The Effect of Consumer Multifactorial Gender and Biological Sex on the Evaluation of Cross-Gender Brand Extensions

Isabelle Ulrich
Rouen Business School

ABSTRACT

Introducing cross-gender brand extensions—masculine or feminine brands that extend to the opposite gender—is a growing trend on the marketplace, though not always a successful one. This research examines the effect of consumer multifactorial gender and biological sex on consumers’ evaluation of cross-gender brand extensions. The influence of gender role attitudes is demonstrated: consumers with traditional gender attitudes are significantly more reluctant to accept these extensions than consumers with more liberal attitudes. Hence the extensions have a negative impact on the subsequent attitude of the former group toward the parent brand, contrary to their effect on more egalitarian consumers. No significant impact of the consumer’s biological sex, gender identity, or sexual orientation is identified. The theoretical and managerial implications of these findings for the development of cross-gender brand extensions are discussed. © 2013 Wiley Periodicals, Inc.

Historically, many brands used to target one biological gender only: Gillette or Pétrole Hahn, for example, was targeting men, while Rexona or Estée Lauder was targeting women. Hence these brands have acquired a gendered image, a phenomenon quoted by many authors (Aaker, 1997; McCracken, 1989). The brands’ feminine or masculine image comes from the biological gender of the main users associated with those brands (Keller, 1993).

In the last 15 years, many of these gendered brands have now expanded to target the opposite biological sex, potentially doubling their business, while limiting launch costs. Instead of developing a completely new brand, they capitalize on the existing brand name by introducing a cross-gender extension (Gillette Venus for Women razors, or Rexona for Men deodorants). This is a growing managerial practice in various other product categories: perfumes (Chanel Allure Homme); shower gels (Dove for Men); shampoos (Elsève Men); depilatories (Nair Men); skincare (Nivea for Men); fashion (Armani Woman); or underwear (Dim Homme).

However, this approach is not always fruitful: several brands that have been highly successful with their initial target have difficulties in developing strong positions with their cross-gender extensions. For example, Lancôme and Dior are ranked, respectively, second and fourth in feminine skincare, whereas “Lancôme Men” and “Dior Homme Dermo System,” launched in 2003 and 2006, respectively, are only fifth and eighth—below their target ranking—in masculine skincare, despite huge media investment. Similarly, the underwear brand Aubade, unbeaten in the feminine segment, had to withdraw its male extension “Aubade for Men” after two seasons. Masculine brands extending to women experience similar problems: Adidas scores less well, as “Adidas Woman,” on the female target than on the male; Eminence and Athena, both prosperous in male underwear, have reached limited sales with their extension to the feminine market. These various examples in different product categories suggest that the cross-gender approach may raise issues and call for greater understanding of the conditions for consumer acceptance of these extensions.

Yet, consumer research on cross-gender brand extensions has been scarce. Jung and Lee (2006) showed the influence of the biological sex of consumers on the evaluation of these extensions: women were found significantly more receptive toward them than men. But this work had some limitations, which called for further research. Only two product categories, which had a low masculine/feminine image, were studied, whereas

1 2011 market shares in France’s prestige distribution channel (NPD Group).
other product categories with a strong feminine or masculine image exist (like bath soap or athletic shoes, respectively), as indicated by prior research (Allison, Golden, Millet, & Coogan, 1980; Fugate & Phillips, 2010). Furthermore, Jung and Lee’s study was conducted in Asian countries displaying a high degree of masculinity (Hofstede, 1985, 2001): it is worthwhile checking if their results can be generalized across western cultures, which have a different pattern of masculinity/femininity.

In addition, no research has so far investigated the impact of multifactorial consumer gender on cross-gender brand extensions, beyond the biological sex effect shown by Jung and Lee (2006). Following Spence (1993), most psychologists view human gender as a multifactorial concept, comprising multiple gender-related factors that may be activated and influence individual behaviors in certain contexts but not in others (Liben & Bigler, 2002; Signorella & Frieze, 2008; Tobin, Menon, Hodges, Spatta, & Perry, 2010; Twenge, 1999). In this conceptualization, consumer gender includes mainly gender identity (masculine and feminine personality traits); gender role attitudes (attitudes toward the roles, rights, and responsibilities of men and women); gendered role behaviors, interests and occupations; and, finally, sexual orientation (Spence & Sawin, 1985).

The effect of consumer multifactorial gender on multiple consumption behaviors has been shown in situations with gender-related content (Ulrich & Tissier-Desbordes, 2013 for a review). Many scholars have revealed the impact of gender identity (Feiereisen, Broderick, & Douglas, 2009; Fischer & Arnold, 1990; Jaffe, 1991, 1994; Winterich, Mittal, Ross, & William, 2009), while some have highlighted the impact of gender attitudes (Alreck, Settle, & Belch, 1982; Fischer & Arnold, 1994). A brand extension across gender introduces gender-associated content to the situation, where gender elements of the consumer self-concept may be stimulated (Deaux & Major, 1987): hence multifactorial gender—more than biological sex—could influence the acceptance of this extension by the consumer. This study aims to investigate the potential effect of consumer multifactorial gender and biological sex on the evaluation of cross-gender brand extensions.

BACKGROUND

The Multifactorial Consumer Gender and its Impact on Consumer Behavior

Biological sex defines men and women by their physical characteristics, genital organs, and chromosomes. By contrast, gender is a sociocultural concept, representing the set of characteristics and behaviors that a given society associates and ascribes differently to women and men (Burr, 1988). Early conceptualizations considered gender as a unidimensional, bipolar personality construct opposing masculine to feminine, with “sane” men supposed to score high on masculinity and women on femininity (Constantinople, 1973). This view changed with the empirical work of Bem (1974) and Spence, Helmreich, and Stapp (1974), who showed that masculine/instrumental traits and feminine/expressive traits are not negatively correlated, but two distinct orthogonal dimensions coexisting at varying degrees within each individual. Many studies in the psychology and marketing fields have adopted Bem’s gender schema theory (1981), positing that the measurement of masculine and feminine personality traits is all that is needed to capture one’s gender and predict other gender-related attributes and phenomena.

However, Spence (1984, 1993) challenged this model and developed the multifactorial gender theory: gender is conceptualized as a combination of multiple factors, loosely connected and interacting to influence human behavior in specific contexts, while other factors may not be influential. Spence and Sawin (1985) suggested these gender-related factors comprised (1) a basic sense of one’s maleness or femaleness; (2) gender identity (the degree to which one identifies oneself with masculine/instrumental and feminine/expressive personality traits); (3) gender role attitudes (individual attitudes toward the roles, rights, and responsibilities of men and women); (4) role behaviors, gendered interests, and occupations (behaviors and activities that are considered masculine or feminine); and (5) sexual orientation.

A large body of empirical research has supported this view of multifactorial gender, finding only moderate relations between gender identity, gender role attitudes, interests, and behaviors (Aube & Koestner, 1995; Koestner & Aube, 1995; Spence & Buckner, 2000; Twenge, 1999). Hence, a majority of psychological researchers have now adopted the multifactorial gender theory (Ashmore, 1990; Athenstaedt, 2003; Aube, Norcliffe, & Koestner, 1995; Liben & Bigler, 2002; Signorella & Frieze, 2008; Tobin et al., 2010; Twenge, 1999). This implies researchers should design studies to assess the multiple components of gender, which are relevant to the research context and the dependent variables (Spence, 1993).

Marketing literature has been examining the impact of gender on consumer behavior for about seven decades. Significant findings have sometimes been mixed, driving some scholars to suggest that the use of this concept should be abandoned in consumer research (Roberts, 1984; Schmitt, Leclerc, & Dubé-Rioux, 1988). But studies that operationalized gender with the multifactorial approach, and where gender was relevant and salient to the research context, did provide meaningful results (Palan, 2001; Ulrich & Tissier-Desbordes, 2013).

Indeed, Fischer and Arnold (1990, 1994) included two components of human multifactorial gender in their work (gender identity and gender role attitudes) and showed that Christmas gift-giving behavior is explained both by gender role attitudes and, to a lesser extent, gender identity, but not by biological sex.
Gender identity has also been strongly linked to interest in the arts (Gainer, 1993); sex-role portrayals in advertising (Jaffe, 1991, 1994); evaluation of male models in print advertisements (Martin & Gnoth, 2009); positive evaluation of advertisements where the model has congruent gender identity (Feiereisen, Broderick, & Douglas, 2009); or donation behavior to in-groups and out-groups—in conjunction here with moral identity (Winterich et al., 2009). Specifically, as regards consumers’ evaluation of brands, early studies revealed congruency between the masculine/feminine personality of individual consumers and their preference for cigarette brands with masculine/feminine images (Fry, 1971; Vitz & Johnston, 1965). Alreck, Settle, and Belch (1982) showed the effect of gender attitudes on brand evaluation: the more strongly men (women) hold to traditional gender attitudes, the more they prefer the brand presented as masculine (feminine) in advertising. Finally, Worth, Smith, and Mackie (1992) also showed the influence of gender identity on brand preference, with consumers having masculine (feminine) gender identity evaluating more favorably brands with a masculine (feminine) image.

**Gender of Brands, Cross-Gender Brand Extensions, and the Effect of Biological Gender**

The masculine/feminine categorization process is still one of the first classification systems learned by children (Powlishta, Sen, Serbin, Poulin-Dubois, & Eichstedt, 2001) and is used by adults unconsciously (Schneider, 2004). As gender is central to the way we see the world, it naturally affects our perception of products and brands. The gendered image of products has long been demonstrated by consumer research, with hairsprays perceived as feminine and cigars masculine (Stutteville, 1971). It was shown that consumers see product categories as highly masculine, highly feminine, or moderately masculine and feminine (Allison et al., 1980; Milner & Fodness, 1996). They indicated also that product masculinity and femininity are two separate constructs, as are human masculinity/femininity (Bem, 1974). Recently, Fugate and Phillips (2010) have reassessed the gendered perception of product categories, with most consumers still perceiving beer or athletic shoes as masculine, facial tissue as feminine, and toothpaste as moderately masculine/feminine (androgynous).

Consumer perception of brand gender is referred to more indirectly in the marketing literature. Levy (1959) stated that brand personality includes personality traits, age, and gender. The feminine/masculine dimensions of brands have been quoted by many authors (Aaker, 1997; Fournier, 1998; McCracken, 1989), yet specific research on the gender of brands has been scarce. Some studies revealed the preference of masculine (feminine) consumers for brands with a masculine (feminine) image (Alreck, Settle, & Belch, 1982; Fry, 1971; Vitz & Johnston, 1965; Worth, Smith, & Mackie, 1992). Others indicated that gender could be conveyed to a brand through advertising, showing that women would prefer the feminine brand and men the masculine (Bellizzi & Milner, 1991), thanks to the biological sex of the endorser, which influenced the gendered perception of the brand (Debevec & Iyer, 1986).

More recently, brand gender has regained attention from scholars. Grohmann (2009) shows that brands possess masculine/feminine personalities, developing two scales to evaluate these separate dimensions and confirming the bidimensionality of masculinity/femininity for brands, as for humans (Bem, 1974). Ulrich, Tissier-Desbordes, and Dubois (2010) revealed the multifactorial nature of brand gender, highlighting its six components perceived by consumers.

Finally, Jung and Lee (2006) used brand gender in their work on the growing managerial practice of cross-gender brand extensions, i.e., masculine or feminine brands that extend to target the opposite sex. They showed that the gender of the parent brand influences the evaluation of cross-gender brand extensions: consumer acceptance is higher when the extension is made from a masculine brand to target women than the other way round. They also revealed the impact of the biological sex of consumers: women are found significantly more receptive toward cross-gender extensions than men, with a more favorable attitude toward the extension, a greater perception of overall fit between the extension and the parent brand, and a tendency to a more positive attitude toward the initial mother brand after extension.

However, there are some limitations to Jung and Lee’s (2006) study, which call for further research. First, this result was obtained with two product categories only (hair gel and high-end fashion): research on more product categories is necessary. Second, these product categories are used by both sexes, hence possessing a moderately masculine/feminine image. It is crucial to check whether these findings may also be generalized to highly masculine or feminine product categories (Allison et al., 1980). Third, this study was conducted in Korea and Singapore, countries with a high degree of masculinity (Hofstede, 1985, 2001); it is important to examine western cultures, which have a moderate level of masculinity/femininity. Essentially, a limitation of their work is inherent in their measure of the brand gender, a set of unidimensional scales. This is strongly in contradiction with (1) the bidimensionality of the masculine/feminine personality of the brand (Grohmann, 2009); (2) the bidimensional approach to brand gender used by Debevec and Iyer (1986); and (3) the bidimensionality of the gender of product categories (Allison et al., 1980).

All these arguments call for further research on the previous finding of Jung and Lee (2006), regarding the

---

2 This set of unidimensional bipolar scales (masculine/feminine, large/small, common/luxurious, harsh/gentle, rough/smooth) was first created and used by Alreck, Settle, & Belch (1982).
influence of biological sex. Building on the result of their article, the following hypothesis is predicted:

**H1:** Women will be more favorable than men to cross-gender extensions, with (a) a more positive attitude toward the extension; (b) greater purchase intent of the extension; (c) greater perception of the overall fit between extension and parent brand; and (d) a more positive attitude toward the initial mother brand after extension.

**Cross-Gender Brand Extensions and the Effect of Consumer Multifactorial Gender**

Jung and Lee (2006) showed the impact of biological sex on the evaluation of cross-gender brand extensions, with the limitations we have just presented. Yet, prior research has revealed the influence of consumer multifactorial gender on brand evaluation, beyond biological sex effect, in situations with gender-related content. The impact of gender attitudes on the preference for masculine or feminine brands has been demonstrated (Alreck, Settle, & Belch, 1982), and so has the effect of gender identity (Worth, Smith, & Mackie, 1992). This suggests consumer multifactorial gender could influence the evaluation of cross-gender brand extensions more than sex does. Indeed, brand extensions across gender convey a masculine or feminine image, focusing on either the male or female target through masculine or feminine associations. Hence, the gender of consumers may influence their appreciation of these new propositions.

In addition, psychologists indicate that human behavior can be affected by gender in situations where gender-related elements of the self-concept are stimulated, defined as situations of gender salience (Deaux & Major, 1987; Spence, 1993). Specifically, Deaux and Major (1987) suggested gender is activated for an individual when (1) immediate situational cues make gender salient (e.g., an incongruous situation as regards sexual roles); (2) the actions of another person make gender salient in the context; (3) the gender-related self-concept of the individual is frequently stimulated; or (4) gender is a central component of the self-concept of this individual. The importance of gender salience for marketing literature is also underlined: significant results were obtained from studies analyzing situations where gender was salient, due to gender-related content in the research object (Palan, 2001).

Extending a brand to the opposite biological sex appears to be a situation with gender salience. When faced with the new masculine brand extension of a previously feminine parent brand, consumers have to cope with the new male associations of the brand extension, which are opposite to the previous feminine associations of the initial brand. So the consumer’s beliefs and attitudes as regards gender are activated and the gendered self-concept is stimulated. Therefore, it seems pertinent to examine the impact of consumer multifactorial gender on the appreciation of cross-gender brand extensions.

Finally, Grohmann (2009) shows that congruency between (1) consumer gender identity, and (2) the masculine/feminine personality of the brand, leads to a more favorable evaluation of the brand. For example, consumers with masculine gender identity tend to evaluate more positively brands with masculine personality. How would these consumers react when a brand—originally with a feminine personality—proposed a brand extension conveying a masculine image? This increases the relevance of exploring the potential impact of individual gender on the evaluation of cross-gender brand extensions. Spence (1993) indicates that some factors of gender may be influential while others may not, depending on the research context: so which components of multifactorial gender may impact consumer reactions to these extensions?

**The Effect of Gender Role Attitudes.** Though marketing research has seldom evaluated the influence of gender role attitudes on consumer behaviors (Palan, 2001), this variable has proved a better predictor of gift-giving behavior than gender identity and biological sex (Fischer & Arnold, 1990, 1994). Gender attitudes have a strong effect on the evaluation and usage of condoms (Pleck, Sonenstein, & Ku, 1993): male teenagers with traditional gender attitudes about masculinity adopt a less favorable attitude toward condoms and use them less. In addition, consumers with traditional gender attitudes prefer the brand congruent to their gender (masculine for men and feminine for women) and reject the brand aimed at the opposite gender, in contrast to consumers with more liberal gender attitudes (Alreck, Settle, & Belch, 1982).

It seems, therefore, logical to assume that consumers with traditional role gender attitudes, who hold strong gender stereotypes and norms, may react unfavorably to a masculine brand that expands to target women with a new extension range (or the reverse). Stereotypes, once established, are typically hard to modify (Hilton & von Hippel, 1996). Consumers with traditional gender attitudes will have lived for a long time with a brand they view as purely masculine or feminine, but which is now trying to convey a gendered image that contradicts its previous image. It seems most probable that these consumers holding strong gender stereotypes would be reluctant to accept this new proposition of brand extension across gender.

In addition, as Jung and Lee (2006) indicated, biological sex also tends to affect consumers’ attitude toward a mother brand after cross-gender extension. Hence, consumers with traditional gender attitudes could be expected to have a less favorable attitude toward the initial mother brand after extension. Therefore, the following hypothesis is predicted:
H2: Consumers with traditional gender role attitudes will be less favorable than consumers with liberal gender role attitudes to cross-gender brand extensions, with (a) a less positive attitude toward the extension; (b) lower purchase intent of the extension; (c) lower perception of the overall fit between the extension and the parent brand; and (d) a less positive attitude toward the mother brand after extension.

The Effect of Gender Identity. As explained earlier, gender identity has a significant effect on multiple consumer behaviors (Feiereisen, Broderick, & Douglas, 2009; Fischer & Arnold, 1990; Gould & Weil, 1991; Jaffe, 1991; Kempf, Palan, & Laczniak, 1997; Martin & Gnoth, 2009; Winterich et al., 2009). In addition, the literature indicates that it is pertinent to evaluate gender identity only in research contexts involving the instrumentality/expressiveness of consumers (Palan, 2001; Ulrich & Tissier-Desbordes, 2013).

It seems pertinent to posit that the extension of a new brand to the opposite gender should represent such a context. It should stimulate the instrumental/expressive personality traits of consumers, because a masculine brand that was previously associated with masculine and agentic images is now connected to more feminine and expressive associations via the new cross-gender extension.

Hence, consumers with either strong feminine/expressive identity or masculine/instrumental identity should be more reluctant to accept cross-gender brand extensions than undifferentiated (low in masculinity and femininity) or androgynous individuals (who possess both highly instrumental and highly expressive traits). Therefore, H3 states:

H3: Consumers with strong masculine or feminine identity will be less favorable than undifferentiated and androgynous consumers to cross-gender brand extensions, with (a) a less positive attitude toward the extension; (b) lower purchase intent of the extension; (c) lower perception of the overall fit between the extension and the parent brand; and (d) a less positive attitude toward the initial mother brand after extension.

Influence of Sexual Orientation. According to Spence and Sawin (1985), sexual orientation is one component of multifactorial gender identity. Yet, as Palan (2001) points out, sexual orientation has not received much attention in consumer behavior literature in connection with gender identity. Recent studies have reported the influence of sexual orientation on attitudes toward advertising with gay or heterosexual content (Oakenfull, McCarthy, & Greenlee, 2008; Tuten, 2005). But so far no research has explored the potential effect of sexual orientation on the evaluation of gendered brands, or on the evaluation of cross-gender brand extensions.

From a managerial standpoint, it seems relevant to determine whether sexual orientation influences the appreciation of cross-gender brand extensions. Indeed, some feminine cosmetic brands have been tempted to target gay males when extending to the masculine, as homosexuals are reported to have a tendency toward innovation and the early adoption of products or services (Solomon, Bamosey, Askegaard, & Hogg, 2002; Vandecasteele & Geuens, 2009) and to be more fashion conscious and dependent upon clothes shopping (Dodd, Linaker, & Grigg, 2005).

However, Ulrich, Tissier-Desbordes, and Dubois (2010) indicated that sexual orientation had no impact on the evaluation of brand gender: the masculinity/femininity of the brands was perceived just the same by homosexuals or heterosexuals, with the same strength. This tends to suggest that reactions to cross-gender extensions may not be influenced by the consumers’ sexual orientation.

In addition, prior research has shown that homosexual identity is only one of many identities incorporated into the homosexual’s self-concept (Troiden, 1988) and that other factors, such as gender identity or biological gender, may have a more crucial role in defining identity and explaining reactions than does sexual orientation. This leads to the following hypothesis:

H4: Consumer sexual orientation has no significant effect on the evaluation of cross-gender brand extensions, with no effect on attitude toward the extension; purchase intent of the extension; overall fit between extension and mother brand; and attitude toward the mother brand after extension.

METHODOLOGY

Experimental Design and Sample
An experimental study was conducted with fictitious cross-gender brand extensions from existing brands. This research design has often been used by previous studies on brand extensions (Aaker & Keller, 1990; Ahluwalia & Gürhan-Canli, 2000; Broniarczyk & Alba, 1994; Klink & Smith, 2001; Park & Kim, 2001; Park, Milberg, & Lawson, 1991). Furthermore, the survey was administered via the Internet to students of ESCP Europe and to French consumers of various age and social condition, contacted thanks to the help of the online panel test company, Créatests. The choice of France as the place to conduct this research was relevant, as this country has a moderate level of masculinity/
femininity (Hofstede, 2001), which is representative of western cultures. Because of the research objectives, it was essential to use respondents diverse in age and socioeconomic profile, including homosexuals: this is why the help of the online panel test company was requested. The aim was to obtain a sample representative of the overall population and not students only, as in most studies. Moreover, only the answers from the participants declaring familiarity with the tested mother brand\(^3\) were retained. This was to avoid bias in the answers due to poor knowledge of the gendered image associated with the parent brand proposing the extension. Each participant was given a questionnaire on one brand and the corresponding cross-gender extension.

A total sample of 420 respondents was collected (51% males and 49% females). It was hard to find male participants familiar with Carita, which resulted in a more feminine subsample for this brand (88 females to 57 males); so other subsamples included more males in compensation. Overall, the sample comprised all social classes, though not at a level representative of country demographic data: intellectual occupations, executives, and managers were overrepresented (37%), and so were students (17%), while employees (22%), workers (6%), and farmers (5%) were underrepresented. Results were checked to ensure they did not differ significantly between social classes.

A diversity of ages was represented,\(^4\) though the sample was more oriented toward younger generations than in country demographic data. Importantly, results did not differ significantly between age groups, indicating that age was not an explanatory variable for the evaluation of cross-gender brand extensions.

Finally, the sample comprised 32 self-reported homosexuals (8% of respondents). This proportion is in line with the existing literature (estimated to represent 3–10% of the U.S. population [Lukenbill, 1995]) and the recent survey from IFOP in France\(^5\) (which estimated 6.5% of people to be homosexual in 2011). The homosexual sample is therefore limited, but allows statistical analysis of the data.

Experimental Stimuli

Preselection of Product Categories. Three product categories were finally selected through the following procedure. Potential product categories for the research were first identified with two criteria in mind: (1) the existence of well-known brands with a strong masculine or feminine image within the segment; and (2) the existence of well-known gendered brands not yet expanded with a cross-gender extension on the marketplace, to enable the experimental testing of fictitious extensions of real brands. Several product segments were identified as appropriate to test potential extensions to the masculine target: shampoo, skincare, shower gels, deodorants, underwear, fashion, fragrance, and hair gel. It was more difficult to find product categories allowing possible extensions to the feminine market, because well-known masculine brands in these categories had already launched their cross-gender extension on the marketplace (as, e.g., in athletic shoes, sport equipment, or fragrance). Jung and Lee’s list (2006) was consulted, as they claimed to include all potential product categories where gender crossing of a brand was relevant (e.g., fragrance, shampoo, alcoholic beverages, tobacco, fashion, undergarments, swimwear, magazines, shoes, sportswear, spectacles, and hair gel/spray). Only soft drinks, fashion, beer, and alcoholic beverages could be identified as potential categories to test extensions to the feminine of existing masculine brands.

To generalize results as far as possible, product categories different from Jung and Lee’s (2006) prior research on hair gel and fashion were selected. Additionally, as people have a gendered perception of products (Allison et al., 1980; Fugate & Phillips, 2010), product categories with different gender image were sought (feminine, masculine, low masculine/feminine), all the more as Jung and Lee (2006) had not taken this into account. The initial objective therefore was to select four product categories from the potential candidates: (1) a feminine product category allowing extension to the masculine; (2) a moderately masculine/feminine product category allowing extension to the masculine; (3) a moderately masculine/feminine product category allowing extension to the feminine; and (4) a masculine product category allowing extension to the feminine.

These criteria led to the selection of the following product categories: (1) face skincare: this had a feminine image, as shown in a preliminary qualitative study on the gender of product categories and brands (Sorin-Ulrich, 2010), and offered the possibility of testing an extension to the masculine thanks to the large number of highly feminine brands on the marketplace; 2) shampoo: this had a low masculine/feminine image due to usage by both sexes, and offered the possibility of testing an extension to the masculine; and (3) soda drinks: these had a low masculine/feminine image due to usage by both sexes, and offered the possibility of testing an extension to the feminine (thanks to the masculine brands on the marketplace, e.g., Canada Dry or Sprite). The only product categories identified as strongly masculine and allowing a study of extensions to the feminine for real brands were alcoholic beverages and beer. These options were considered but rejected because of antialcohol-drinking campaigns in the country, which could bias the answers of male and female consumers faced with a proposed extension to the feminine target for this category.

Pretest for the Selection of Brands. A pretest was then conducted to select one brand in each of these

---

\(^3\) Brand familiarity scores higher than 3 on a seven-point scale (measure transposed from Klink & Smith, 2001).

\(^4\) 39% of respondents aged 18–29 years, 36% aged 30–49 years and 25% 50 years and above.

\(^5\) Online survey by IFOP Institute for Têtu magazine – leading gay magazine in France – on 7800 French respondents in 2011.
three product categories. First, a potential list of brands was identified with several criteria in mind: the brands should be well known; have a strong gendered image; and have no cross-gender extension yet. This led to the choice of eight feminine brands in the face skincare category, four feminine brands in shampoo, and four masculine brands in soft drinks.

Second, two convenient samples of individuals with various sociocultural profiles were recruited to evaluate the eight skincare brands \((n = 33, 60\% \text{ female and } 40\% \text{ male})\) or the eight shampoo and soft-drinks brands \((n = 31, 65\% \text{ female and } 35\% \text{ male})\) in terms of gender image, attitude, and familiarity.

The objective of the pretest was to select brands with (1) the highest feminine (or masculine) image in their product category; and (2) comparable scores in familiarity with and attitude toward the brand. Obtaining similar brand familiarity evaluation to the tested brands enabled control of this variable, in line with prior brand extension literature (Aaker & Keller, 1990; Klink & Smith, 2001). Additionally, obtaining close scores in attitude toward the brand allowed a fair comparison of the brand extensions within different product types, and seemed relevant in view of the major influence of attitude toward the initial parent brand on the evaluation of extensions (Völckner & Sattler, 2007).

Brand familiarity was measured on a 7-point scale (transposed from Klink & Smith, 2001), as was brand attitude (taken from Völckner & Sattler, 2007). Gendered image was measured with two separate items on a 7-point scale (from “this brand has a masculine image,” to “this brand has a feminine image”), adapted from Allison et al. (1980) and Debevec and Iyer (1986).

Pretest results led us to select Helena Rubinstein for face skincare, Carita for shampoo, and Canada Dry for soft drinks. Helena Rubinstein was rated the most feminine of the skincare brands at 6.55 (significantly in comparison to Carita 5.83, \(p = 0.006\); Diadermine 5.52, \(p = 0.001\); La Prairie 5.45, \(p = 0.001\); Garnier 4.68, \(p = 0.000\); and directionally in comparison to Guerlain 5.90, \(p = 0.06\); or Estée Lauder 6.42, \(p = 0.57\), ns). Carita was perceived by far the most feminine shampoo brand \((M = 5.96 \text{ vs. Ultra Doux 4.70, } p = 0.006; \text{ Dop 3.90, } p = 0.00; \text{ and Pantène 3.57, } p = 0.00)\). Canada Dry was directionally the most masculine soft drink \((M = 5.14 \text{ in comparison to Gini 3.88, } p = 0.008; \text{ Sprite 4.62, } p = 0.24, \text{ ns; and Seven Up 4.93, } p = 0.63, \text{ ns})\). In parallel, attitude scores were equivalent for Helena Rubinstein versus Carita (5.19 vs. 4.84, \(p = 0.39\), ns), and Canada Dry at a lesser extent (4.39, \(p = 0.27\), ns vs. Carita; and \(p = 0.037\) vs. Helena Rubinstein). Familiarity scores were similar on Helena Rubinstein and Canada Dry (4.06 vs. 4.45, \(p = 0.47\), ns) but at a lower level on Carita (3.18, \(p = 0.15\) vs. Helena Rubinstein but \(p = 0.02\) vs. Canada Dry). However, as Carita was the only shampoo candidate with a significantly higher feminine image than competitors, it was selected.

Measures

Gender Role Attitudes. Gender role attitudes have rarely been measured in the marketing literature (Palan, 2001), except by Martin and Roberts (1983), Coughlin and O’Connor (1985), or Fischer and Arnold (1990, 1994). In contrast, this construct is broadly used by sociopsychologists (Beere, 1990; Palan, 2001). According to Beere (1990), the most widely utilized gender attitudes measure has been the Attitudes Towards Women Scale (AWS; Spence & Helmreich, 1972).

However, this scale is designed to evaluate attitudes toward the roles and rights of women in society, while specific tools to measure attitudes toward male roles have been developed (e.g., Attitudes Towards Males Scale; Iazzo, 1983). Since the purpose of the current research was to study the impact of gender...
attitudes on brand extensions to both the feminine and the masculine, it was more appropriate to select a generalist measure, which could be used as a single instrument for different experiments. In addition, the AWS scale was developed in 1972; though it was reassessed for its psychometric qualities in 1992 by Spence and Hahn, marked social changes have taken place since its construction and some of its items may sound caricatural and weird to people today. For these reasons, a more recent generalist gender attitude measure was chosen: the GAI (Gender Attitudes Inventory: Ashmore, Del Boca, & Bilder, 1995).

This inventory is structured with three second-order factors (“Stereotypes,” “Sexual relationships,” and “Societal organization”), regrouping 14 primary subscales. It can be administered entirely, or in selecting the subscale best adapted to the research context (Ashmore, Del Boca, & Bilder, 1995). Recent psychological research uses the GAI, employing the subscales most relevant to the study context (Bligh, Schlehofer, Casad, & Gaffney, 2012; Lydon, White, & Kadlec, 2007; McMullin & White, 2006; Robinson, Gibson-Beverly, & Schwartz, 2004; Toller, Suter, & Trautman, 2004). To examine traditional as opposed to egalitarian consumers, it was decided to utilize the subscale “acceptance of traditional stereotypes” (with 10 items—“men are generally more egotistical than women”), which was best adapted to the subject and had been selected by previous authors (Lydon, White, & Kadlec, 2007; McMullin & White, 2006; Robinson, Gibson-Beverly, & Schwartz, 2004). A French language version of this subscale was developed with the help of a French researcher expert in the gender field, and of an American researcher, using a back-translation procedure as recommended (Brislin, 1986). All items were rated on 5-point scales from strongly disagree to strongly agree, as per the authors’ initial procedure, with higher values indicating a more “traditional” gender attitude.

The “acceptance of traditional stereotypes” subscale exhibits good reliability ($\alpha = 0.84$), comparable to the initial results of this subscale ($\alpha = 0.85$) by Ashmore, Del Boca, and Bilder (1995). Table 1 details subscale items and reliability. As per the authors’ procedure, the median split calculation allows people to be classified in two groups (traditional vs. egalitarian). Participants who did not respond to some items of the subscale were excluded from this analysis.

**Gender Identity.** Two instruments have dominated the psychological literature to evaluate gender identity (Spence & Buckner, 2000): the BSRI (Bem, 1974), and the PAQ (Spence, Helmreich, & Stapp, 1974), whereas marketing studies have favored the BSRI so far (Ulrich & Tissier-Desbordes, 2013).

The PAQ was selected for several reasons. First, a comparative study from Spence and Buckner (2000) indicates the superiority of the PAQ instrument over the BSRI.\(^6\) Second, recent psychological literature shows the good psychometric properties of the PAQ (Choi, 2004) and uses it successfully to analyze the impact of gender identity on many individual behaviors (Fischer & Anderson, 2012; London, Downey, Romero-Canyas, Rattan, & Tyson, 2012; McBride, 2011; Simonson, Mezulis, & Davis, 2011; Wood, Heitmiller, Andreasen, & Nopoulos, 2008). Third, a large body of literature has criticized the BSRI (see Hoffman, 2001, for a review). In addition, a first French-Canadian version of the PAQ has been developed and assessed (Hill, Fekken, & Bond, 2000) but showed problematic structure and loadings, calling for further research on a French version of this measure.

Building on this initial adaptation, the PAQ was transposed into French, using a back-translation approach as explained earlier. Reliability was satisfactory and in line with prior psychological studies (Choi, 2004), with a lower level for the Instrumental scale ($\alpha = 0.74$ vs. $\alpha = 0.84$ for the Expressive scale). The PAQ differentiated four groups of individuals, based on the median split calculation for the Instrumental and Expressive scales (Spence, Helmreich, & Stapp, 1974). Participants classified as masculine scored high on the Instrumental scale and low on the Expressive scale ($n = 96$), whereas those classified as feminine scored high on the Expressive scale and low on the other ($n = 92$). An androgynous classification was attributed to respondents scoring high on both scales ($n = 139$), while those who scored low on both scales were classified as undifferentiated ($n = 93$).

**Sexual Orientation.** Most studies in the marketing field have used a self-categorization question for sexual orientation, allowing people to classify themselves as

| Table 1. Acceptance of Traditional Stereotypes (GAI Subscale): Reliability. |
|------------------------|------------------|
| Acceptance of Traditional Stereotype Items | Reliability |
| Men are more competitive than women | $\alpha = 0.84$ |
| Men are generally more adventurous than women | |
| Men are generally more egotistical than women | |
| On the average, men are more arrogant than women | |
| Women are more gentle than men | |
| Men are more independent than women | |
| Men are more sure of what they can do than women | |
| Compared to men, women tend to be gullible | |
| Compared to men, women are more able to devote themselves completely to others | |
| Compared to men, women tend to be weak | |

\(^6\) Men scored significantly higher than women for a majority of the PAQ Instrumental scale items (five out of eight items) in contrast to a minority of the BSRI Masculine scale items (six out of 17 items). In parallel, women scored significantly higher than men on all items of the PAQ Expressive scale, which was not the case for all the items of the BSRI Feminine scale.
heterosexual, homosexual, or bisexual (see Bhat, Leigh, & Wardlow, 1998; Oakenfull, McCarthy, & Greenlee, 2008; Tuten, 2005). Indeed in western civilizations, it has been suggested that individuals mostly use this common classification system to describe their sexual preference (Gonsiorek, Sell, & Weinrich, 1995). This procedure was followed, leading to a sample with 358 heterosexuals (79%), 32 homosexuals (8%), and 10 bisexuals (3%), while 20 subjects refused to give an answer.

**Dependent Measures.** Four dependent measures were evaluated: attitude toward the extension; purchase intent of the extension; attitude toward the mother brand; and perception of overall fit.

Attitude toward the extension was measured with three 7-point Likert scales adapted from Park, Milberg, and Lawson (1991) and Keller and Aaker (1992) (e.g., good quality, likable, pleased). The reliability was satisfactory (α = 0.91).

Purchase intent of the extension was assessed with two items transposed from Rangaswamy, Burke, and Oliva (1993), but two measures were distinguished, so as to take into account the specific masculine or feminine target of the extensions across gender: (1) purchase intent for oneself; and (2) purchase intent for one’s beloved of the opposite gender. To illustrate, in the case of the brand extension Helena Rubinstein “For Men,” this enabled the measurement of how far men intended to purchase this proposition for themselves (and to purchase the extension for a female person); and, for women, how far they intended to purchase this proposition for a male person (and for themselves). In this case of Helena Rubinstein “For Men,” the analysis hereafter will retain for males only purchase intent for themselves, and for females only purchase intent for a male individual. The two measures turned to be reliable (α = 0.97 and 0.96, respectively, on the overall sample).

Attitude toward the mother brand was measured using two 7-point scales translated from Park, Milberg, and Lawson (1991), e.g., likable, pleased. As this variable usually strongly influences the consumer’s attitude toward the extension (Aaker & Keller, 1990; Völckner & Sattler, 2007), it was measured at the beginning of the questionnaire, prior to exposing the respondents to the new extension. Additionally, this research aims to explore whether adding a brand extension across gender impacts the appreciation of the initial brand; therefore the questionnaire ended by measuring the respondents’ attitude toward the parent brand post exposure, with the same items. Both measures were reliable, with attitude toward the parent brand prior extension at α = 0.93, and attitude post extension at α = 0.95. A pre/post shift in attitude toward the parent brand within subjects was then computed by subtracting the prescore from the postscore, to further analyze the reciprocal effect on parent brand after the exposure of the new concept. Finally, most prior studies have evaluated overall fit between brand and extension, using the measure developed by Keller and Aaker (1992): following this route, these three items were translated, and measured on a 7-point scale. Reliability of the overall fit measure was satisfactory (α = 0.93).

**RESULTS**

**Manipulation Check**

Before proposing a brand extension to the opposite gender, it was important to check how consumers perceived the gender image of the chosen parent brands (Helena Rubinstein, Carita, Canada Dry). This was measured by consumer agreement on two separate items (this brand has a masculine image, this brand has a feminine image) on a 7-point scale, adapted from Allison et al. (1980) and Devecv and Iyer (1986). As expected from pretest results, Helena Rubinstein was perceived as highly feminine (MF = 5.87 vs. MM = 1.94, p < 0.001), Carita as highly feminine (MF = 5.14 vs. MM = 2.48, p < 0.001), and Canada Dry as strongly masculine (MM = 4.20 vs. MF = 2.72, p < 0.01). Importantly, perception of the gender image of parent brands did not differ significantly between women and men (MF = 4.62 for women compared to 4.34 for men, p = 0.29, ns; MM = 2.66 for women vs. 3.19 for men, p = 0.53, ns).

Additionally, initial attitudes toward parent brands were checked for a possible effect from consumer multifactorial gender or biological sex. No significant differences between male and female consumers were evident on the initial attitude toward parent brands (F(1,415) = 0.662, p = 0.416). Similarly, gender role attitudes had no significant effect (F(1,415) = 3.184, p = 0.08): consumers with traditional or egalitarian gender attitudes displayed similar attitudes toward parent brands. As for gender identity, no significant influence was revealed: F(3,415) = 2.068, p = 0.10. Also, the sexual orientation of respondents had no effect on the attitude toward initial mother brands (F(1,388) = 2.36, p = 0.125).

**Hypothesis Testing**

**The Effect of Biological Gender.** To test the hypotheses, an analysis of variance (ANOVA) was conducted using SPSS software on each of the four dependent variables. Contrary to the previous results of Jung and Lee (2006), the consumer’s biological gender had no significant effect on the dependent variables. On the overall sample, men and women were similarly favorable to cross-gender extensions, with no significant effect from biological gender on the attitude toward the extensions (F(1,415) = 2.378, p = 0.124), nor on the purchase intent (F(1,415) = 0.124, p = 0.725). No significant biological sex effect was measured on the fit between parent brand and extension (F(1,415) = 0.645, p = 0.422). Unsurprisingly, biological gender also had
**Table 2. F Value, Means (and Standard Deviations) of the Dependent Variables for Men Compared to Women.**

<table>
<thead>
<tr>
<th></th>
<th>Total Sample</th>
<th>Helena Rubinstein</th>
<th>Carita</th>
<th>Canada Dry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Cell size</td>
<td>216</td>
<td>204</td>
<td>69</td>
<td>53</td>
</tr>
<tr>
<td>Attitude to extension</td>
<td>3.93 (1.02)</td>
<td>4.08 (0.99)</td>
<td>3.92</td>
<td>4.23 (1.15)</td>
</tr>
<tr>
<td>F value</td>
<td>2.378</td>
<td>2.688</td>
<td>0.004</td>
<td>1.129</td>
</tr>
<tr>
<td>Significance</td>
<td>0.124</td>
<td>0.104</td>
<td>0.951</td>
<td>0.290</td>
</tr>
<tr>
<td>Purchase intent</td>
<td>3.68 (1.32)</td>
<td>3.73 (1.29)</td>
<td>3.30</td>
<td>3.53 (1.41)</td>
</tr>
<tr>
<td>F value</td>
<td>0.124</td>
<td>0.104</td>
<td>0.951</td>
<td>0.290</td>
</tr>
<tr>
<td>Significance</td>
<td>0.725</td>
<td>0.317</td>
<td>0.167</td>
<td>0.259</td>
</tr>
<tr>
<td>Perception of fit</td>
<td>4.07 (1.24)</td>
<td>4.17 (1.28)</td>
<td>4.14</td>
<td>3.87 (1.10)</td>
</tr>
<tr>
<td>F value</td>
<td>0.645</td>
<td>1.874</td>
<td>2.69</td>
<td>3.994</td>
</tr>
<tr>
<td>Significance</td>
<td>0.422</td>
<td>0.174</td>
<td>0.104</td>
<td>0.048</td>
</tr>
<tr>
<td>Attitude to parent brand</td>
<td>4.59 (1.03)</td>
<td>4.70 (1.16)</td>
<td>4.58</td>
<td>4.53 (1.22)</td>
</tr>
<tr>
<td>F value</td>
<td>0.310</td>
<td>0.810</td>
<td>0.323</td>
<td>0.889</td>
</tr>
<tr>
<td>Significance</td>
<td>0.189</td>
<td>1.005</td>
<td>0.000</td>
<td>2.961</td>
</tr>
<tr>
<td>Pre/post shift attitude parent brand</td>
<td>+0.02 (0.70)</td>
<td>+0.05 (0.68)</td>
<td>+0.17 (0.45)</td>
<td>+0.05 (0.76)</td>
</tr>
<tr>
<td>F value</td>
<td>0.664</td>
<td>0.318</td>
<td>0.997</td>
<td>0.093</td>
</tr>
<tr>
<td>Significance</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

no impact on the attitude toward the parent brand post extension \((F(1,415) = 0.163, p = 0.686)\), nor on the scores of pre/post shift in attitude toward the parent brand \((F(1,415) = 0.189, p = 0.664)\). The pre/post shift scores are similarly positive for male and female respondents, showing a trend to a more positive attitude toward mother brands after extension. We further analyzed each subsample per brand (Table 2). Although the cells for each male/female group within the subsamples per brand are discrepant, an ANOVA is generally robust to violations of the normality of variance assumption (Harris, 1998). A similar pattern of results was observed on each subsample, the biological gender having no significant effect on any of the dependent variables. We then checked the results among students only, as Jung and Lee’s prior study (2006) was conducted with a sample of college students, and came to similar conclusions. Finally, hypothesis H1 was not supported.

**The Effect of Gender Role Attitudes.** As predicted, gender role attitudes had a significant effect on the attitude toward cross-gender brand extensions \((F(1,415) = 98.29, p = 0.00)\) and on the purchase intent \((F(1,415) = 58.84, p = 0.00)\) for the total sample. Indeed, consumers with traditional gender attitudes displayed less favorable attitudes toward the extensions than those with modern gender attitudes, and lower purchase intent. These results contrast with the initial attitudes toward parent brands, which were not influenced by gender role attitudes \((F(1,415) = 3.184, p = 0.08)\). Analysis conducted for each subsample per brand also revealed a significant effect from gender attitudes on the evaluation of cross-gender extensions (Table 3).

The effect of gender attitudes on fit was also significant in the expected direction for the overall sample, though at a lower level of significance \((F(1,415) = 4.69, p = 0.03)\). Consumers with traditional gender attitudes evaluated overall fit lower than consumers with liberal attitudes did \((4.00 vs. 4.27)\). Yet, the ANOVA conducted for each subsample per brand indicates that gender attitudes had only a directional effect on fit: almost significant for the Helena Rubinstein subsample, but low for the Canada Dry subsample. As for final attitude toward mother brands after extension, the influence of gender attitudes was significant in the expected direction for the overall sample \((F(1,415) = 106.39, p = 0.00)\) and for each subsample. Furthermore, there was a significant difference in the pre/post attitude shift scores among traditional as opposed to egalitarian consumers \((F(1,415) = 204.91, p = 0.00)\) for the overall sample and for each subsample. The pre/post shift in attitude scores declined among traditional individuals \((-0.35 for the total sample, -0.20 for Helena Rubinstein, -0.37 for Carita, and -0.45 for Canada Dry)\), indicating that the extension had a negative reciprocal effect on the parent brand. In contrast, the pre/post shift in attitude scores among egalitarian individuals increased \((+0.45 for the total sample, +0.47 for Helena Rubinstein, +0.52 for Carita, and +0.36 for Canada Dry)\). Hence, hypothesis H2 was supported for the brand extension evaluation (with only directional support for the fit variable) and for the parent brand evaluation post extension.
The Effect of Gender Identity. Contrary to expectations, consumer gender identity had no significant effect—measured with the PAQ—on the evaluation of cross-gender brand extensions. First, the effect was directional only in the expected direction for individuals with masculine identity opposed to androgynous or undifferentiated respondents. Comparing masculine to androgynous consumers, attitude toward the extensions was directionally lower (3.94 compared to 3.99, \( p = 0.723 \), ns), and so were purchase intent (3.58 vs. 3.85, \( p = 0.153 \), ns) and fit (4.00 vs. 4.17, \( p = 0.422 \), ns). Similarly, the scores of masculine respondents about the extensions were directionally lower than those of undifferentiated respondents (attitude: 4.00, \( p = 0.679 \), ns; purchase intent: 3.62, \( p = 0.823 \), ns; fit: 4.08, \( p = 0.59 \), ns). Finally, there was no significant difference in the attitude toward parent brands post extension but a directional effect only, with masculine individuals at 4.47, while androgynous or undifferentiated respondents scored, respectively, 4.74 (\( p = 0.074 \), ns) and 4.63 (\( p = 0.288 \), ns). Due to the size of the cells for the four groups of respondents, results are reported only for the total sample (Table 4).

Second, there was no significant difference between the evaluation of feminine consumers and that of androgynous/undifferentiated consumers, as regards cross-gender extensions. Some scores were even directionally higher for feminine consumers, contrary to expectations. Attitude reached 4.07 (\( p = 0.585 \) compared to androgynous, and 0.654 vs. undifferentiated, ns); purchase intent 3.68 (\( p = 0.344 \) vs. androgynous, and 0.743 vs. undifferentiated, ns); and fit 4.07 (\( p = 0.938 \) vs. androgynous, and 0.615 vs. undifferentiated, ns). Similarly, there was no significant difference between feminine respondents and androgynous/undifferentiated respondents for the attitude toward parent brand post extension, and for the pre/post shift in attitude. Therefore, \( H_3 \) was not supported.

Influence of Sexual Orientation. The researchers predicted that sexual orientation would have no effect on the evaluation of cross-gender brand extensions and of parent brands post extension. There was no significant impact on any of the dependent variables, as shown by \( t \)-tests on the overall sample (heterosexuals = 358 and homosexuals = 32). Attitude toward extensions reached 3.99 for heterosexuals compared to 4.22 for homosexuals (\( p = 0.239 \), ns); purchase intent of the extensions was 3.68 versus 4.00 (\( p = 0.184 \), ns); and fit was 4.14 versus 4.18 (\( p = 0.877 \), ns). Sexual orientation had no effect either on the evaluation of parent brands post extension: attitude toward parent brands was 4.62 for heterosexuals versus 4.98 for homosexuals (\( p = 0.08 \), ns); and the calculation of pre–post shift in attitude reached +0.02 for heterosexuals versus +0.05 for homosexuals (\( p = 0.768 \), ns). Hence, \( H_4 \) was supported for all the dependent variables.

DISCUSSION

Theoretical Implications

This study examined the influence of consumer gender on the evaluation of cross-gender brand extensions
of gendered brands, with a large sample of consumers with various ages and social classes. Three gendered brands were analyzed in three product categories. For extensions to the masculine, the chosen categories were face skincare (product category with feminine image) and shampoo (product category with low masculinity/femininity); for extensions to the feminine, the chosen category was soda drinks (product category with low masculinity/femininity).

Contrary to Jung and Lee (2006), this research found that biological gender had no significant effect on the acceptance of cross-gender brand extensions: overall, men were as receptive as women toward these offers, with no impact on the three dependent variables (attitude, purchase intent, and fit). As a consequence, biological sex also had no influence on the evaluation of the parent brand post extension, contrasting with the trend observed by Jung and Lee (2006). Their study was conducted in Korea and Singapore, and was limited to undergraduate students with two product categories. In contrast, the current research provides evidence that their findings cannot be generalized to consumers of various ages in western cultures with other product categories of different gender image (strongly feminine or low masculinity/femininity). Indeed, France scores slightly more strongly for femininity than the United States, yet far below Sweden, Norway, or the Netherlands. France has a moderate score on masculinity, while Korea and Singapore—like most Asian countries—have high masculinity scores. The current results could most probably be generalized to western countries with similar patterns of masculinity/femininity, and to countries with a higher degree of masculinity. This also underlines the importance of taking into account the cultural dimension and generalizing intercultural studies for further research on gender differences; for example, the study by Feiereisen, Broderick, and Douglas (2009).

The current research findings provide evidence that specific factors of consumer multifactorial gender do influence the evaluation of cross-gender brand extensions, while others do not.

First, as predicted, gender role attitudes have a significant effect on this acceptance: consumers with traditional gender attitudes are less favorable to these extensions than egalitarian consumers, with significantly lower attitude and purchase intent toward the extensions, and directionally lower perception of fit. In addition, a reciprocal effect on the initial brands was observed: gender attitudes also influenced the evaluation of parent brands post extension, with a lower attitude for traditional as opposed to egalitarian individuals, and a significant difference in the pre/post attitude shift scores among the two groups. Cross-gender extension had a negative reciprocal effect on...
the parent brand for traditional consumers, whereas pre/post attitude shift scores increased for egalitarian consumers.

Overall, this research shows significant differences between traditional and egalitarian consumers in evaluating these extensions, independently of consumer gender identity (masculinity/femininity) or biological sex.

Thus, the gender attitudes construct appears relevant to explain consumer behavior in gender-related contexts: here for the acceptance of cross-gender brand extensions, as previously for the preference for masculine/feminine brands (Alreck, Settle, & Belch, 1982) or in the context of gift buying (Fischer & Arnold, 1994). The study helps show the theoretical importance of this construct for consumer research, and the relevance of the GAI (Ashmore, Del Boca, & Bilder, 1995) measure. It should be noted that gender attitudes had only a directional effect on overall fit for the subsamples per brand. This lower impact on fit rather than on the other dependent variables may be based on the degree to which the questions pertain to individual choice. The fit construct does not ask respondents to imagine themselves as consumers intending to evaluate and purchase the extension: they are just asked whether the product “fits” the parent brand, with rational items (“corresponds well,” “seems logical”) that do not put them in the position of a consumer considering buying the product. This may explain why the effect of gender attitudes is only directional on the fit variable, while significant on the attitude and purchase intent toward the extensions.

Second, as predicted, consumer sexual orientation has no significant influence on the evaluation of cross-gender brand extensions, contrary to gender attitudes. Homosexual male consumers are no more receptive than heterosexuals to feminine brands expanding to the male target (and vice versa). In addition, sexual orientation does not affect the evaluation of mother brands post extension. This adds to previous findings indicating that sexual orientation has no impact on perception of brand gender (Ulrich, Tissier-Desbordes, & Dubois, 2010), and corroborates those from Troiden (1988), suggesting that gender factors other than sexual orientation may have a more crucial role in explaining individual reactions.

Third, gender identity does not significantly influence consumer acceptance of cross-gender brand extensions, contrary to expectations. For all the dependent variables, only a directional effect was found in the predicted direction for masculine in comparison to androgynous or undifferentiated individuals. Moreover, gender identity had no significant effect among feminine respondents compared to androgynous/undifferentiated respondents, and no directional effect in the expected direction for the dependent variables. Hence, consumers’ gender identity, captured via the PAQ instrument, is not predictive of how they evaluate cross-gender extensions and parent brands post extension. This contributes to prior findings in consumer research, where gender identity was less meaningful than gender role attitudes to explain behaviors (Fischer & Arnold, 1994). Spence (1993) indicates that the PAQ and the BSRI instruments should be used only in situations where instrumental/expressive traits are relevant. Though gender identity appears as a valuable construct to explain consumer responses in many studies on gender portrayals in advertising (Feiereisen, Broderick, & Douglas, 2009; Jaffe, 1991, 1994; Martin & Gnoth, 2009), it is not meaningful for the evaluation of cross-gender brand evaluations: a context where instrumentality and expressiveness do not appear pertinent.

Incidentally, the present study also indicates that consumer age has no effect on the acceptance of cross-gender extensions and in return on the parent brand. Though age comparison was not a specific objective of the research, this adds to the understanding of consumer behavior, and to the work of Jung and Lee (2006), who suggested that age could affect the perception of extensions across gender but did not check it.

Managerial Implications

This research provides many insights for managers with regard to cross-gender extensions from gendered brands. In cultures with moderate to high femininity like France (Hofstede, 2001), marketers can consider that these extensions can be accepted equally by men and women. However, consumers with traditional gender attitudes, whatever their age and biological sex, will show more reluctance toward cross-gender extensions: the potential market for these extensions is primarily limited to consumers with egalitarian attitudes to gender.

Hence, converting a new male (female) target to the new cross-gender extension of a previously feminine (masculine) brand will probably require time. Market share objectives for this extension should account for the limitation of consumer targets to “egalitarian” individuals. In addition, marketers in charge of gendered brands with low market shares should carefully consider expanding the franchise to the opposite biological sex, since business potential in the long term may be restricted. Managers launching a cross-gender brand extension could try to better target “egalitarian” individuals in optimizing their media plan—selecting print magazines, Internet sites, or TV channels whose target is most in line with “egalitarian” individuals—and in adjusting the way they communicate to best reflect the expectations of these consumers in terms of gender role portrayal or selection of models, as per previous work of Martin and Gnoth (2009) or Feiereisen, Broderick, and Douglas (2009).

Another direct implication of this research for managers is that age has no impact on consumer acceptance of cross-gender brand extensions, so specific products targeting senior consumers can be developed within the
extension franchise. Finally, sexual orientation has no direct influence on variations in consumer behavior as regards these extensions. This is important for managers, as some were previously tempted to target gay consumers when expanding brands from the feminine to the masculine (as in the cosmetic market), and the finding has direct implications for communications and media planning.

Limitations and Further Research

However, there are some limitations to this study. It examined three brands in three product categories: one category with a strongly feminine gender, the other two categories with low femininity/masculinity. It would be interesting to generalize the results to product categories with a strong masculine image. Second, the findings are limited to cultures with a moderate degree of masculinity/femininity like France, which scores 42 on the masculinity scale (Hofstede, 2001); an avenue for further research might be to check whether the results could be replicated in countries with higher scores in masculinity, like the United States, China, or Japan, which score, respectively, 62, 66, and 95 on the masculinity scale (Hofstede, 2001). Moreover, as consumers with traditional gender attitudes are reluctant to accept cross-gender extensions, it seems probable that the stronger the gender of the parent brand, the stronger the reluctance of these individuals would be. Future research could examine this influence of the initial gender of the parent brand on consumers’ acceptance of cross-gender extensions. Finally, some highly feminine brands have limited success on the marketplace when extended to the masculine (as in the skincare market); future research could explore the relative influence of the brand gender in comparison to the gender attitudes of the consumer on the evaluation of these extensions.

REFERENCES


EFFECT OF MULTIFACTORIAL GENDER AND BIOLOGICAL SEX

Psychology and Marketing  DOI: 10.1002/mar

807


The author would like to thank the anonymous reviewers for the pertinence of their comments and constructive suggestions, which have made a significant contribution in improving this article.

Correspondence regarding this article should be sent to: Isabelle Ulrich, Assistant Professor, Rouen Business School, Bd André Siegfried, 76825 Mont-Saint-Aignan, France (iul@rouenbs.fr).
Appendix

Table A1. Scenario Helena Rubinstein for Men.

Building on strong expertise in face skincare products for women, Helena Rubinstein introduces:

A new face skincare range **for men only**.

Introducing *Helena Rubinstein For Men*, the new face skincare expert products exclusively designed for men, and best adapted to their skin specificities.

This new product range, suited to the specific needs of male skin, comprises:

1. Cleansing products - Face cleansing gel for daily usage
   - Exfoliating cleanser to get rid of impurities
2. Specific care - Moisturizer that fights the signs of fatigue
   - Matifying hydrating gel
   - Complete antiaging moisturizer
   - Eye products fighting wrinkles and dark circles
   - Face self-tanner

Table A2. Scenario Carita for Men.

Building on strong expertise in haircare for women, Carita introduces

A new shampoo range **for men only**

Introducing *Carita For Men*, the new range of shampoo products exclusively designed for men, and best adapted to their specific hair requirements

This new range, suited to the specific needs of male hair, comprises

- Antidandruff shampoo
- Intensive antiloss hair shampoo

Table A3. Scenario Canada Dry for Women.

Building on strong expertise in beverages, Canada Dry introduces

A new soda **for women only**.

Introducing *Canada Dry For Women*, a new refreshing drink, sugar-free, exclusively designed for women, with its delightful taste and feminine packaging.

This new soda will be available in 1.5 L bottles and 33 cl cans.