz, Hadlock, & Levine, 2004). In addition, in each country, mall intercepts were implemented in two locations to address geographical differences intranationally, with approximately 150 questionnaires administered per location. In the present study, the samples were matched based on gender, age, and geographic diversity. The use of matched samples minimizes the likelihood that major socioeconomic and demographic differences will confound substantive cultural differences. Results did not differ significantly between implementation methods or between early and late e-mail responders. A total sample of 1654 subjects was collected, in a narrow age bracket (18 to 30 years) to limit potentially distorting effects of other characteristics. The sample reflects the target markets of the products surveyed.

Stimuli

Participants were assigned a survey instrument containing four advertising stimuli. Three featured different female portrayals (gender identities as described by Bem, 1974) for a product targeted to women, and a control advertisement. Systematic procedures were followed to select the ads used in this experiment (Bhat, Thomas, & Wardlow, 1998; Jaffe, 1994). First, a census of print advertisements was selected in the top five U.S., British, and French women's magazines over a six-month period based on three criteria: All the products advertised were perfumes targeted to women, all advertisements were full page, and the portrayal of a female image was a central element of the advertisement, except in the case of control ads.

Previous work in consumer responses to advertising has emphasized the benefits of using real print ads to enhance external validity (Fox et al., 1998; Jones &
Mullan, 2006; Moorman, Neijens, & Smit, 2002; Morgan & Reichert, 1999; Nataraajan & Chawla, 1997; Torres & Briggs, 2005). Wells and Mithun (2003) argue that research where the independent variables are real products or advertisements should be encouraged to stimulate valid models of actual consumer behavior. The use of real advertisements was also appropriate given the context of an online panel. The respondents were members of an online panel and accustomed to responding to questions about “real” ads for “real” brands or questions relating to “real” products. Consequently, use of advertisements for fictitious brands would have been confusing. Furthermore, if fictitious brands had been used, differences in consumer willingness to innovate would have confounded results. Purchase intentions would have been influenced by willingness to innovate and would have been lower among those unwilling to try an unknown brand. Furthermore, there is some evidence of systematic differences in willingness to innovate across the three countries. American and U.K. consumers have been found to be more willing to innovate and try new products than French consumers (Steenkamp, Hofstede, & Wedel, 1999).

Second, when selecting ads, only one product category, perfume, was used to control for involvement in the product category, and the ads were all for high-end perfumes, thus controlling for the effect of price. To minimize any strong negative feelings toward the product advertised or the advertiser itself, the selected ads did not include products or companies likely to elicit strong negative attitudes. In addition, involvement with the product category and actual purchase of the brands were also measured to control for major potential confounds.

To ensure category equivalence, well-known international brands of perfumes were used, so that all respondents—irrespective of the country of origin—were likely to be aware of the brands. All brands had an international reach and were available and used in all three countries. The product category is also conceptually and functionally equivalent in the three countries. Linguistic equivalence was ensured by back-translation of the questionnaire (Malhotra, 1999).

These initial procedures produced a set of 56 advertisements. These ads were then examined by a panel of expert judges consisting of ten marketing academics. The experts were asked to perform three tasks. First, they categorized the ads into four piles matching the gender identity traits of high masculine/lown feminine (HMLF), low masculine/high feminine (LMHF), high masculine/high feminine (HM/HF) and non–gender-dominant to the ads following Bem’s (1974) categorizations. Second, they chose the ad that best symbolized each category. Finally, in order to validate their choice, they were asked to determine whether each of the ads selected matched the complete list of BSRI adjectives describing masculinity and femininity (Bem, 1974). This procedure is essentially a peer-evaluation process, as suggested by Miles and Huberman (1994). The four ads that obtained the highest level of agreement from the panel of expert judges in each category, and thus exhibited face validity, were selected for inclusion in the survey. This procedure resulted in an agreement rating of 92% and an inter-judge reliability index of 95% (Perreault & Leigh, 1989).

Construct validity of the stimuli was further confirmed by including Stern, Barak, and Gould’s (1987) sexual identity scale in the survey. Each respondent rated the degree of masculinity/femininity of each ad using this scale. The scale was originally designed to measure the degree to which an individual identifies with a given gender (Bearden, Netemeyer, & Teel, 1989). Here it was adapted to measure the degree to which an individual associated an advertising portrayal
with a given gender and was used to ensure that each stimulus was viewed in a consistent manner. Appendix A provides descriptions of the four advertising stimuli used.

Measures

Respondents’ gender identity was measured utilizing the reduced version of Bem’s (1974) BSRI scale (Barak & Stern, 1986). To assess gender identity congruity, the respondent’s gender identity was compared with the gender identity portrayed in a given advertising stimulus. Advertising involvement was assessed using the 10-item, 7-point semantic differential scale developed by Zaichkowsky (1994). This scale is an adaptation of the original PII (Zaichkowsky, 1985) and was specifically designed to measure advertising involvement. The aim was to capture both rational and emotional relevance to the advertisement. The scale exhibits good reliability (average \( \alpha = 0.83 \)) and was able to discriminate between individuals who showed low and high involvement with the ads. Additionally, some items were reverse scored to avoid a halo effect. The reduced version of Wells’ (1964) Emotional Quotient scale captured attitude to ad (average \( \alpha = 0.81 \)), and purchase intention was measured using two items capturing likelihood of purchase and intended frequency of purchase. Table 6 details the scale items depicted in Figure 1.

The moderating constructs were captured using a vanity scale consisting of five physical concern items and six physical view items (Netemeyer, Burton, & Lichtenstein, 1995). All items were rated on 7-point Likert scales from strongly disagree to strongly agree. Hofstede’s (2001) measures of masculinity/femininity were used to rank the U.S., the U.K., and France on this dimension.

After completing these measures, participants responded to a manipulation check for involvement toward the product category (i.e., perfumes) that included three 7-point scales: “I attach great importance to perfumes,” “I have a strong interest in perfumes,” and “I enjoy buying perfumes” (\( \alpha = 0.92 \)). Overall ad preference was assessed using an ordinal-scaled question. Finally, participants indicated their ethnic background, age, education, partnership status, and sexual orientation. Responses to the demographic items were not significantly related to any of the dependent measures. Thus, these variables are not discussed further.

RESULTS

Cross-National Measurement Validation

The metric equivalence of the Bem gender identity scale (1974) was assessed via national, multigroup, and pooled-level analyses. Table 1 outlines the results. At a national level, where each country was analyzed separately, the psychometric properties of the gender identity measures were examined for measurement reliability and dimensionality via maximum-likelihood confirmatory factor analysis (Durvasula et al., 1993). Following standard procedures (e.g., Steenkamp & Baumgartner, 1988), the discriminant validity and dimensionality of the masculine and feminine gender identity measures were assessed through a series of confirmatory-factor models using LISREL 8.2, with covariance matrices as
input (Jöreskog & Sörbom, 1989). Two- and one-factor models were compared. The two-factor model assumes a structure in which feminine and masculine gender identities are distinct, but correlated, constructs. The one-factor model represents both constructs as combined into one factor (i.e., a unity correlation between the two constructs).

Two tests assessing the discriminant validity of the gender identity measures were performed. First, if the chi-square fit of the hypothesized two-factor model is better than the fit of the one-factor model, evidence of discriminant validity exists, thus supporting the hypothesized model of gender identity (Bagozzi & Phillips, 1982). The top portion of Table 1 shows that the fit of the two-factor model is significantly better than that of the one-factor model ($p < 0.01$, $df = 26$).

Discriminant validity is also supported if the confidence intervals around the maximum likelihood estimates of the interfactor correlations ($\phi$) are less than 1 ($p < 0.05$). $\phi$ values range from 0.367 to 0.812, and none of the maximum likelihood estimates of the interfactor correlations contain a value of one ($p < 0.05$).

Convergent validity:
Factor loadings
$t$-values
All exceed 0.4 level
All significant (larger than 6.0)

Fit Indices indices of 2-factor model:
GFI 0.932 0.946 0.887 0.912
AGFI 0.882 0.935 0.867 0.884
RGFI 0.930 0.940 0.883 0.916

Consistent factor structure:
RMSR 0.053 0.051 0.059 0.053

Composite Reliability:
Masculine GI 0.834 0.827 0.903 0.841
Feminine GI 0.820 0.807 0.893 0.826

The dimensionality of the two-factor model is also supported by examining the model fit statistics. Goodness-of-fit indices appropriate for large samples...
were selected (Bearden, Netemeyer, & Mobley, 1993). The relative goodness-of-fit index (RGFI), across samples, ranged from 0.883 to 0.940. While the two-factor model is a good fit for the U.S. and U.K. samples, it provides a modest but acceptable level of fit for the French sample (Maiti & Mukherjee, 1990). The root mean square residuals (RMSR) (ranging from 0.051 to 0.059) suggest that the observed factor structure is consistent with the hypothesized factor structure (Gerbing & Anderson, 1988). Finally, composite reliability measures were acceptable. The findings are satisfactory and provide support for the configural invariance of the two gender identity constructs (Baumgartner & Steenkamp, 1996; Sharma, 1996; Steenkamp & Van Trijp, 1991).

A more stringent test of metric equivalence was imposed through an assessment of the invariance of measures across countries using multigroup analysis (Durvasula et al., 1993; Mullen, 1995). The unconstrained model, where the factor loadings, error variances, and covariances between the two factors are allowed to vary across the samples, was estimated. This model was then compared, through a chi-square difference test, to the constrained model where the parameters of the three country groups were constrained to be equal (Bollen, 1989; Jaccard & Wan, 1996; Jöreskog & Sörbom, 1989). A statistically nonsignificant change in the chi-square difference test would imply that the factor loadings, error variances, and covariances between the two factors did not differ appreciably among the three country groups (Bollen, 1989). To test scalar invariance (Steenkamp & Baumgartner, 1998), an additional constraint to the model was imposed:

$$\tau_1 = \tau_2 = \ldots = \tau_G$$

The difference between the constrained model and the unconstrained model was statistically insignificant ($\chi^2_{\text{diff}} = 14.61, df = 21$), suggesting the equality of measurement intercepts. Scalar invariance was, therefore, supported (Steenkamp & Baumgartner, 1998). As the measurement invariance holds, any remaining differences between country groups could be attributed to differences in the distributions of the latent variables rather than inconsistent scoring and response set bias (Mullen, 1995).

As a final check of the universal nature of the model, a pooled-level analysis was undertaken (Bond, 1988; Durvasula et al., 1993). This analysis tests the universal pattern of gender identity relations at the individual level (Bond, 1988; Hofstede, 1980) using “decultured” data (see Bond, 1988, for detailed procedure). The same procedures used in the national-level analysis were implemented on the pooled-level data. Once again, the two-factor model provided a significantly better fit to the data than the one-factor model. The goodness-of-fit measures were all satisfactory, as was the RMSR at 0.053. The coefficients for the two-factor model were significantly less than 1, supporting discriminant validity among the gender identity constructs. The two constructs were also found to be internally consistent.

**Test of Hypotheses: Consequences of Gender Identity Congruity**

The degree of congruity between each of the HM/HF, HM/LF, LM/HF, and the control (LM/LF) stimuli and respondents’ actual gender identity was then
assessed for each national sample. This resulted in the generation of a number of observations four times the original sample size (i.e., US \(2125\), UK \(2156\), F \(2336\)). Though these multiple observations are not independent, several authors have established that bias due to non-independence of observations is small when samples are large (Steenkamp, Batra, & Alden, 2003; Hunter & Schmidt, 1990).

The network of relationships between constructs, as detailed in Figure 1, was evaluated separately for each country through covariance structure analysis using LISREL 8.2. In this analysis, a nesting approach was adopted, in which the models were sequentially compared to one another (Anderson & Gerbing, 1988; Durvasula et al., 1993). Three nested rival models were estimated: (1) a null model in which the relationships among observable constructs were set to zero (i.e., the error terms were free; the null model thus served as a baseline for comparing the other nested structural models); (2) the proposed model as depicted in Figure 1; and (3) an alternative model that captured the direct effects of gender identity congruity on advertising involvement, attitude to ad, and purchase intention. Table 2 presents the results.

The chi-square fit of the proposed model was significantly better than the alternative model \((p < 0.01, df = 4)\) and the null model \((p < 0.01, df = 11)\) across all three samples. The proposed model’s values on the three fit indices were high across all countries. Further, all standardized path estimates were significant at a minimum at the 0.05 level. The structural relations in the proposed model were also supported by the pooled-level data analysis. The model proved to be a good fit to the data and all path coefficients were statistically significant, again at a minimum of \(p < 0.05\) level. Thus, the network of gender identity congruity relationships appeared to hold for the three countries sampled, suggesting that these relationships were not culturally bound (Durvasula et al., 1993).

Consistent with H1, gender identity congruity was found to be positively associated with advertising involvement in all three countries, with the strongest

### Table 2. The Sequential Chi-Square Tests and Path Estimates of the Nomological Network of Gender Identity Congruity (Figure 1).

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>UK</th>
<th>Fr.</th>
<th>Multigroup</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chi-square fit:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figure 1 model ((df = 65))</td>
<td>2807.97</td>
<td>2261.44</td>
<td>3641.66</td>
<td>16967.95 ((df = 325))</td>
</tr>
<tr>
<td>Alternative model ((df = 69))</td>
<td>3196.82</td>
<td>2403.34</td>
<td>4222.75</td>
<td>18694.21 ((df = 345))</td>
</tr>
<tr>
<td>Null model ((df = 76))</td>
<td>3812.76</td>
<td>3694.17</td>
<td>5456.03</td>
<td>22145.69 ((df = 380))</td>
</tr>
<tr>
<td><strong>Standardised path coefficients for proposed model:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1</td>
<td>0.42**</td>
<td>0.38*</td>
<td>0.31**</td>
<td>0.37**</td>
</tr>
<tr>
<td>H2</td>
<td>0.22**</td>
<td>0.19*</td>
<td>0.19*</td>
<td>0.22**</td>
</tr>
<tr>
<td>H3</td>
<td>0.11*</td>
<td>0.51**</td>
<td>0.20**</td>
<td>0.35**</td>
</tr>
<tr>
<td><strong>Fit indices for proposed model:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GFI</td>
<td>0.93</td>
<td>0.94</td>
<td>0.91</td>
<td>0.94</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.88</td>
<td>0.91</td>
<td>0.85</td>
<td>0.90</td>
</tr>
<tr>
<td>RGFI</td>
<td>0.93</td>
<td>0.95</td>
<td>0.91</td>
<td>0.94</td>
</tr>
</tbody>
</table>

**\(p < 0.001\); * \(p < 0.01\).
effect evident in the U.S. ($b = 0.42, p < 0.001$). Advertising involvement was also hypothesized to be positively associated with attitude to ad (H2) and with purchase intention (H3). Results showed significant coefficients of at least the $p < 0.01$ level across all sample groups (for H2, $b_{pooled} = 0.22, p < 0.001$; and for H3, $b_{pooled} = 0.35, p < 0.001$). These coefficients thus supported the hypothesized relationships in Figure 1. This was also reflected in the comparison of the means for advertising involvement. For each stimulus, when advertising was congruent with respondent’s gender identity, advertising involvement was significantly higher than in the case of incongruity. Table 3 presents these results.

### Evaluating the Moderators of Gender Identity Congruity

Using non-standardized scores for cross-country comparisons (Balabanis & Diamantopoulos, 2004), path coefficients for the hypothesized moderated relationships were ranked across countries and compared to Hofstede’s (1980) value scores for femininity and masculinity. This provides a visual evaluation of the moderating role of the national culture variables. Next, using multigroup analysis, across-group equality constraints were applied to the gamma and beta matrices to test if there were differences between the groups on any of the path coefficients (Jaccard & Wan, 1996; Jöreskog & Sörbom, 1989). A statistically significant difference in the chi-squares of the constrained and unconstrained models would imply that the coefficients in the gamma and beta matrices differed appreciably between the three country groups (Bollen, 1989). Each country pair was then compared for statistical differences. Table 4a shows these results.

Consistent with H4, masculinity moderated gender identity congruity relationships in the expected directions. All country pairs differed significantly. Results suggested that the positive effect of gender identity congruity on advertising was stronger when national cultural masculinity was higher. Table 4b further illustrates the moderating effect of national cultural masculinity on the relationship between gender identity congruity and advertising involvement. While advertising involvement was highest in ad/respondent congruent groups, the U.S. masculine culture demonstrated the highest advertising involvement overall.

The sample was then split using mean physical concern and physical view scores to evaluate the moderating effect of these constructs on gender identity congruity. Both physical concern and physical view moderated the gender identity

<table>
<thead>
<tr>
<th>Respondents’ GI/ Ad Stimuli GI</th>
<th>HM/LF</th>
<th>LM/HF</th>
<th>HM/HF</th>
<th>LM/LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>HM/LF Congruent</td>
<td>4.5</td>
<td>2.9</td>
<td>3.5</td>
<td>2.1</td>
</tr>
<tr>
<td>LM/HF Congruent</td>
<td>3.3</td>
<td>3.9</td>
<td>3.1</td>
<td>2.4</td>
</tr>
<tr>
<td>HM/HF Congruent</td>
<td>3.5</td>
<td>3.2</td>
<td>4.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Control</td>
<td>2.9</td>
<td>2.7</td>
<td>2.4</td>
<td>3.2</td>
</tr>
</tbody>
</table>

*Note: The measurements are scaled between 1 and 5, where 5 indicates high advertising involvement. The congruent and incongruent means differ to at least the 0.05 level.*
congruency relationship, providing support for H5a and H5b. Table 5 shows that the positive effect of gender identity congruency on attitudinal and behavioral variables was weaker when physical concern was higher and stronger when physical view was higher.

**DISCUSSION OF FINDINGS AND IMPLICATIONS**

**Theoretical Implications**

The research findings provided evidence of the ability of gender identity congruency to elicit positive consumer responses to advertising appeals. As expected, the relationship between gender identity congruency and consumer response to the advertisement was mediated by advertising involvement. The study also revealed several variables likely to moderate the positive impact of gender identity congruency on consumer response. Findings suggested that female consumers from a masculine culture or with a high physical view would have an enhanced need for gender identity congruency. Conversely, women who are greatly concerned...
about their appearance may be less responsive to congruent gender advertising portrayals.

Overall, congruity theory provides a powerful framework to examine consumer responses to gender portrayals in advertising. Identifying the role of gender identity congruity in eliciting positive consumer responses to advertisements adds a new perspective to the existing body of literature on gender (Orth & Holancova, 2004). Findings also provide support for psychological gender identity theory, which conceptualizes gender identity as the psychological traits of masculinity and femininity, and as orthogonal constructs which coexist in varying degrees within the same individual (Bem, 1974). Consistent with Wolin (2003), evaluating gender differences in advertising through psychological gender identity can be a valuable avenue for marketing and advertising research, as gender groups are neither necessarily homogeneous nor isomorphic with biological gender.

Managerial Implications

The present study provides a number of insights for managers with regard to product positioning through advertising portrayals. Two congruity dimensions are worth considering for successful positioning relative to a target audience. First, the brand itself has a perceived gender identity, which can be masculine, feminine, androgynous, or undifferentiated. For example, the perfume Opium has a strong masculine positioning as a rich, spicy fragrance evoking strength and assertiveness. The advertising portrayal should thus be congruent with this identity in order to be effective.

The second aspect of congruity is whether the congruity of the respondent’s own gender identity with the ad portrayal impacts its effectiveness. Results from this study showed that the congruity between the respondent’s gender identity and the ad portrayal is likely to enhance the effectiveness of the ad. In a symbolic product category like perfumes, the gender identity associated with a brand is typically a salient attribute for consumers. However, several factors may moderate individuals’ need for congruity. This study showed that women belonging to a masculine culture, or who attached importance to their own physical appearance, tended to have a greater need for congruity. They may purchase a brand to obtain the benefits associated with the signaling effect of using this brand and thus communicate to others their inner gender identity. In some cases, however, women who are concerned about their physical appearance may be less attracted to portrayals congruent with their inner gender identity. For example, a woman with a masculine gender identity may wish to hide her real identity and project a feminine image to others through the apparel she wears and hence be attracted by advertising portrayals that reflect a feminine image (i.e., the wolf in sheep’s clothing phenomenon). Essentially, the present study identified some of the factors that affect the congruity between an individual’s gender identity and the visual tools she uses to either project or mask that self-identity.

Marketers often develop a brand gender identity and generate advertising portrayals reflecting that gender identity, hoping to tap a specific target segment. This may be one that either has been successfully targeted in the past, or has been identified as having large market potential. However, marketers frequently find that consumers with other gender identities purchase the brand. A classic
example of this is the Mustang car, which was targeted to young males with a young macho positioning. However, it attracted both older men who wanted to project a young image and women who wanted to project an exciting liberated masculine image. It is therefore important for marketers to check regularly the congruity between the gender identity of their target market and that of those actually purchasing the product. This may be important for a number of reasons. First, the product may no longer be attractive to the initial target market if it is purchased by too many outside the target market. For instance, if too many women purchase and drive Mustangs, it may no longer be as attractive to males. This is particularly true in the case of a socially visible product (Alreck, Settle, & Belch, 1982). Second, marketers may want to adjust the ad positioning based on the actual identity of the purchasers.

Marketing managers can decide to confer a specific gender identity on a brand via advertising portrayals that project a feminine, masculine, androgynous, or undifferentiated identity. Examples of successful brand positioning using gender portrayals are next discussed along with implications for designing advertising portrayals targeted to female consumers.

When designing advertisements targeted to female consumers with a feminine gender identity, the advertising portrayal should represent a woman displaying traits such as youthful, romantic, natural, and wholesome. The 2006 campaign for the fragrance “Pleasures” by Estee Lauder (Appendix B, ad 1) provides an example of an advertising campaign featuring this type of woman: smiling, warm, sensitive, surrounded by a natural landscape of flowers which echoes the light, feminine blend of florals that characterizes the fragrance (Doyle, 2005).

When designing advertisements targeted to female consumers with a masculine gender identity, the advertising portrayal should show a woman with masculine gender traits such as: assertive, sexy, athletic, and successful. The Dior campaign for the fragrance “Pure Poison” (Appendix B, ad 2), for example, shows a forceful woman with a strong personality and a self-reliant, aggressive gaze.

When designing advertisements targeted to female consumers with an androgynous gender identity, it would be best to show a woman exhibiting the following traits: sophisticated, independent, and confident. Good examples of this type of advertisement are the Calvin Klein campaigns and in particular the campaigns for the “gender-neutral” fragrance CK One (Appendix B, ad 3).

When designing advertisements targeted to female consumers with no clear gender identity, advertisements should show only the product itself. This strategy is followed by Issey Miyake for the advertising campaign of the fragrance “L’Eau d’Issey” (Appendix B, ad 4). As these consumers score low both on femininity and masculinity dimensions, they are likely to be more attracted to advertisements that do not accentuate either a masculine or a feminine side of the product.

Limitations and Directions for Future Research

Finally, the limitations of this study are acknowledged, and directions for future research are identified. First, although congruity between the gender portrayals depicted in an advertisement and the gender identity of the consumer target was found to enhance advertising effectiveness, this finding may be due to the nature of the study. Consequently, caution should be exercised in interpreting the findings. In particular, the current research focuses on a single product cat-
egory: perfume. The results may not be generalizable to other product categories. Applying the model to other products and contexts would provide an interesting and fruitful area for further research.

Secondly, the use of “real-world” advertisements in the present study necessitates some caution in interpreting the findings. Because studies using real ads do not allow the same degree of internal control as experiments using specially designed stimuli, the results may be attributable to other factors. While the effect of a number of explanatory variables such as involvement with the

<table>
<thead>
<tr>
<th>Construct</th>
<th>Scale Authors</th>
<th>Scale Items</th>
<th>Reliability</th>
</tr>
</thead>
</table>
| Gender identity       | Bem (1974);   | Masculine items: Feminine items: Ambitious: Feminine items:  
|                       | Barak and     | Compassionate: Gentle: Feminine: Loyal: Sensitive: Sympathetic: Tender:       |
|                       | Stern (1986)  | Masculine: Understanding: Sensitive: Tender:                                |
|                       |               | Self-sufficient: Warm:                                                      |
| Advertising involvement| Zaichkowsky   | Important/unimportant: Boring/interesting: Relevant/irrelevant: Exciting/une   |
|                       | (1990)        | exciting: Means nothing/means a lot to me: Appealing/unappealing: Fascinating |
|                       |               |/mundane: Worthless/valuable: Involving/uninvolving: Not needed/needed:       |
| Attitude to ad        | Wells (1964)  | The advert did not seem to be speaking directly to me:                       |
|                       |               | The advert fits my lifestyle very well:                                     |
|                       |               | The advert makes me feel good about myself:                                 |
|                       |               | The advert is not really for me:                                            |
|                       |               | If I could change my lifestyle, I would make it less like the people in the advert:|
|                       |               | The advert did not remind me of any experiences or feelings I've had in my own life:|
|                       |               | This advert leaves me with a good feeling about using the brand:            |
|                       |               | I like this advert:                                                        |
| Purchase intention    |               | How likely are you to buy at least one bottle of this perfume in the next 6 months? (5 = very likely, 1 = very unlikely) |
|                       |               | How often will you buy at least one bottle of this perfume in the next 6 months? |
product category and actual purchase of the brands were examined, other underlying variables may influence findings. Although the use of real ads increases external validity, other uncontrolled differences between ads may exist. Consequently, follow-up controlled experiments should be conducted to clarify possible ambiguities.

Furthermore, the participants from each country share a common national culture but may come from contrasting ethnic backgrounds. In the U.S., almost a quarter of Americans identify themselves as "something other than white alone" (Raymond, 2001). Therefore, as Hispanics and African American groups are expanding and their disposable income is increasing (La Ferle & Lee, 2005), it is crucial for advertisers to understand whether ethnic minority groups identify with advertising portrayals targeted to the general market. Previous findings suggest that use of diverse portrayals in advertisements is beneficial, as are media plans that integrate both mainstream media options and the growing ethnic media options (La Ferle & Lee, 2005). Further research is needed to determine whether female consumers sharing the same national culture but coming from different minority groups identify with a common advertising gender portrayal and whether the positive effect of gender identity congruity on consumers’ responses to ads holds true across different minority groups.

As a final point, it would be worthwhile to extend this work to male consumers. A considerable body of research has focused on women’s responses to advertising (DeYoung & Crane, 1992; Ford, LaTour, & Honeycutt, 1997; Ford, LaTour, & Lundstrom, 1991; Jaffe, 1991, 1994), whereas only recently have researchers started to consider the persuasive impact of advertising appeals on male consumers (Elliott & Elliott, 2005). With the growth of new categories of men's grooming products (market worth $23 billion worldwide, Euromonitor, 2008) and the emergence of the metrosexual man, research dedicated to the persuasive impact of gendered appeals on male consumers is a timely endeavor.

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APPENDIX A

Study Stimuli

Ad 1: Low Masculine/High Feminine, Eau de Dior, Dior. The advertisement features a young woman walking on water lilies. The colors of the ad are pastel: light blue, green, and pink. Overall she looks very natural and wholesome: She is smiling, wearing a simple outfit (white dress) and little to no makeup.

http://www.parfumdepub.net/doubles/Dior/Coloressences_1.jpg
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Ad 2: High Masculine/Low Feminine, Opium, Yves Saint Laurent. The advertisement features a woman with ginger hair, wearing only golden heels along with a necklace and bracelet. The background of the ad is black. Her body posture suggests that she is assertive and strong.

http://www.parfumdepub.net/collection/Yves_St_Laurent/Opium/Opium_03.jpg
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Ad 3: High masculine/High Feminine, 212, Carolina Herrera. This black-and-white advertisement features a woman smiling. She is wearing a black dress and appears to be sophisticated.

http://www.parfumdepub.net/collection/Carolina_Herrera/212/212_Women_2.jpg
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Ad 4: Control, Eau de Cartier, Cartier. This advertisement features only the product on a white and blue background.

http://www.parfumdepub.net/doubles/Cartier/Eau_de_Cartier.jpg
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APPENDIX B

Illustrative Advertisements

Ad 1: Low Masculine/High Feminine, Pleasures, Estee Lauder. The advertisement features a blonde woman smiling and wearing a pink shirt. She is holding a pink flower, and the background also shows flowers and trees.

http://www.parfumdepub.net/collection/Estee_Lauder/Pleasures/(3)-Pleasures_16.jpg
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Ad 2: High Masculine/Low Feminine, Pure Poison, Dior. The advertisement shows a woman wearing a black pearl necklace. She has black hair and is wearing dark makeup. Her facial expression is forceful and dominant.

http://www.parfumdepub.net/doubles/Dior/Pure_Poison_3.jpg
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Ad 3: High Masculine/High Feminine, CK1, Calvin Klein. This black-and-white advertisement shows several characters. The main character is a woman wearing a black coat and what appears to be black underwear. Her body and face are rather masculine, illustrating well the concept of androgyny.
http://www.parfumdepub.net/collection/Calvin_Klein/CK_One/CK_One_32.jpg
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Ad 4: Control, L'Eau d'Issey, Issey Miyake. This advertisement shows the product on a light blue background.

http://www.parfumdepub.net/doubles/Issey_Miyake/L.eau_d.Issey_5.jpg
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