

# Images of Men and Women in Mobile Phone Advertisements: A Content Analysis of Advertisements for Mobile Communication Systems in Selected Popular Magazines

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Published online: 16 November 2006  
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**Abstract** The present study was designed to analyze gender stereotypes in print advertisements for mobile communication systems in German popular magazines intended for men, women, and general readership. Depictions of both women and men are addressed. A total of 288 depictions were examined using Goffman's (*Gender advertisements*, Harvard University Press, Cambridge, Massachusetts, 1979) framework for content analysis. Other variables studied were the setting in which men and women are depicted and the different types of magazines in which the advertisements appeared. It is shown that certain means of emphasizing stereotypes (such as Feminine Touch) are still widely used, at least in mobile phone advertising, whereas others have decreased in frequency since Goffman's time (for example, Function Ranking).

**Keywords** Gender stereotypes · Content analysis · Print advertisements · Technology

The depiction of men and women in mass media often portrays traditional gender stereotypes. This has been demonstrated for television, radio, and print advertising across different cultures (e.g., Bell & Milic, 2002; Craig, 1992; Furnham & Mak, 1999; Furnham & Thomson, 1999; Ganahl, Prinsen, & Netzley, 2003; Lindner, 2004; Neto & Pinto, 1998). Traditional gender stereotypes that characterize men and women with distinct psychological and physiological features (for example, women as emotional and slender; men as competent and muscular) and fields of

action (for women household, family, and fashion; for men paid work, sports, and technology) have been criticized from a feminist perspective since the 1970s (Carter & Steiner, 2004). Gender stereotypes in the media, and the mass media in particular, have a long-recognized capacity to define "socially acceptable" ways of being or relating to others, as well as to give, or withhold, public approval (and status) to, or from, certain groups (Carter & Steiner, 2004).

Further, traditional gender stereotypes used in the media support rigid gender roles, which restrict the options for women's and men's development. Besides, traditional gender roles are hierarchical, as men are more often presented in a higher position, whereas women are more often depicted in passive and more lowly roles (Gallagher, 2004).

One approach to explain the effects of media on the confirmation of gender stereotypes could be a theory originating from media effects research: Cultivation theory (see Gerber & Gross, 1973) states that people tend to incorporate stereotypes presented in the media in their own concepts of reality. Thus, they adjust their reality concept to match the stereotypes portrayed in the media, which results in a change of behavior. Although cultivation theory was developed in close connection to television research, it offers promising starting points for a transfer to print advertising. Just as television, magazines form a part of mass media with equivalent impact on recipients. Further, readers are confronted with an abundance of advertisements in magazines, as those are one of the financial resources for the publishers. Thus, gender stereotypes transported in print advertisements can change the recipients' concept of reality and further contribute to the fixation of rigid gender roles.

According to McLaughlin and Goulet (1999), expectations regarding gender role relationships, as subtly implied by the media in general and by advertising in

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particular, may operate as socialization agents on several levels. First they are broadcast publicly, and thus can influence all members of society. Second, the individuals depicted in those advertisements seem to accept their positions and thus serve to validate the roles described. Finally, because advertisements portray the roles and attitudes of both men and women in society, they define social expectations and serve to educate viewers as to acceptable versus unacceptable behaviors.

Thus, according to Goffman (1979), advertising is involved in the ritualisation of the social world. Several investigations have shown that this applies not only in theory, but also in real life. Lavine, Sweeney, and Wagner (1999), for example, were able to show that exposure to television advertisements that portray women as sex objects caused increased body dissatisfaction among both men and women. Becker, Burwell, Gilman, Herzog and Hamburg (2002) assessed the impact of novel, prolonged exposure to television on eating attitudes among ethnic Fijian girls. Fiji was selected as study site because of its extremely low prevalence of eating disorders. Further, the analyzed province was selected for its lack of exposure to television until early 1995. The authors found that the key indicators of disordered eating were significantly more prevalent after exposure to television. It has to be noted that individual efforts to reshape the body by dieting traditionally have been discouraged in Fijian culture.

Given the theoretical background on media effects and the studies demonstrating these effects in real life, it becomes clear that an observation of the presentation of women in the media deserves attention from researchers. The first step to change the chain of events of the reinforcement of stereotypes is to analyze the status quo and to answer the question whether the change in the lives of women is mirrored in the depiction of gender roles.

Despite the extent to which stereotypical gender roles are critically viewed, and (at least in the developed world) the immense changes to gendered identity and behavior (especially women's), the level and frequency of stereotyping in print advertisements seems to show no clear decrease, as has been revealed in a number of studies.

Advertisements have often been analyzed in relation to gender stereotypes. One of the most prominent researchers was Erving Goffman (1979). He believed that gender relations are socially defined and constructed. He stated that the best way to understand the gender relations depicted in advertisements is to compare them to the parent-child relation, with men playing the part of the parents and women that of the children. In 1979, he published an analysis of visual images in print advertisements. His investigation of nearly 400 advertisements showed that gender roles are not only transferred over from the real world, but are even exaggerated in the process.

Goffman's coding model concentrates on very subtle signs of behavior: posture of hands, eyes, knees, positioning, facial expressions and aversion of gaze. He stated that the most simple gestures can contribute to an understanding of the relation between the sexes. In his influential book, Goffman showed how women are portrayed as the weaker sex in advertisements in several ways: Relative Size (women are depicted as smaller or lower than men), Feminine Touch (women touch themselves in a non-utilitarian way), Function Ranking (men have the executive role when cooperating with a woman), Ritualisation of Subordination (women are more likely to be shown lying down when it is not appropriate), and Licensed Withdrawal (women remove themselves psychologically from the situation at hand). Still, despite his ground-breaking observations, his work was criticized. Goffman drew a purposive sample, that is, he selected the analyzed pictures at will from newspapers and popular magazines that were at hand. The pictures were chosen to fit into sets, which mirror gender stereotypes. Thus, his sample was not appropriate to generalization.

A revolutionary change in the role of women has taken place in many cultures since Goffman's time. Women's place in the workforce—that is, the workforce of the developed world—is better established; they are better represented in management positions, which used to be a male province. Because of the changes in societies, gender depictions in advertisements also may have changed, because, unless advertisements attract the consumers at whom they are aimed to identify with their messages, the products will not sell. Later authors have therefore investigated whether the portrayals of women in the media, and in advertisements in particular, have changed since 1979.

Despite the criticism of Goffman's work, his categories were used in numerous studies in the last decades (for example, see Belknap & Leonard, 1991; First, 1998; Kang, 1997; Lindner, 2004; McLaughlin & Goulet, 1999). However, researchers also used combinations of Goffman's criteria and other approaches such as Kilbourne's categories or semiotic analysis (for example, see Lazier & Kendrick, 1993; Bell & Milic, 2002) to complete Goffman's initial study.

Kang (1997) analyzed whether print advertisements in 1991 samples presented less frequent gender displays in term of Goffman's categories. In addition, she constructed and examined two further categories: Body Display, which describes the level of nudity, and Independence and Self-Assertiveness. The latter focused on the more subtle representation of advertisements; Kang evaluated the female models' overall images in terms of independence and self-assertiveness. She coded 252 advertisements from women's magazines from 1979 and 1991, respectively. She

found that the overall amount of sexism in magazine advertisements remained the same from 1979 to 1991. Of the seven categories she studied, only Body Display and Licensed Withdrawal revealed significant changes over time. For both, a higher number of examples was evident in 1991 than in 1979. Of her sub-categories, height relationship showed a change in the hypothesized direction, although not to a statistically significant degree. Further, the frequency of depicting men as instructors significantly decreased over time, whereas the percentage of women averting their head or gaze and withdrawing their gaze increased over time. Also, women showed a higher degree of Body Display in 1991. Furthermore, Kang's study showed that some gender characteristics reported by Goffman (i.e., height relationship and conducting the instructing role) were no longer prevalent in modern magazine advertisements. Those categories were found so seldom that Kang considered them no longer to apply.

Lindner (2004) also found that, since the 1950s, some shift in the depiction of women in advertising has taken place. Women are less often portrayed in traditional roles as housewife or mother and more often portrayed in professional roles. However, there seems to be a countering tendency, in that women are more frequently depicted in other ways that suggest stereotypical gender roles. Over the period from 1955 to 2002, women have been more frequently shown in sexualized ways or as adopting body postures that suggest the need for protection. Lindner analyzed a total of 1,374 print advertisements. She also compared advertisements from a women's magazine and advertisements from a general interest magazine to determine whether the change in the portrayal of women differs from one type of magazine to another. Lindner coded the Goffman categories of Relative Size, Function Ranking, Feminine Touch, Ritualisation of Subordination, and Licensed Withdrawal. Further, she used Kang's Body Display, and three more categories: Movement, when the woman is hindered in her ability to move, e.g., by being wrapped in a blanket; Location, meaning the woman is shown in a domestic environment, such as kitchen, bedroom, bathroom, or an unidentifiable environment that does not allow for purposeful activities; and Objectification, when the woman is portrayed in a way that suggests that being looked at is her major function in the advertisement. Only women were coded, so Lindner's study offers no data for a comparison of percentages of men and women in the various categories. She found that Relative Size and Function Ranking differed significantly between magazine types; both categories were more frequently shown in the general interest magazine. In all other categories, with the exception of movement, for which no main effect for magazine types was found, advertisements in the women's magazine portrayed women in a more stereotypical way

than did advertisements in the general interest magazine. Feminine Touch, Ritualisation of Subordination, and Movement occurred more frequently in earlier years (between 1955 and 1975) than in later years (1985–2002).

Bell and Milic (2002) examined 827 advertisements from a representative sample of Australian men's and women's magazines, as well as general interest magazines, all published during 1997–1998. The authors combined two approaches in their work: content analysis and semiotic analysis. They measured Goffman's propositions on gender representations in advertisements using Kress and van Leeuwen's image semiotic categories. The following results were particularly interesting. Men were shown more frequently than women as playing an active role. Women were much more likely than men to express emotions. Also, women were not as frequently shown in what Goffman would call "executive" roles. Contrary to Bell and Milic's hypothesis, women were more likely than men to gaze at the viewer, that is, women were more frequently depicted in image-acts that demand a relationship with the viewer. Further, individual female models were positioned in the top half of the advertisements more frequently than were men. However, when more than one man was shown, this pattern was reversed. Individual women tended to be more frequently coded in "fantasy" modes (i.e., advertisements that borrow from certain genres of art), whereas individual men were more likely to be shown in "factual" or "realistic" contexts (i.e., advertisements that borrow from scientific and naturalistic coding orientations).

### Rationale and Hypotheses

Since the United Nation's fourth World Women's Conference in 1995, the implementation of gender mainstreaming is obligatory in all UN activities and programs. As one of the aims of gender mainstreaming is to put the lives of men and women on an equal basis, the media, and advertising in particular, are affected. Because advertising has the great effect noted above on the construction of gender roles in the societies in which it takes place, it seems desirable that there should be a trend in the media toward gender mainstreaming. In the interim, guidelines have been established, for example, for gender-equal language (cf. American Psychological Association, 2001). Against this background it is important to examine whether the proportion of gender stereotyped advertisements in Germany is still the same, or has changed, since Goffman's time.

The purpose of the present study was to analyze the presentation of gender in print advertisements in popular magazines. In addition to depictions of women, depictions of men were also included. We decided to use Goffman's categories to be able to focus on the change in the pro-

portion of advertisements portraying gender stereotypes since the late 1970s by using most similar measures for the analysis of current depictions. We further chose to concentrate on advertisements for services and products of mobile communication systems, a choice made because these objects are potentially of great interest to both genders, and because they can be expected to have technical connotations for men (i.e., the features of end devices) and social connotations for women (e.g., the social contacts sustained by using Short Message Service). Lifestyle and decoration aspects of mobile phones also have gender-specific associations (e.g., masculine sports/outdoor cell phone, feminine clothing accessory cell phone). The examination of gender stereotypes in advertisements for mobile communication systems was differentiated across three target groups: mixed public (general interest magazines), female public (women's magazines) and male public (men's magazines), to make it possible to see whether gender-stereotyped advertisements differ when aimed at different target groups. It could well be that, in order better to address modern women whose background or life circumstances differ from the traditional patterns, advertisements in women's magazines show fewer traditional stereotypes than do those in other magazines.

According to Goffmann (1979), advertisements often contain gender stereotypes. However, later studies have shown that the degree of stereotyping in advertisements is changing. Furthermore, mobile communication systems are usually addressed to both women and men, though not necessarily both at once. This led to the following research question: Do recent advertisements for mobile communication systems reveal gender stereotyping?

We set up the following hypotheses for analysis. The first five follow Goffman's categories:

1. One of the gender stereotypes is men's higher social status. In advertisements this was expected to be expressed in greater girth and height.
2. Women were expected to be depicted using Feminine Touch more often than men.
3. When collaborating in gender-mixed teams, men would perform the executive role more often than women.
4. Women would show Licensed Withdrawal (expansive smiling, covering one's face or mouth, withdrawing one's gaze from the situation) more often than men.
5. Women would be more likely than men to show Ritualisation of Subordination (sitting or lying down, canting of head or body, being embraced, leaning on others for support).
6. According to Kang (1997) another way of stereotyping women is to show them in revealing clothes. We assumed that in the advertisements to be considered women would show more skin than men.

7. A common stereotype mentioned by various investigators is the presentation of men and women in different fields of action. We expected that women would be more likely to be shown in household or relaxing settings and more likely to fulfil merely decorative functions. Men would be more likely to be presented in paid work, out and about, or involved in sports.

Our research also addressed whether differences in gender-stereotyped depictions could be found between different types of magazines. Finally, we wanted to compare the proportion of gender-stereotyped advertisements found in our analysis with the findings of similar studies of gender-stereotypes in print advertisements.

## Materials and Methods

### Sampling

A total of 183 print advertisements for mobile communication systems were collected from popular German magazines published from July 2001 to July 2003 in three categories: men's, women's and general readership. We examined every issue of the men's and women's magazines that are published monthly. For the weekly published magazines, a key date in each month was defined to achieve comparability with the monthlies. This key date was the month's first issue, chosen because the women's and men's magazines' monthly publication date was at the middle and end of the month respectively for the following month, and because it would also allow for the fact that the weekly magazines are all published on different week days. The method ensured that at the end of year the same number of issues was at hand and that biased selection was avoided. Over the 2-year period, all issues of the following magazines were collected: *Focus*, *Der Spiegel*, *Stern*, *Cosmopolitan*, *Amica*, *Men's Health* and *FHM*.

Of 183 advertisements, 112 depicted one male or one female model, a group (two or more) of people, or isolated parts of a body (e.g., hands, legs). Every person depicted in the 112 advertisements was coded separately, which resulted in a sample of 224 depictions of people. In four cases the sex of the depicted person was not identifiable, so these were excluded from further analysis. The final sample thus consisted of 220 people. As we also examined whether there are differences between the general interest, women's, and men's types of magazine, we had to take into account that sometimes the same advertisements were published in different types of magazine. This resulted in a larger sample of 149 advertisements with 288 depicted people. We took the 288 cases as the sample because we otherwise would

have had to exclude cases where advertisements had been duplicated and the sub-samples under “magazine type” thus would have been biased. The 288 cases were each analyzed by one of the authors and a part of them additionally by a second coder, who was not connected with the study, for computing inter-rater reliability. The coding criteria are outlined in the following paragraph.

### Measurement of Variables

The operationally defined variables and the respective values are as follows. First the persons in the advertisements were coded as to “group membership” (whether the depicted person is part of a heterogeneous or homogeneous group or not) and “gender” (whether the person is male, female, or unidentifiable).

Three values to cover Relative Size were used. “Body height” encoded whether men and women were depicted as different heights; a value of 1 indicates that the person was at the highest point of the arrangement in relation to other persons. “Position” identified whether the depicted women and men took different positions in the picture; the first position indicates that the analyzed person was in the foreground of the image, the second person was situated behind the first one, etc. These variables were only coded for the persons if they were part of a group. “Relative Size” encoded whether men were depicted as larger and as taking up more space in the advertisement when heterogeneous groups were presented. The coder chose between “Relative Size,” that is, men depicted as larger (which included men as larger due to their natural size) and “no Relative Size,” that is, women depicted as larger or no difference between the sexes. An advertisement that, for example, shows both a man and a woman with the man taking up more space than the woman, would be coded as showing Relative Size.

“Feminine Touch” encoded whether the person presented was touching him/herself (e.g., hair, face, lips) or his/her clothing in a studied manner, or was using the fingers or hands to trace an object, to cradle it or to caress its surface. This sort of touching was distinguished from a utilitarian kind that grasps, manipulates and holds an object.

The category “Function Ranking” was only applied when heterogeneous groups were presented. It was coded if men and women were collaborating on a shared task and the man was performing the executive role. An advertisement is rated as showing Function Ranking, for example, when a couple is shown with a broken-down golf cart, and the man lets the woman push it, whereas he is seated behind the steering wheel.

“Ritualisation of Subordination” was measured on four variables. “Posture” of the body was coded as standing, sitting or lying. Canting of head or body, being embraced

so that mobility is restricted, and leaning onto others for support were the other features taken into account.

Three further variables aid the analysis of “Licensed Withdrawal.” Coded were depictions of expansive smile or loud laughter, covering one’s face or mouth, and withdrawing one’s gaze from the situation.

Under “Body Display” a rating was given to the apparent degree of clothing on the protagonists. The category was differentiated into unclothed (nude persons), sparsely clothed (e.g., bikini, trunks, pants, bra, gym shorts), lightly clothed (shorts with T-shirt, knee-long skirt, and top) and fully clothed (business suit, trousers and shirt, long skirt and top).

“Setting” encoded whether the protagonists were depicted as doing chores or paid work, or sports, or relaxing, or being out and about, or having a merely decorative function.

### Inter-rater Reliability

To assess inter-rater reliability, Cohen’s kappa statistic was calculated. This statistic was designed to estimate the consensus between two judges (or raters) after correcting the percent-agreement figure for the amount of agreement that could be expected by chance alone, based upon the values of the marginal distributions. The interpretation is as follows: a value of zero on kappa indicates that the two raters did not agree with each other any more than would be predicted by chance alone. Kappa values from 0.41 to 0.60 are considered moderate, values above 0.60 as substantial (compare Stemler, 2004). Twenty-seven randomly selected depictions of people in the present study were coded individually by one of the authors and a second rater not connected with the study, so that the statistic could be computed. The kappa values range from 0.44 ( $p=0.001$ ) for withdrawing gaze to 0.93 ( $p<0.0001$ ) for sex, and an average kappa of 0.76 for all variables.

## Results

### Descriptive Statistics

The sample consisted of 168 (58.3%) depictions of men and 120 (41.7%) depictions of women. Twenty-eight percent of the advertisements showed a single person, 41.3% if the people were in a heterogeneous group, and 28.8% were part of a homogeneous group. For five people (1.7%) group membership could not be classified exactly; they were part of a group, but the sex of the other group member was not identifiable. Table 1 shows the number of advertisements and depictions of persons for the three types of magazine analyzed.

**Table 1** Advertisements and depictions of women and men for different types of magazines.

Sample	General interest ( <i>n</i> =75)	Women's magazines ( <i>n</i> =39)	Men's magazines ( <i>n</i> =35)
Advertisements <i>N</i> =149	67.0	34.8	31.3
Persons <i>N</i> =288	71.5	44.4	36.8
Women <i>n</i> =120	65.8	63.3	30.8
Men <i>n</i> =168	75.6	31.0	41.1

Percentages do not add up to 100% because of multiple incidences of some advertisements.

### Findings for Goffman's Categories

The following tests were carried out: For nominal data, one-dimensional  $\chi^2$ -tests were computed. Ordinal data were analyzed using Mann-Whitney-U Tests. Exact Fisher-Yates-Tests were used when needed.

Not all of our hypotheses based on Goffman were confirmed. In our first hypothesis, we assumed that, according to Goffman's observation, there is a gender stereotype of men having a higher social status, expressed in greater girth and height. This was not confirmed in our sample. Table 2 shows that there was no significant difference between the space taken up by men and women in the advertisements. A Mann-Whitney-U Test for the variable body height also showed no significant difference between the sexes,  $U=4882.00$ ,  $Z=-0.72$ ,  $p=0.47$ ,  $N=207$ . The same applies for the variable position,  $U=4792.50$ ,  $Z=-0.94$ ,  $p=0.35$ ,  $N=207$ .

However, the second hypothesis that women are more often depicted using Feminine Touch was confirmed. The opposite was true in regard to the next hypothesis assuming that men are shown performing the executive role when cooperating with women. Function Ranking was depicted only in one of the advertisements that showed both men and women.

Next, we hypothesized that women would show Licensed Withdrawal more often than men. This was confirmed for the variable expansive laughter  $\chi^2=6.10$ ,  $p=0.01$ ,  $N=87$ . Although withdrawing one's gaze from the situation revealed significant difference, it was men who were more often depicted showing this behavior,  $\chi^2=11.10$ ,  $p=0.001$ ,  $N=136$ . For covering one's face or mouth, no significant differences were found (cf. Table 2).

We also assumed that women would be more likely than men to show Ritualisation of Subordination (sitting or lying down, canting of head or body, being embraced, leaning on others for support). In this respect, the data gave only partial confirmation of our hypothesis. A Mann-Whitney-U Test for the "posture" variable revealed no significant difference between women and men (cf. Table 3). Canting, on the other hand, showed a significant difference between women and men,  $\chi^2=28.00$ ,  $p<0.0001$ ,  $N=130$ . Women were depicted more often canting their head or body. Leaning on others for support was also more frequently shown by women,  $\chi^2=16.10$ ,  $p<0.0001$ ,  $N=11$ . Being embraced so that one's mobility is inhibited, however, showed no differences, as the values in Table 2 display.

The hypothesis originally tested by Kang (1997) that women present more naked skin in advertisements was also confirmed in our study. As Table 3 reveals, the Mann-Whitney-U Test for the variable body display showed a significant difference between women and men,  $U=3424.50$ ,  $Z=-7.75$ ,  $p<0.0001$ ,  $N=248$ . The median for the

**Table 2** Frequencies and  $\chi^2$ -values for Goffman's categories.

Goffman Category	Total		Women (%)	Men (%)	Number	$\chi^2$	<i>p</i>
	Percent	Number					
Relative size	34.4	288	53.5	46.5	99	0.5	0.482
Feminine touch	17.8	275	69.4	30.6	49	17.6	<0.0001
Function ranking	3.4	119	50.0	50.0	4	0.01	1.0
Ritualisation of subordination							
Canting	49.4	263	57.7	42.3	130	28.0	<0.0001
Embrace	2.5	277	57.1	42.9	7	0.8	0.451
Support	4.0	274	100.0	0	11	16.1	<0.0001
Licensed withdrawal							
Expansive smile / laughter	35.5	245	51.7	48.3	87	6.1	0.013
Covering	2.3	256	16.7	83.3	6	1.3	0.408
Withdrawing gaze	51.7	263	49.3	50.7	136	11.1	0.001

Under total sample, the percentage describes the percentage of all people analyzed, i.e., the sum of those coded in the different categories. Percentages of men and women show the distribution of sexes in the various categories. One-tailed significances are given for  $\chi^2$ -values.  $df=1$ .

**Table 3** Frequencies and Mann-Whitney-U values for the categories posture and body display.

Coding category	Total		Women		Men		U	p
	Percent	Number	Percent	Number	Percent	Number		
Posture		230		102		128	6210.0	0.475
Standing	53.9		59.8		49.2			
Sitting	38.3		26.5		47.7			
Lying	7.8		13.7		3.1			
Total	100.0		100.0		100.0			
Body display		248		103		134	3424.5	<.0001
No clothing	1.3		0.0		2.2			
Sparse clothing	11.0		20.4		3.7			
Light clothing	26.6		47.6		10.4			
Complete clothing	61.2		32.0		83.6			
Total	100.0		100.0		100.0			

male sample was 4.0 ( $N_{\text{male}}=134$ ), equivalent to complete clothing; for the female sample the median was 3.0 ( $N_{\text{female}}=103$ ), equivalent to light clothing.

#### Findings for Men's and Women's Settings

We hypothesized that women and men would be depicted in different settings. We expected women to be shown more often in household or relaxing settings and that they would be more likely to fulfill merely decorative functions. Men were expected to be presented more often in settings of paid work and sports and as out and about.

Chi-square tests could not be computed for the "household" variable, as there were no cases in the sample and thus it was a constant. The hypothesis concerning the other settings was, however, confirmed. Table 4 gives the exact values. Women were indeed depicted more often as relaxing and as having merely decorative functions, whereas men were more likely to be presented at work, involved in sports, or out and about.

#### Comparison between Types of Magazines

One of our research questions was whether different magazine types show different degrees of gender stereotyping in advertisements. General interest magazines, as well as women's and men's magazines, all showed no significant differences between men and women in respect of Function Ranking, Posture, being embraced in a restraining way, and covering one's mouth or face. However, the advertisements in all three types of magazine were stereotypical in that women canted their heads or bodies significantly more often than men did, and women displayed more body, that is, men were most often fully clothed and women most often wore light clothing. The values for the ordinal variables Posture and Body Display are as follows: Posture revealed no significant differences between the sexes when computed separately for the different magazine types,  $U_{\text{General Interest}}=3066.00$ ,  $Z=-0.91$ ,  $p=0.36$ ,  $n=164$ ;  $U_{\text{Women's Magazine}}=778.00$ ,  $Z=-1.57$ ,  $p=0.12$ ,  $n=93$ ;  $U_{\text{Men's Magazine}}=747.50$ ,

**Table 4** Frequencies and  $\chi^2$ -values for settings with feminine and masculine connotations.

Setting	Total (%)	Women (%)	Men (%)	Number	$\chi^2$	p
Feminine setting						
Household	0	0	0	288	— <sup>a</sup>	— <sup>a</sup>
Relaxing	42.7	55.3	44.7	123	16.4	<0.0001
Decoration	25.7	60.8	39.2	74	15.0	<0.0001
Masculine setting						
Paid work	12.5	5.6	94.4	36	22.1	<0.0001
Out and about	6.3	5.6	94.4	18	10.3	0.001
Sports	12.8	10.8	89.2	37	16.6	<0.0001

Under total sample, the percentage describes the percentage of all people analyzed, i.e., the sum of those coded in the different categories.  $N_{\text{total}}=288$ . Percentages of men and women show the distribution of sexes in the various settings. Two-tailed significances are given for  $\chi^2$ -values.  $df=1$ .

<sup>a</sup> $\chi^2$ -tests could not be computed because some features were constant.

$Z = -0.25$ ,  $p = 0.80$ ,  $n = 79$ . Body Display, on the other hand, showed significant differences between men and women for all magazine types,  $U_{\text{General Interest}} = 1444.00$ ,  $Z = -7.41$ ,  $p < 0.0001$ ,  $n = 169$ ;  $U_{\text{Women's Magazine}} = 387.50$ ,  $Z = -5.42$ ,  $p < 0.0001$ ,  $n = 97$ ;  $U_{\text{Men's Magazine}} = 472.50$ ,  $Z = -4.18$ ,  $p < 0.0001$ ,  $n = 85$ . Table 5 gives the differentiated  $\chi^2$ -values.

As Table 5 shows, only women's magazines contained advertisements that showed Relative Size,  $\chi^2 = 9.60$ ,  $p = 0.002$ ,  $N = 60$ . On the other hand, only advertisements from general interest magazines showed a higher proportion of expansive smiles or laughter in women,  $\chi^2 = 13.00$ ,  $p <$

$0.0001$ ,  $N = 71$ . A reciprocal pattern appeared for Feminine Touch, leaning on others for support, and withdrawing one's gaze from the situation: men's magazines were the only type that did not show significant differences between men and women.

Our next step was to compare the types of magazine to see if they varied in showing women and men in stereotypical settings. As Table 6 displays, advertisements from general interest magazines depicted significant differences between men and women, as women were shown in feminine settings as relaxing and decorative, and men in

**Table 5** Percentages and  $\chi^2$ - values for Goffman's categories for different types of magazines.

Goffman Category	Total Percent	Number	Women Percent	Men Percent	Number	$\chi^2$	$p$
<i>General Interest</i>							
Relative size	61.7	206	46.8	53.2	79	0.3	0.574
Feminine touch	18.2	198	69.4	30.6	36	16.6	<0.0001
Function ranking	4.7	86	50.0	50.0	4	0.02	1.0
Ritualisation of subordination							
Canting	48.4	190	55.4	44.6	92	20.4	<0.0001
Embrace	2.5	200	40.0	60.0	5	0.00	1.0
Support	4.6	197	100.0	0	9	14.4	<0.0001
Licensed withdrawal							
Expansive smile / laughter	40.3	176	53.5	46.5	71	13.0	<0.0001
Covering	2.7	185	20.0	80.0	5	0.550	0.657
Withdrawing gaze	52.6	190	50.0	50.0	100	17.1	<0.0001
<i>Women's magazines</i>							
Relative size	46.9	128	30.0	70.0	60	9.6	0.002
Feminine touch	21.0	124	96.2	3.8	26	18.2	<0.0001
Function ranking	6.7	60	50.0	50.0	4	0.2	0.634
Ritualisation of subordination							
Canting	58.2	110	70.3	29.7	64	8.0	0.006
Embrace	5.0	120	66.7	33.3	6	0.1	1.0
Support	6.8	117	100.0	0	8	5.6	0.022
Licensed withdrawal							
Expansive smile / laughter	54.5	110	61.7	38.3	60	0.4	0.547
Covering	0	112	0	0	0	— <sup>a</sup>	— <sup>a</sup>
Withdrawing gaze	57.3	110	73.0	27.0	63	15.0	<0.0001
<i>Men's magazines</i>							
Relative size	34.0	106	44.4	55.6	36	0.4	0.505
Feminine touch	18.4	103	52.6	47.4	19	3.6	0.057
Function ranking	0	49	0	0	0	— <sup>a</sup>	— <sup>a</sup>
Ritualisation of subordination							
Canting	55.9	93	51.9	48.1	52	16.0	<0.0001
Embrace	2.0	101	100.0	0	2	3.8	0.118
Support	2.0	98	100.0	0	2	3.7	0.125
Licensed withdrawal							
Expansive smile / laughter	33.7	83	21.4	78.6	28	1.9	0.165
Covering	3.4	87	0	100.0	3	1.3	0.551
Withdrawing gaze	47.4	95	37.8	62.2	45	1.5	0.218

Under total sample, the percentage describes the percentage of all people analyzed, i.e., the sum of those coded in the different categories. Percentages of men and women show the distribution of sexes in the various categories. One-tailed significances are given for  $\chi^2$ -values.  $df = 1$ .  
<sup>a</sup>  $\chi^2$ -tests could not be computed because some features were constant.

**Table 6** Percentages and  $\chi^2$ -values of male and female depictions in different settings for three types of magazines.

Setting	Total (%)	Women (%)	Men (%)	Number	$\chi^2$	<i>p</i>
<i>General Interest</i>						
"Female" setting						
Relaxing	45.1	51.6	48.4	93	12.6	<0.0001
Decoration	22.8	57.4	42.6	47	9.4	0.002
"Male" setting						
Paid work	15.5	6.3	93.8	32	16.5	<0.0001
Out and about	6.3	0	100.0	13	8.3	0.002
Sports	10.2	9.5	90.5	21	8.2	0.004
<i>Women's magazines</i>						
"Female" setting						
Relaxing	57.8	55.4	44.6	41	1.1	0.363
Decoration	25.0	87.5	12.5	32	14.0	<0.0001
"Male" Setting						
Paid work	2.3	66.7	33.3	3	0.1	1.0
Out and about	3.9	20.0	80.0	5	3.3	0.157
Sports	10.9	28.6	71.4	14	6.2	0.013
<i>Men's magazines</i>						
"Female" Setting						
Relaxing	49.1	48.1	51.9	52	7.8	0.008
Decoration	25.5	44.4	55.6	27	1.4	0.249
"Male" Setting						
Paid work	4.7	0	100.0	5	2.8	0.160
Out and about	3.8	0	100.0	4	2.2	0.187
Sports	17.0	0	100.0	18	11.6	0.001

Under total sample, the percentage describes the percentage of all people analyzed, i.e., the sum of those coded in the different settings.  $n_{\text{General Interest}} = 206$ ;  $n_{\text{Women's Magazines}} = 128$ ;  $n_{\text{Men's Magazines}} = 106$ . Percentages of men and women show the distribution of sexes in the various settings. No cases were found for household, so this setting is not mentioned here. Two-tailed significances are given for  $\chi^2$ -values.  $df = 1$ .

masculine settings of paid work, sports, and out and about. The women's magazines revealed fewer stereotypical settings. Only decoration (women more often depicted as decorative objects) and sports (men more often depicted) were statistically significant. In the men's magazines, men were also more often than women depicted doing sports, but, surprisingly, in these magazines men were shown in a "relaxing" setting significantly more often than women.

#### Comparison with Other Studies

Finally, we compared our results with those of earlier studies of gender stereotypes in print advertisements. Comparison was not simple, because the different researchers measured their variables differently. Also, the criteria for inclusion in the various studies were different. Kang (1997) and McLaughlin and Goulet (1999) coded stereotypical advertisements that showed both men and women. Lindner (2004) included only advertisements that showed women. As we coded both men and women, but wanted to compare our results with those studies mentioned, Table 7 shows the advertisements that stereotyped women as a percentage of the total sample, so that we

could draw comparisons between our data and the findings of Kang (1997) and Lindner (2004), whose studies were most similar to ours. Additional comparisons, to McLaughlin and Goulet's (1999) research are given in the text below.

Kang (1997) and we found that a similar percentage of advertisements showed Relative Size, whereas Lindner (2004) and McLaughlin and Goulet (1999) found fewer. On the other hand, our results concerning Feminine Touch are similar to Lindner's. It seems that Feminine Touch was very common in prior decades, but has been decreasing recently. However, it is somewhat surprising that Kang found such a high level of Feminine Touch in her 1991 sample. As to Function Ranking, our data reveal a reduced degree. Only McLaughlin and Goulet (1999) obtained percentages similar to ours. Ritualisation of Subordination showed nearly the same percentages in all data sets, with exception of McLaughlin and Goulet's African American sample, which revealed a mere 15%. Licensed Withdrawal was also reflected to similar degrees in the different samples, again with exception of McLaughlin and Goulet's work (which indicates only about 7% as maximum). Concerning Body Display, Kang found relatively high

**Table 7** Comparison of the Frequency for Goffman's categories in coded women between different studies.

Sub sample	Own study	Kang (1997)		Lindner (2004)	
		1979	1991	1955–1975	1985–2002
Relative size	56.0	51.5	46.5	14.5	11.8
Feminine touch / object	12.4 <sup>a</sup>	41.8	41.4	22.7 <sup>a</sup>	14.7 <sup>a</sup>
Feminine touch / self		38.2	40.2		
Function ranking	3.4	35.3 <sup>b</sup>	38.1	10.8	14.5
Subordination	– <sup>c</sup>	– <sup>c</sup>	– <sup>c</sup>	35.1	28.1
Canting	28.5	31.7	37.5	– <sup>d</sup>	– <sup>d</sup>
Embrace	1.4	– <sup>e</sup>		– <sup>d</sup>	– <sup>d</sup>
Support	4	– <sup>e</sup>		– <sup>d</sup>	– <sup>d</sup>
Withdrawal	– <sup>c</sup>	– <sup>c</sup>	– <sup>c</sup>	29.8	28.4
Expansive smile	18.4	32.9	28.5	– <sup>d</sup>	– <sup>d</sup>
Covering mouth	0.4	6.3	8.7	– <sup>d</sup>	– <sup>d</sup>
Withdrawing gaze	25.5	22.7	33.2	– <sup>d</sup>	– <sup>d</sup>
Body display	17.5 <sup>f</sup>	24.6	31.9	11.5	9.7

The posture variable was not brought into the comparison because it was not measured comparably. Percentages are rounded to one decimal place. As the various authors coded whether women were wearing no or little clothing, the percentage given is the sum of those two categories.

<sup>a</sup> Touching of an object and self-touching coded in one category; <sup>b</sup> coded as male in superior role; <sup>c</sup> coded in several sub variables; <sup>d</sup> coded in main category; <sup>e</sup> not coded. <sup>f</sup> Definition was adapted.

levels; our results were in the middle, and Lindner's results were relatively low.

## Discussion

Our leading research question was whether print advertisements for mobile communication systems today show the gender stereotypes found in Goffman's analysis. There has been considerable social change since Goffman did his analysis and mobile communications systems are associated with both sexes, so we thought it plausible that there would be fewer stereotypical depictions of men and women in this particular type of advertisement. The study we conducted, however, shows that gender stereotypes are still common in advertising, at least for mobile communication systems. In particular, the more subtle means of emphasizing gender stereotypes were found: Feminine Touch, canting of head and body, leaning on others for support, and showing an expansive smile or loud laughter. A further means of implementing stereotypes is presenting women in revealing clothes—so that women show a higher degree of nudity than men—and this was documented in our study. Men were most often presented wearing full clothing and women most often presented wearing light clothing. Still, this difference is not extreme, as full clothing means long trousers and long-sleeve shirt or suits, and light clothing means a skirt and shirt or T-shirt and long jeans. These results fit with those of previous studies, as Kang (1997) and Lindner (2004) also found that those variables not only were rather prominent, but some showed an increase over time.

On the other hand, we found no significant differences for several of Goffman's categories. Relative Size and Function Ranking did not play an exceptional role in the advertisements we examined. This may lead to the assumption that rather obvious means of gender stereotyping have been discarded over time. However, there were also several more subtle categories that did not reveal significant differences between men and women, such as posture (lying or sitting down), being embraced in a mobility-restricting way, or covering one's mouth and face. Again, these results are not surprising, as former researchers found similar decreases in those variables over time (compare Kang, 1997; Lindner, 2004; McLaughlin & Goulet, 1999). A rather unexpected result was that men were more often than women shown withdrawing their gaze from the situation. However, this result has to be regarded with caution. While on the phone, especially the mobile phone, one quite commonly withdraws one's gaze or even turns away when other people are present. This behavior serves to create a kind of private space in public (Murtagh, 2002). To clarify whether men being shown withdrawing their gaze from the situation in the context of mobile communication advertisement is a means of countering gender stereotypes or is simply due to the fact that the mobile communication system is in use, it would have been necessary to analyze how people are preoccupied while withdrawing their gaze.

We also hypothesized that women and men would be depicted in different settings. We expected women to be shown more often in household or relaxing settings and as more likely to fulfill merely decorative functions. We

expected men to be presented more often in settings of paid work or sports or as being out and about. With the exception of the household setting, which did not occur in our data, our study confirmed the presence of these common stereotypes. With regard to the literature, this is surprising, at least in part. Lindner (2004) also found indications that women are relatively often depicted as mere decorative objects, and this fact did not change over time. On the other hand, Haddon (2000) stressed strongly the role that mobile phones play for mothers to organize their household tasks. Parents seem to appreciate the ability to contact their children while they are out, and mothers, for example, seem to use their mobile phone on their way from work to call home if some shopping is needed. Thus, it is curious that these advantages of mobile communication systems did not figure in the advertising we analyzed.

A further research question was whether different magazine types show different levels of gender stereotyped advertisements. We examined this in relation to Goffman's categories and depictions of men and women in stereotypical settings. None of the three types of magazine showed indications of Function Ranking or differences between men and women concerning posture, being embraced in a restraining way, or covering one's mouth or face. Every magazine type contained stereotypical advertisements concerning canting of body or head and body display. As the same results were found in the overall analysis, these findings are not surprising. However, we were, indeed, able to demonstrate some differences between magazines addressed to special readerships. General interest and women's magazines revealed a similar proportion of stereotyped advertisements. But, whereas women's magazines contained advertisements that used the rather explicit means of Relative Size, advertisements from general interest magazines presented a high proportion of advertisements that used the more subtle categories, for example expansive smiles or laughter. It seems that advertisements in general interest and women's magazines use different means to stereotype, as was also found by Lindner (2004). Men's magazines, on the other hand, revealed a relatively low degree of stereotyping à la Goffman: only canting of head or body showed significant differences between men and women. This may be due to the fact that the selected men's magazines were lifestyle magazines. It is possible that those magazines are bought by so-called "metrosexual" men, that is, men who are heterosexual, but live out their feminine side by taking care of their bodies and are interested in fashion and lifestyle. It is, therefore, not possible to generalize from the results. Other examinations of men's magazines and explicit codings of depictions of men still seem to be lacking in the literature, so for this area we cannot draw conclusions between our results and those of other authors. It does seem somewhat surprising that

advertisements from women's magazines show a rather high degree of stereotyping, whereas advertisements from men's magazines show a lesser degree.

Differences between magazine types were also obtained for the setting in which men and women were depicted. General interest magazines depicted women and men in highly traditional ways. Women were presented in the feminine settings of relaxing and decoration and men in the masculine settings of paid work, sports, and out and about. In the men's magazines there also emerged a somewhat traditional pattern. Men were the only people appearing in masculine settings. On the other hand, even in relaxing and decorative settings, more men than women were presented. In women's magazines, traditional patterns seem to be undergoing change. In relaxing and decorative settings more women were still presented, and in sports settings and out and about, men were shown more frequently, but in a paid work setting, most persons depicted in these magazines were women. Further, the percentage of women in masculine settings was increased in relation to the other magazine types. These results lead to the assumption that men can be depicted in a wide range of roles, even to the extent of being presented as a mere decorative object, whereas women are more restricted in the settings in which they are shown. In general interest and men's magazines women still seem to be restricted to rather traditional feminine roles. The setting of decoration is highly interesting in the following aspect: In men's magazines there was a higher percentage of men with merely decorative functions, whereas in women's magazines more women were presented that way. It probably follows that decorative persons do not serve only as sex objects, but also as objects of identification.

Our last step was to compare our findings with those from studies done by other researchers. As the criteria for measurement and inclusion differed between studies, comparability is restricted. Despite this, as has been stated above, some correspondences between our results and those of other authors can be found. Still, despite similar tendencies, different researchers found different levels of gender stereotyping in print magazine advertisements. The differences in the various findings may well have their source in methodological differences. In summary, our comparison indicates that the degree of stereotyping in advertisements may vary for different advertised products and different readerships. For effective comparisons to be drawn, replications with the same criteria for measurement and inclusion are needed, with a controlled variation of time frame, magazine type, and advertised products.

In conclusion, our data show that the means of implementing gender stereotypes in print advertisements are still used today. Further, our study does not seem to reveal exceptional outcomes, as the comparison with other

recent studies has shown. Given the considerable change in the social and personal life of women in western societies since Goffman's time, this is a rather discouraging finding. Gender roles portrayed in advertising may have changed slightly, but not to an appropriate extent. What may the reasons be, and what are the consequences for our society?

One explanation possibly is the missing awareness of advertisers for Gender Mainstreaming. This is somewhat surprising, as women today have considerable spending power and advertisements should address their target groups. A further possible explanation could be that there seems to be no need to avoid gender stereotypes in advertisement, because products still get sold in spite of them. Besides, stereotypes serve to structure our experience of the world by providing handy categories for information processing. Some advertisements explicitly use stereotypes to reach a higher identification between the product and the possible consumers. According to cultivation theory, the mass media's capacity to construct "socially acceptable" ways of being and relating to others results from the phenomenon that recipients tend to adapt their concepts of reality to the concepts of reality presented in the media. If women and men are presented in stereotypical gender roles, people are given to accept those roles as real and maybe even as appropriate. This may lead to more difficulties in overcoming traditional gender roles for both men and women, and thus slow down the implementation of Gender Mainstreaming by influencing our self-image as men and women.

However, in our data the proportion seems to have decreased, or at least changed since Goffman's time. This leads to the question of whether this is a real decrease, or whether Goffman's categories can be usefully applied today, as the role of women, at least in Western societies, has changed considerably. One drawback of Goffman's criteria is that there seems to be no theoretical background in his selection of what criteria to observe. A possible task for future researchers would be to develop such a theory and then to investigate whether his categories still apply for different cultures and advertised products. A vantage point could be to examine how men and women actually percept stereotypes and how they experience depictions of gender roles. What behavior and what body language do we rate stereotypical? Does showing expansive laughter really mean being not in full control of a given situation? Withdrawing one's gaze from the actual environment, for example, is a rather typical behavior when using the mobile phone. Interestingly, in our survey men were depicted behaving in a typical way not more often than women. In the context of mobile communication systems, criteria for measuring gender stereotypes seem to need reexamination and maybe redefinition.

Further, the addressing of advertisements to different readerships should be taken into account. Do women and

men experience portrayed gender stereotypes in the same way? Additional criteria applicable to the investigation of gender stereotyping in advertisements could be weighed and either accepted or rejected for future study, as, for example, stereotypical color in clothing. An examination of the advertisement's texts might also provide an interesting research field.

Though we recognize that our study has several limitations, we did find some significant results. One limitation is that our sample of 288 cases was not exceptionally large, so that the number of cases in the magazine type subsamples was at times rather small. Likewise, we examined advertisements from a limited selection of magazines. Future researchers should include magazines addressed to different readerships—sports magazines, computer magazines or advertisements from daily press, for example. Third, we only examined advertisements from German magazines, so our results cannot be generalized to different cultures. Neither were we able to show a development of gender stereotypes in mobile communication systems advertisements, as we did not conduct a longitudinal study. To suggest that future researchers should take into account the time dimension in replicating our work may be an impossibility, as mobile communication is relatively new and already changing rapidly.

An aspect not yet determined in our study is whether advertisements for mobile communication systems play a special role because they usually have special connotations for men and women. Comparison with similar research fields that address both sexes may contribute to an answer to this question. Despite those drawbacks, our study has innovative features. We examined advertisements from Germany, which opens up the possibility for intercultural comparisons based on other studies. We tackled depictions of both men and women and drew comparative conclusions. As no explicit examination of men's depictions in print advertisements has yet been published in the literature, ours is a step into this field. Finally, in distinguishing between different types of magazine and finding qualitative and quantitative differences in the stereotyping in the advertisements they carried, we hope to have given impetus to future research.

**Acknowledgment** The authors would like to thank Franziska Fellenberg for her contribution as a reliability coder.

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