

Changing Roles, Changing Preferences?

The Dual Impact of Gender Identity on Preferences for Sex Specific Advertising Stimuli

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This paper investigates whether gender identity, or the extent to which an individual identifies with socially constructed sex roles, moderates the influence of sex on typically male and female ad preferences. We distinguish primary from secondary ad stimuli. Universally, men prefer young women and women prefer babies and children (= primary stimuli). On the other hand, cultural changes might affect sex specific preferences of, for example, leisure activities (= secondary stimuli). Results of our first study partly support this duality. However, gender identity did moderate women's preference of primary stimuli. Study 2 revealed that identification may explain this unexpected result.

Over the last 150 years, the women's rights advocates and other policy makers have made great progress towards emancipation and equal rights for men and women. They particularly strived against discrimination of women in all layers of society (e.g., politics, education, work). While their battle continues, male and female roles in family life have also changed substantially. Nowadays, it is normal for women to work outdoors. Likewise, raising the kids, cleaning the house and preparing food are not exclusively feminine tasks anymore. Over the years, sex roles have been changing and, consequently, traditional male and female conceptions have blurred. However, do these blurring sex role patterns also imply that men and women have become more equal in their feelings and preferences in general, and in their ad preferences in particular?

The huge success of recent bestselling pseudo-scientific books, like "Why Men don't listen and Women can't read Maps" and other popular readings from the famous couple Allen and Barbara Pease, suggests that the answer to this question is going to be negative. Millions of men and women seem to be interested in sex differences and want to understand the driving force beneath the opposite sex's and their own behavior. Also, sex-oriented products (like women's magazines, make-up, and all kinds of beauty products) continue to be big business. We can conclude that societal trends of emancipation and blurring sex roles, on the one hand, and popular culture, on the other, makes debating about sex differences a rather ambivalent issue.

Apparently, this ambivalence is also reflected in current advertising. Although content analyses research reports that, over the years, sex stereotyping in advertising has decreased (Wolin, 2003), advertisements that depict sex specific (and often traditional) values are among the most appreciated by the audience. A clear example is the huge success of the advertisements of Johnson's baby care products which are addressed to mothers and depict values of nurturing and parental care.

To make sense of these conflicting observations, we propose that sex differences operate on two levels. The first level is a very basic level. This level covers innate and universal sex differences. Being stable and universal, these differences seem to be robust to cultural change (Buss, 1989). The second level is more dynamic. This level comprises cultural changes and depends on contemporary social structures. Consequently, these sex differences are malleable (Eagly, 1987).

In this paper we will emphasize the relevance of studying both levels in an advertising context. We assume that sex typical ads can be divided into two categories reflecting both levels of sex differences. In general, we expect that, while men and women continue to like ads consistent with their primary sex typical preferences, their preference for ads reflecting the secondary level is dependent on their gender identity, being a reflection of the extent to which they identify with socially constructed sex roles. In the following section, we outline the theoretical underpinnings that support this claim.

Sex Differences and Advertising Preferences

In advertising and consumer literature, several studies have reported sex differences, for instance in the way that consumers process advertising (Darley and Smith, 1995; Meyers-Levy and Maheswaran, 1991), on the impact of sex roles on the judgment of persuasive messages (Meyers-Levy, 1988), and in responses to sex role portrayals (Al-Olayan and Karande, 2000; Orth and Holancova, 2004) and to sexual appeals (Jones, Stanaland, and Gelb 1998; LaTour, 1990;). For a complete overview of sex related issues in advertising research, we refer to the comprehensive review by Wolin (2003).

However, not much is known about the influence of cultural change on sex specific advertising preferences. This topic has become very relevant in the light of the ambivalence discussed above. For example, do – often cited – ‘new men’ who identify with female characteristics like caring and tenderness, prefer an advertisement depicting hugging children to an advertisement showing a sensual looking woman in bikinis? Or, did independent, emancipated women stop loving ads with babies? Accurate answers to these questions would

be very useful to advertisers wanting to address persuasive messages to men, women or to both sexes.

Two Perspectives to Explain Sex Differences: Conflicting or Compatible?

In social sciences, the dominant theory for explaining sex differences is the social role theory (Eagly, 1987; Eagly and Wood, 1999). In a nutshell, this theory suggests that the historical division of labor between the sexes creates different gender role expectations, which then lead to sex differences in (social) behavior and personality. More concretely, women are expected to fulfill their communal role (nurturance and yielding) and men are expected to fulfill their agentic role (assertive and instrumental). Because of these different role expectations, men and women are socialized differently and behave differently. Recently, social role theorists have documented that the trend towards greater role similarity between the sexes leads to an erosion of sex differences (Diekmann and Eagly, 2000). Social role theory is also the dominant approach to explain sex differences in current advertising literature. For example, Prakash (1992) and Putrevu (2004) found that sex differences in ad preferences were consistent with males' agentic and females' communal sex roles.

An alternative approach for studying sex differences is evolutionary psychology. Evolutionary psychology contends that the human mind has evolved in a similar way as the human body. According to the principles of evolutionary biology, our bodily organs (like liver, kidneys, lungs...) have evolved to serve vital functions that were (and still are) needed in order to survive. Similarly, the human mind consists of a set of evolved mental mechanisms that emerged as a solution to specific adaptive problems faced by our ancestors. Among other adaptations, these include solutions to the problem of what we should and should not eat, who we should mate with, and who we should see as friends and who as foes (Barkow, Cosmides and Tooby, 1992). Recent research shows that evolutionary psychology can be very valuable when applied to social behavior in general (Schmitt, 2003) and to advertising and consumer research in particular (Collarelli and Dettmann, 2003; Saad and Gill, 2000, 2003).

How can this approach be used to study sex differences in ad preferences? It is assumed that during evolution men and women faced partially different adaptive problems. Evolutionary psychology therefore predicts that the strongest sex differences will occur in those domains in which the sexes faced different adaptive problems (Buss 1989). Although the ultimate goal of both sexes is (gene) reproduction, the strategies to attain this goal are different. Women, compared to men, invest more energy in their offspring (gestation,

lactation, birth, breastfeeding...); they are physiologically limited in terms of the number of offspring that they can procreate. Consequently, women developed a proclivity towards nurturing and parenting in order to cope with this adaptive problem. Men, on the contrary, are not physiologically restricted in terms of the number of offspring they can procreate. Their primary limitation is the number of healthy, fertile females that are willing to mate. To cope with this adaptive problem, men have a disposition to look for mates giving signs of youth as an indication of good genes and high fertility (Buss, 1989). These different reproductive strategies following different adaptive problems can be behavioral, attentional, and attitudinal (Schmitt, 2003). The broad influence that sex seems to have on our primary interests strongly suggests that it can be successfully applied to the study of sex differences in ad preferences.

Although both social role theorists and evolutionary psychologists often claim to have the final word in this debate (Eagly and Wood, 1999; Lueptow, Garovich and Lueptow, 1995), the two theories do not necessarily have to be incompatible with each other. Archer (1996) compared the explanatory power of social role theory and evolutionary psychology. He argued that evolutionary psychology accounts for many aspects regarding sex differences in social behavior. However, this does not mean that evolutionary psychology rules out the impact of cultural influences on the generation of sex differences. According to Archer (1996) socialization can be viewed as reflecting the differential adaptive requirements of men and women. Although the way in which sex specific behavior is expressed differs across time and cultures, some primary sex specific predisposition – as a result of different reproductive strategies – remain stable. This implies that, irrespective of time and culture, primary sex specific interest and preferences will prevail.

However, evolution has endowed us with great flexibility that allowed us to cope with widely different environments (Skinner, 1984). This flexibility has enabled different cultures to emerge as a way of coping with new challenges. As a consequence, new sex differences could emerge and universal sex differences may be substantially shaped by the cultural-specific environment. Referring to our initial claim about the two levels in sex differences, we posit that evolutionary psychology is the appropriate framework to explain and to study the primary, universal preferences which are shaped by our evolutionary past. Since evolution does not prohibit that cultures change and evolve, social role theory, on the other hand, can be well suited to study more novel and contemporaneous sex differences which are malleable and are changing over time. This integration between evolutionary psychology and social role theory implies that distinguishing between two levels of sex specific ad stimuli might make sense.

Beyond Dichotomous Sex: Gender Identity

Considerable research went beyond dichotomous sex differences between men and women, and focused on an assessment of a person's maleness and femaleness, mostly referred to as 'gender identity' (Bem, 1974; Deaux and Major, 1987; Frable, 1989; Spence, 1993). In this context, sex is considered as a purely biological feature that refers to anatomical and physiological characteristics of being a man or a woman. Gender identity, as an indication of a person's psychological sex, is then defined as the degree to which an individual identifies with -socially constructed- female or male characteristics prevalent in a specific society (Kaplan, 2001; Mealy, 2000). Gender identity can easily be interpreted in the light of the social role theory, since it studies the extent to which an individual identifies with the social and cultural meanings associated with maleness and femaleness as imposed and expected by society (Kaplan, 2001; Wolin, 2003). Throughout the years, different scales measuring gender identity have been developed (Bem, 1974; Markus et al., 1982; Spence, Helmreich, and Stapp, 1975).

Although those scales measure individuals' self assessment of maleness and femaleness, the majority of advertising studies still uses the label 'gender' as a binary, dichotomous variable, actually referring to biological 'sex'. However, some researchers have investigated the role of gender identity in advertising studies (Jaffee 1991; Kempf, Palan and Laczniak, 1997). Palan (2001) reviewed the consumer behavior and advertising literature on gender identity and found that these studies often report inconsistent results. In the majority of studies, (biological) sex was a better predictor than gender identity. However, gender identity could explain variations in consumer behaviors when it was carefully linked to changing sex role conceptions (Palan, 2001). In general, the impact of gender identity was also stronger for women than for men. This is presumably due to the greater change in female sex roles, compared to male sex roles (Diekmann and Eagly, 2000).

In our opinion, the major relevance of differentiating sex and gender identity as predictor variables lays in the – earlier discussed – levels of robustness of sex differences to cultural change. We will illustrate this in the subsequent study in which our key hypothesis posits that gender identity moderates the impact of sex on preference for ads reflecting sex differences on the secondary, cultural level but not for ads depicting primary, universal sex differences.

Study 1: the Moderating Impact of Gender Identity

Study Objectives

The major aim of this study is to examine the moderating role of gender identity on affective reactions to sex specific advertising stimuli. This means, we want to investigate whether the extent to which an individual has adopted masculine or feminine sex roles influences their preferences for typical male- or female-oriented stimuli. However, in line with our discussion about the duality in sex differences, sex typical ad stimuli vary in their resistance to cultural change. Accordingly, the moderating impact of gender identity on men and women's affective reactions to sex typical ad stimuli will depend on how resistant the ad's content is to factors of cultural change, like changing role patterns.

Some sex specific ads reflect universal, innate sensitivities. As pointed out by evolutionary psychologists, men prefer young, desirable women and women are sensitive to signs of parental care. We expect that sex differences in preferences for ads reflecting these universal values are stable and unaffected by attitudinal change in society. In this study, these are referred to as 'primary' ad stimuli (this means: biologically stable). We expect that gender identity has a minor impact on preferences for these primary ad stimuli. Other sex specific ads show preferences that seem to be more influenced by changes in society. For example, beer ads often depict men socializing in the pub, while coffee or tea ads depict women gathering in cozy home-parties. However, in our current Western society, socializing in the pub isn't an exclusively male activity anymore. In this study, these are referred to as 'secondary' ad stimuli (this means: malleable due to changes in society). We expect that gender identity will have a moderating impact on preferences for such secondary ad stimuli. Since female sex roles have undergone larger changes compared to male sex roles, we further expect that the moderating impact of gender identity will be larger for women than for men (Diekmann and Eagly, 2000).

We focus on affective reactions to visual advertising stimuli. Affective reactions play a fundamental role in both attention processes and attitudinal processes and therefore can be seen as the core-element in the advertising process (Batra and Ray, 1986; Holbrook and Batra, 1987). In this study, positive affective reactions are considered as direct, spontaneous ad preferences.

Method

Pilot Study 1: Stimulus Material Selection. This pilot study aimed at selecting typically male-oriented and typically female-oriented ad stimuli. Concretely, 79

undergraduate students (38 males and 41 females, $M_{\text{age}} = 21.5$, $SD = 1.2$), enrolled in a Communication Management course at a Belgian University, served as judges in return for course credit. They were asked to select the stimulus material out of a wide range of pictures. The picture set consisted of two books (approx. 900 pictures each) used by art directors from advertising companies to select visuals for their campaigns. There were pictures of men, women, children, couples, elderly people, and families with children in all sorts of situations (home, work, school, vacation, sports, and leisure activities). The picture set also contained pictures of all sorts of animals, going from small insects to large gorillas. Pictures showing objects were also included (e.g. pictures of landscapes, flowers, books, and computers). The judges were asked to select those pictures from the set that would appeal to their own sex. Half of the judges had to select pictures from the first book and half of the judges had to select pictures from the second book. The order in which they had to select the pictures was counterbalanced; half of the judges started at the beginning of the book, half of the judges started at the end of the book. The judges had to select between 50 and 100 pictures. We retained the 30 pictures that male judges selected most often (those pictures were chosen by 21.1% - 34.2% of the male judges) and the 30 pictures that female judges selected most often (those pictures were selected by 19.5% - 31.6% of the female judges) for the main experiment.

Pilot Study 2: Stimulus Material Categorization. The pictures in our stimuli set included pictures imaging both primary and secondary levels of preferences. To test our prediction that gender identity differentially impacts both types of pictures, we classified the pictures in the stimuli set as primary or secondary. We first composed pairs of pictures containing one male-oriented and one female-oriented picture such that the two pictures were semantically related as much as possible. For example, a male-oriented picture with a black panther was combined with a female-oriented picture showing a kitten. Likewise, a male-oriented picture depicting a half nude woman was combined with a female-oriented picture of a close-up of a cute little girl. Later, two independent judges familiar with the basic tenets of evolutionary psychology classified the pictures sets as reflecting the primary or the secondary level of sex differences. Only the picture sets with a convergent classification were retained, resulting in nine primary and 14 secondary picture sets. For the primary picture sets, the male-oriented pictures were primarily pictures showing young, attractive women. The primary female-oriented pictures were for the most part pictures showing babies, children, or slices of a happy family life. Further, the male-oriented secondary pictures consisted mainly of pictures

showing typical male competition sports (e.g. wrestling, basket ball, and snooker), large and dangerous animals (e.g. black panther, shark, and tiger), and socializing activities like drinking beer. On the other hand, the female-oriented secondary pictures showed relaxing or individual sports (e.g. fitness, ballet, and yoga), small and vulnerable animals (e.g. baby dolphins, kittens, and lambs), and socializing activities like coffee or tea parties.

Stimulus Material. The 23 picture sets, consisting of the male- and female-oriented pictures selected in the pilot study, were extended with 2 neutral pictures per set. We considered pictures as ‘neutral’ when they were not or hardly chosen by the male and female judges in pilot study 1. The inclusion of the neutral pictures disguised our interest in reactions to sex specific stimuli. To summarize, the stimulus material consisted of 23 picture sets, all comprising 1 male-oriented picture, 1 female-oriented picture, and 2 neutral pictures. As noted above, our stimulus material consisted of nine primary picture sets and 14 secondary sets.

Procedure. We created a program in Flash® that contained the 23 picture sets (primary and secondary sets were shown randomly). Each set of 4 pictures was presented during 5 seconds. Within those 5 seconds the subjects had to indicate the picture that evoked the most positive feelings in them. This means that with each set containing 4 pictures, respondents had an average time of only 1.25 seconds to judge each picture. A short exposure time minimizes cognitive processing, which improves the measurements of spontaneous affective reactions. We counted how many times the respondents chose the male-oriented, the female-oriented, or the sex neutral pictures in the primary and in the secondary picture sets. In sum, the picture choices resulted in 5 variables: preference for the primary male-oriented pictures (min. 0 – max. 9), preference for the primary female-oriented pictures (min. 0 – max. 9), preference for the secondary male-oriented pictures (min. 0 – max. 14), preference for the secondary female-oriented pictures (min. 0 – max.14), and preference for the sex neutral pictures (min. 0 – max. 23).

Respondents. A total of 687 respondents (332 men, 355 women) participated voluntarily in this study, (which was part of a more comprehensive study on consumer preferences, values, and attitudes). With the help of 40 undergraduate students, enrolled in a Practical course on Marketing Communications at a Belgian University, one hundred and sixty families were recruited. Both parents and children (older than 16 years of age) participated in this study ($M_{\text{age}} = 35.20$, $SD = 14.34$).

Gender identity Measure. To assess gender identity, respondents had to complete the Bem Sex Role Inventory (BSRI) developed by Bem (1974). The BSRI contains 60 items: 20 masculine items (for example: aggressive, athletic, competitive), 20 feminine items (for example: affectionate, compassionate, loves children, soft-spoken) and 20 neutral items (for example: adaptable, conscientious, helpful, moody). For each item, respondents had to indicate on a seven-point likert scale to which extent it applied to them. Finally, the sum score on the feminine items (feminine-subscale) was subtracted from the sum score on the masculine items (masculine-subscale). This outcome is considered as the respondent's 'gender identity-score' (Bem, 1974). The higher the gender identity-score, the more exclusively an individual identifies with masculine characteristics, and is considered as being 'masculine'. The lower the gender identity-score, the more an individual identifies with feminine characteristics and can be considered as being 'feminine'.

Although, the BSRI is developed more than 30 years ago, Cramer and Westerngren (1999) found that the sex stereotypic items in the BSRI are nowadays still used to describe men and women in stereotypic ways.

Results

Manipulation Check. To check whether the pictures from the pilot study were indeed 'male-oriented', 'female-oriented' or 'sex neutral', we performed ANOVA-analyses on the five preference variables with sex as between-subjects variable. Results indicated a strong sex differentiation on spontaneous preferences for the male-oriented and the female-oriented stimuli (for both the primary and the secondary sets) in the expected directions. The preference for the 'sex neutral' pictures did not differ between the sexes. These results illustrate that the selected ad stimuli reflect a male-oriented, female-oriented or sex neutral content. Table 1 shows the results in detail.

Test of Hypotheses. We expected that gender identity would have a moderating impact beyond sex for spontaneous preferences of secondary pictures and that it would not have an impact beyond sex for spontaneous preferences of primary pictures. We further expected that the moderating effect of gender identity would be stronger for women than for men.

To test these predictions, we first performed a multiple regression analysis with gender identity, sex, and their interaction as predictors, and mean picture preference for the four categories of pictures (i.e. primary and secondary male and female-oriented pictures) as

dependent variables. Results revealed a significant three-way interaction for sex by gender identity by picture type ($F(4, 675) = 2.917, p = .021$). To gain more insight, we looked at the effect of gender identity and sex and their interaction for the two types of pictures separately.

Table 1
Mean picture preferences for men and women on male-oriented, female-oriented and sex neutral pictures

Picture type	Mean (SD) Men	Mean (SD) Women	<i>F</i>	<i>p</i>
<i>Primary</i>				
Male-oriented	4.37 (2.26)	2.10 (1.76)	219.14	< .001
Female-oriented	2.38 (1.69)	4.45 (1.89)	225.27	< .001
<i>Secondary</i>				
Male-oriented	4.24 (2.24)	2.55 (1.95)	112.36	< .001
Female-oriented	4.18 (1.97)	6.09 (2.16)	145.89	< .001
Sex neutral¹	7.81 (3.04)	7.81 (2.79)	0.000	NS

Secondary Pictures. We tested whether gender identity had an impact beyond sex on spontaneous preferences for secondary pictures. We conducted a multiple regression analysis with gender identity and sex and their interaction as predictors and the mean picture preference for secondary male and female-oriented pictures as dependent variables. Overall, masculinity increased women’s and men’s preferences for male-oriented pictures and decreased their preference for female-oriented pictures (see Table 2). As expected, our results showed that the impact of gender identity on secondary picture preference was somewhat stronger for women than for men. For men, a multiple regression analysis revealed that gender identity had a significant effect for male-oriented secondary pictures and a marginally significant effect for female-oriented secondary pictures. For women a multiple regression analysis revealed a significant effect of gender identity for both male-oriented and female-oriented secondary pictures.

¹ To compare the preference for the sex neutral pictures to the preference for the male-oriented and the female-oriented pictures, the mean preference score has to be divided by 2, because there were 46 neutral pictures, and 23 male-oriented and 23 female-oriented pictures.

Table 2

The effect of gender identity on preferences for secondary male- and female-oriented pictures for men and women

<i>Secondary pictures</i>	Interaction			Sexes separately					
	Sex x Gender identity			Men			Women		
	β	<i>t-value</i>	<i>p-value</i>	β	<i>t-value</i>	<i>p-value</i>	β	<i>t-value</i>	<i>p-value</i>
Male-oriented	0.343	-0.577	NS	0.168	3.092	.002	0.238	4.585	<.001
Female-oriented	-0.340	2.319	.021	-0.091	-1.657	.098	-0.248	-4.806	<.001

Primary Pictures. We performed a similar regression-analysis for the primary pictures. We expected that for both males and females gender identity would have no impact on their spontaneous preference for primary pictures. However, the analysis did reveal a significant interaction effect between sex and gender identity, both for male-oriented and female-oriented pictures. Looking at the sexes separately, a multiple regression analysis for men did not reveal any significant effect of gender identity, neither for male-oriented pictures, nor for female-oriented pictures beyond sex. So, as expected, men prefer male-oriented pictures to female-oriented primary pictures (see Table 3), irrespective of their gender identity. A multiple regression analysis for women only, however, revealed a significant effect of gender identity. Masculinity increased women's preferences for male-oriented primary pictures and decreased preference for female-oriented primary pictures. Table 3 summarizes these results.

Table 3

The effect of gender identity on preferences for primary male- and female-oriented pictures for men and women

<i>Primary pictures</i>	Interaction			Sexes separately					
	Sex x Gender identity			Men			Women		
	β	<i>t-value</i>	<i>p-value</i>	β	<i>t-value</i>	<i>p-value</i>	β	<i>t-value</i>	<i>p-value</i>
Male-oriented	0.355	-2.11	.035	0.066	1.20	0.232	0.266	5.19	<.001
Female-oriented	-0.370	2.41	.016	-0.084	-1.53	0.127	-0.246	-4.77	<.001

Although we expected the impact of gender identity to be slightly larger for women, the significant impact on women's preferences for primary pictures was surprising and therefore needs further investigation and explanation. When taking a closer look at the content of the primary pictures, we notice that the male-oriented pictures mostly contain young, desirable women, whereas the female-oriented pictures generally depict situations associated with parenting. Some women may prefer the male-oriented pictures because they feel connected to or identify themselves with the women on those pictures. The types of women depicted on the male-oriented pictures look in fact like young women who do not explicitly engage in a family life but rather prefer to be independent. If identification drives this unexpected result, then the impact of gender identity will mainly hold for young women because the male-oriented ad stimuli that we used only depict young women.

To test this assumption, we performed a multiple regression analysis for women with gender identity-score and age and their interaction as predictors, and mean picture preference for male and female-oriented primary pictures as dependent variables. Results revealed a significant interaction between age and gender identity for male-oriented pictures ($t(353) = -2.014$, $p = .045$) but not for female-oriented pictures ($t(353) = 1.260$, *NS*). With age as a categorical variable (young versus old), further correlation analyses show that for young women (aged between 17 and 32) there was a significant positive correlation between gender identity and preference for male-oriented pictures ($r = 0.33$, $p < .001$) whereas for older women (aged between 40 and 63) there was a much weaker, insignificant correlation between these two variables ($r = 0.13$, $p = .08$).

Discussion Study 1

For the secondary pictures, results were largely in line with our predictions. For both sexes, gender identity moderated spontaneous preferences for sex specific ad stimuli. Moreover, women's preferences were more strongly influenced by their gender identity than men's preferences.

For the primary pictures, results support our predictions when it comes to male reactions. Results show that for men, gender identity has no impact on their spontaneous preferences for primary sex-oriented advertising stimuli. Men clearly prefer 'male-oriented' stimuli to 'female-oriented' stimuli. Gender identity has no moderating impact on this preference. It seems that, although men vary in terms of gender identity, their preferences for primary advertising stimuli are still in accordance with their traditional sex role. However, for women we found a surprising, yet interesting, result. In general, women preferred the

‘female-oriented’ stimuli to the ‘male-oriented’ stimuli, but gender identity moderated these preferences. Masculine female respondents had an increased preference for the ‘male-oriented’ stimuli and a decreased preference for the ‘female-oriented’ stimuli in comparison to the feminine women. Moreover, the moderating impact of gender identity depended on age. Particularly, young women’s preferences for ‘male-oriented’ ad stimuli varied more with their gender identity than older women’s preferences. The moderating impact of gender identity on preference for female-oriented pictures did not vary with age. We conclude that the blurring sex roles have more impact on women than on men and that presumably young women’s affective reactions to male-oriented advertising stimuli (as reflected in their primary picture preferences) could be influenced by how much they identify with the women in the pictures.

Why does gender identity affect women’s spontaneous preferences for primary sex specific advertising stimuli more than men’s? We suggest that women can more easily identify with the preferred sex specific advertising stimuli of both sexes. Almost all male-oriented pictures show young desirable women in seductive poses (naked under a shower, wearing sexy underwear, dancing in bikinis...). The female-oriented pictures, on the other hand, depict women in committed contexts (a wedding ceremony, a woman with small children) or just show babies and children. In fact, the women depicted on the male-oriented pictures, can be considered as women who are independent, uncommitted, and possessing other characteristics typically associated with ‘masculinity’, whereas the women shown on the female-oriented pictures can be seen as sensible, affectionate, ‘feminine’ women. This suggests that the moderating impact of gender identity that we found for the young women may be a matter of identification with the women shown on the sex specific pictures. Consequently, this is reflected in their primary preferences. This explanation is the premise of study 2.

Study 2: Gender Identity and Young Women’s Identification

The purpose of this study is to find further evidence for our interpretation that the moderating impact of gender identity on spontaneous affective reactions for young women is related to identification with the primary pictures’ content. Since the male-oriented primary pictures often depict self-conscious, good looking young women, we expect that more masculine young women, associating themselves with characteristics such as ‘assertive’, ‘dominant’, ‘independent’ etc., identify with the women depicted on those male-oriented pictures. The female-oriented primary pictures often depict women in commitment contexts. We expect that more feminine young women, associating themselves with characteristics as

‘affectionate’, ‘compassionate’, ‘loving children’, etc., identify with the women depicted on those female-oriented pictures.

Method

Participants were 102 female undergraduates at a Belgian University, aged between 18 and 29 ($M_{\text{age}} = 21.2$, $SD = 1.7$). The participants were paid to take part in the experiment. As stimulus material we used 8 pictures of women, divided into 2 subsets. One set was ‘male-oriented’ and contained 4 male-oriented primary pictures from study 1. These pictures showed a naked, sensual, dominant, and/or seductive young woman. The other set was ‘female-oriented’ and contained 4 pictures of very feminine women. These were pictures showing a woman with a baby, a woman with 2 little kids, a woman in a wedding dress, and a romantic scene of a woman on the beach. We asked respondents to indicate on a 7-point scale how much they identified with the women on the pictures (-3 = not at all, 3 = very much). As in study 1, we asked the respondents to complete the BSRI in order to compute their gender identity-score.

Results and Discussion

The pictures in the 2 subsets depicted a random set of women and simultaneous identification with them all is unlikely. This implies that the 2 subsets are not uni-dimensional and can be considered as ‘multiple-item index scales’ (Rossiter, 2002). We summed the identification scores within the 2 subsets. Regression analyses with identification as the criterion and gender identity as the predictor revealed a significant effect of gender identity, both on identification with masculine women ($\beta = 0.19$, $t(101) = 1.94$, $p = 0.05$) and on identification with feminine women ($\beta = -0.22$, $t(101) = -2.30$, $p = 0.02$). So, the more masculine the women are, the more they identify with the masculine women and vice versa for identification with the feminine women. Referring back to the results from study 1, this suggests that the increase in preference for male-oriented primary pictures for young masculine women results from identification with the women shown on those male-oriented pictures.

General Conclusion

Our general aim was to investigate the moderating impact of gender identity on preferences for sex specific advertising stimuli. In general, we conclude that the moderating impact of gender identity is dual. This duality is in line with our view that there are two levels

of sex differences emerging from different origins. The first, primary level stems from innate sex-specific dispositions which have been outlined by evolutionary psychology as stable across time and cultures. Gender identity, as an indication of a person's identification with sex typical characteristics, has no impact on preference for ads reflecting these universals. Sex differences operating on the secondary, cultural level, are more dynamic. Consequently, preferences for ads reflecting this level of sex differences are influenced by how strongly a person has adopted a specific sex role. Results from our first study largely support this dual impact of gender identity. However, there was one exception. Gender identity did have a moderating impact on young women's preferences for primary pictures. For women, not only their innate disposition towards parental care influenced their preferences for primary pictures, but also their gender identity had an impact on these preferences. Study 2 further unraveled that gender identity is related to identification with different types of women depicted on the male-oriented and the female-oriented pictures from study 1.

Palan (2001) suggested that in order for gender identity to have a significant impact on consumer behavior, it needs to be carefully conceptualized. We think distinguishing between sex differences operating on two different levels can be a meaningful contribution towards careful conceptualization of consumer related gender identity studies.

Managerial Implications

The research described in this paper has several managerial implications. Advertisers often use sex based segmentation strategies. It seems that changing role patterns (as reflected in gender identity) have a dual impact on ad preferences. Although men have started engaging in traditional feminine tasks, their primary preference for ads showing young, seductive women to ads showing committed situations (like kids and weddings) does not seem to be affected. However, their preferences for ads reflecting socially constructed male symbols (like beer and dangerous animals) seem to depend on how strongly a men sticks to his traditional sex role. For women, the conclusion is more complex. In general, women prefer ads showing more 'tender and communal themes' to ads showing typically male-oriented themes. Nevertheless, gender identity can have an impact for young, assertive and independent women who tend to identify with the young, attractive women often depicted on typically male-oriented ads. To us, this appears as an advantage for advertisers, because this does also imply that those women are not offended by showing young, good looking women in order to appeal to men. On the contrary, they might even like it because they identify with those women.

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