Female roles in advertising and their effects on Brazilian consumers

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Abstract
This research aimed to analyze the attitudes of Brazilian adults about the portrayal of female stereotypes in advertising and their effects on advertisers' image and intent to buy. A survey was applied between November and December of 2017 in a sample of 519 respondents. The collected data were analyzed by structural equations modeling. It was concluded that the offensiveness caused by stereotyped female roles in advertising influenced the intention to boycott the products. It was confirmed that women present more negative attitudes than men about the stereotypes portrayed, in terms of offensiveness. However, there was no significant difference between male and female regarding the impact of offensiveness on the company image or the intention to boycott.
Keywords: Advertising. Stereotyped Female Roles. Company's Image. Purchase Intention. Brazilian Context.

Introduction

The sales message communicated by advertisements needs to be quick and easy to process (WINDELS, 2016). This often results in the stereotyped portrait of men and women: while the male figure is commonly associated with workplaces and automobiles; the female image usually announces household items (MATTHES; PRIELER; ADAM, 2016).

Criticisms about the female portrait in advertising started to be raised with the social and cultural transformations that have occurred in the last decades, such as the greater insertion of women in the labor market (GRAU; ZOTOS, 2016).

In the 70's, several researchers became interested in the subject, which still remains an important topic of study (HUHMANN; LIMBU, 2016; GRAU; ZOTOS, 2016), given the persistence of these representations in advertisements in different countries (MATTHES; PRIELER; ADAM, 2016).

Most of the literature still consists of content analysis studies based on image coding schemes used to identify and describe stereotyped roles in advertising (KYROUSI; PANIGYRAKIS; PANOPOULOS, 2016; BAXTER; KULCZYNSKI; ILICIC, 2016). The volume of research about the effects of these advertisements on consumers is much smaller, with an even smaller number of studies examining the attitudes of men on the topic (THEODORIDIS *et al.*, 2013). Therefore, the following research problem arises: *What are the attitudes of adult Brazilian consumers towards female roles portrayed in advertising in general and their possible consequences for the advertiser's image and the purchase intention of the advertised products?*

Allied to this question and based on the scale of Lundstrom and Sciglimpaglia (1977), the general objective of this study is to analyze the effect of attitudes towards female roles in advertising in general on consumers' purchase (or boycott) intention and the possible interference of company image in this association.

Gender roles in Brazilian advertising

Since the "second wave" of the feminist movement, it is understood that "sex" represents the physical characteristics that distinguish female and male (BRISTOR; FISCHER, 1993), while "gender" refers to traits, attitudes, beliefs, and rooted behavioral trends regarding two ramifications: the masculine and the feminine (CARVALHO, 2009).

Gender stereotypes reflect these beliefs and can be broken down into psychological traits, physical characteristics, behavioral roles and professional occupations (KNOLL; EISEND; STEINHAGEN, 2011; KYROUSI; PANIGYRAKIS; PANOPOULOS, 2016; SHINODA, 2017). The reinforcement of behavioral or gender roles by media representations can generate limiting consequences for women (KNOLL; EISEND; STEINHAGEN, 2011).

In their seminal article, Courtney and Lockeretz (1971) conclude that there are four dimensions of the female role in advertising: a woman's place is at home; women do not make important decisions; they depend on men; and are portrayed as sexual objects.

In Brazilian television advertising, Matthes, Prieler and Adam (2016) found that: the proportion of male figures was slightly higher than that of female characters; male portraits were associated with cars and technological items; the portrait of women in domestic environments and men in workplaces is more likely (MATTHES; PRIELER; ADAM, 2016).

On the other hand, Shinoda (2017) analyzed advertisements of Brazilian magazines from 1995, 2005 and 2015 and claims that there has been an expansion of the roles represented over time. In 1995, decorative roles represented more than half of the portraits, while in 2015 there was an increase in non-traditional roles.

To illustrate, it is presented an advertisement by Editorial Minuano, which was analyzed by the National Council for Advertising Self-regulation (CONAR) in response to dozens of consumer complaints reporting sexism (Figure 1).

Figure 1 – Housewife Stereotype

Source: O Globo (2016).

The advertisement shows different occupations and the salary that, on average, is charged for each of them. Then, it mentions that "marrying a woman who doesn't charge for any of that, is priceless!". Therefore, the ad conveyed the idea that "the man married to a woman who does the functions of a maid, a psychologist, a nanny, a nurse, a cook and a driver, gets along and ends up 'saving' what he would spend on these professionals" (O GLOBO, 2016, p. 1).

In summary, although some studies indicate an increase in equal representations, in general, stereotyped roles are still present in national advertising.

Consumer attitudes towards female roles in advertising in general

From the perspective of the advertiser, an advertisement is effective when it generates positive attitudes towards the products offered and convinces consumers to buy them (MORRISON; SHAFFER, 2003).

Attitudes to gender roles consist of a person's beliefs about the rights and responsibilities of men and women (PALAN, 2001). In the context of advertising, such

attitudes may involve the perceived inadequacy of the roles played, offense and the spread of sexism (FORD; LATOUR, 1996; FORD; LATOUR; HONEYCUTT JR., 1997; LATOUR; HENTHORNE; WILLIAMS, 1998; HUHMANN; LIMBU, 2016). Therefore, this research deals with inherently critical or negative attitudes or "level of criticism", as defined by Ford, Latour and Honeycutt Jr. (1997).

Adequacy or accuracy refers to the portrayal of women and men as they really are or performing the activities they usually perform on a daily basis (FORD; LATOUR, 1996; FORD; LATOUR; HONEYCUTT JR., 1997; LATOUR; HENTHORNE; WILLIAMS, 1998).

Consumer attitudes towards gender roles in advertising in general are called *a priori* or general attitudes, as they refer to advertising at an aggregate level (ORTH; HOLANCOVA, 2004). The study of attitudes in general is relevant due to its influence on the responses to specific ads (ORTH; HOLANCOVA, 2004; THEODORIDIS *et al.*, 2013).

Studies that examined the effects of advertisements with stereotypes provided mixed results (EISEND; PLAGEMANN; SOLLWEDEL, 2014). Stereotyped portraits can be advantageous or harmful for advertisers, depending on factors such as culture and individual gender orientations of the viewers (BAXTER; KULCZYNSKI; ILICIC, 2016).

Researches that considered respondents from both genres point out that women are more aware of stereotypes in advertising and have more negative attitudes towards these ads than men (PLAGEMANN; SOLLWEDEL, 2014). Men are more likely to believe that advertisements accurately depict genders in their daily activities (HUHMANN; LIMBU, 2016). It has also been found that the offense caused by degrading portraits can cause negative reactions to companies and advertising brands, such as acts of repudiation and boycott (CHRISTY, 2006).

Company image and purchase or boycott intention

The development of a good company image is related to the purchase decision of potential consumers and the creation of competitive advantage (GOMES; SAPIRO, 2003). Purchase intention is the probability that an individual will try or acquire the brand or product advertised in the near future and does not necessarily imply the actual act of purchase (FERRELL; HARTLINE, 2010). In this context, brand image is a holistic construct formed from a gestalt of all the brand associations related to the name, term, sign or symbol intended to identify the goods or services of one seller (KOTLER, 1997, FAIRCLOTH; CAPELLA; ALFORD, 2001). In opposition to the purchase there is boycott, which is the act of not buying a product or service as a form of repudiation (CRUZ; PIRES JR.; ROSS, 2013).

Jones and Reid (2010) point out that advertisements with stereotypes considered degrading affected negatively the purchase intention of women, as well as a substantial portion of men. Other articles indicate that women reported less intention to buy when the ads contained stereotyped portraits (HUHMANN; LIMBU, 2016).

Methodology

Based on the theoretical framework adopted, the following hypotheses were elaborated:

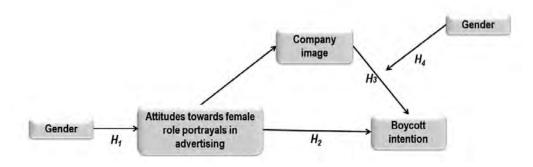**H₁:** *In Brazil, women express more negative attitudes towards female roles in advertising than men.*

H₂: *Attitudes towards female roles in advertising have a positive effect on boycott intention.*

H₃: *Attitudes to female roles in advertising have a positive indirect effect on boycott intention through negative company image (mediator).*

H₄: *The respondent's gender moderates the indirect effect (company image) of attitudes towards female roles in advertising on boycott intention. For women (vs. men), specifically, the indirect positive effect will be greater (vs. minor).*

Considering these hypotheses, the research model was constructed (Figure 2).

Figure 2 – Research Model

Source: Adapted from Ford and Latour (1996), Ford, Latour and Honeycutt Jr. (1997) and Latour, Henthorne and Williams (1998).

Attitudes to female roles in advertising are generally considered to impact the intention to boycott directly or indirectly, through the company's negative image as a mediating variable. It is understood that the respondents' gender moderates the expected indirect effect.

It is a descriptive research, with a quantitative approach and a transversal time horizon, carried out through a survey. The target population consists of adult men and women living in Brazil. Deyoung and Crane (1992) claim that a more representative sample at the national level could offer better insights on the topic. Thus, we sought to reach men and women from all over the country, with relatively different ages and income levels.

As a "list or set of instructions to identify the target population" (MALHOTRA, 2012, p. 303), we opted to select e-mails from professors working at Brazilian federal universities

in Administration and Psychology courses. It was thought that this way there would be a higher rate of questionnaires return, because the respondents are inserted in the academic environment and in areas related to the theme.

Therefore, the sample used was non-probabilistic and by convenience (HAIR JR. *et al.*, 2016). Based on the parameters of Hair Jr. *et al.* (2016) and Kline (2011) to enable a confirmatory factor analysis, the sample size was calculated around 136 or 204 elements.

The questionnaires were structured using the Lundstrom and Sciglimpaglia (1977) scale, one of the most used in the literature to assess the reception of gender stereotypes (NAVARRO-BELTRÁ; LLAGUNO, 2012). The reverse translation of the scale was carried out with the help of a bilingual Brazilian teacher and a United States native professor also fluent in Portuguese (Table 1). The translation was necessary for applying the questionnaire to the public, which was composed of Brazilians.

Table 1 – Scale

Attitudes towards female role portrayals in advertising	Items
Ads which I see show women as they really are.	AT_1
Ads suggest that woman are fundamentally dependent on men.	AT_2
Ads which I see show men as they really are.	AT_3
Ads treat women mainly as "sex objects".	AT_4
Ads which I see accurately portray women in most of their daily activities.	AT_5
Ads suggest that woman make important decisions.	AT_6
Ads which I see accurately portray men in most of their daily activities.	AT_7
Ads suggest that woman don't do important things.	AT_8
Ads suggest that a woman's place is in the home.	AT_9
I'm more sensitive to the portrayal of women in advertising than I used to be.	AT_10
I find the portrayal of women in advertising to be offensive.	AT_11
Overall, I believe that the portrayal of women in advertising is changing for the better.	AT_12
Negative company image	**Items**
Companies that portray women offensively in their advertising are more likely to discriminate against women and other minorities in job promotion and advancement, compared to other companies in the same business or industry.	CI_1
I believe that how women are portrayed in ads merely reflects the general attitude of that company toward women's place in society.	CI_2
Boycott intention	**Items**
If a new product is introduced with ads that I find offensive, I might still buy it if it offers me benefits which I find attractive.	BI_1
If a new product or service which I use adopts an ad campaign which I find offensive, I'll discontinue using it.	BI_2

Even though I may see an ad which is offensive for one product, I would continue to purchase other products that I have been using from the same company.	BI_3

Source: Adapted from Lundstrom and Sciglimpaglia (1977).

The scale consists of 17 sparse items in three dimensions. Each item is measured by a 7 seven point Likert scale ("I totally disagree" until "I totally agree"). A pre-test of the scale was implemented to identify the need for modifications.

Data collection through e-mail took place between November 13 and December 29, 2017. An invitation containing the link on the form was sent to each recipient to participate in the study. A total of 2,124 questionnaires were sent and 537 responses were obtained (return rate of approximately 25%).

A missing value (GASKIN, 2017) was found in one questionnaire , referring to gender. Since this variable is essential to answer the research objectives, the questionnaire was excluded. Outliers (HAIR JR. *et al.*, 2016) were identified in 17 questionnaires, which were also disregarded, which implied on a final sample of 519 subjects.

The asymmetry and kurtosis calculations using IBM® SPSS Statistics® 20.0 to test normality resulted in values within the ± 1.96 limit suggested by Hair Jr. *et al.* (2016), indicating that the data distribution was close to normal.

Sample Profile

Among the 519 subjects in the final sample, 280 (53.95%) are female and 239 (46.05%) are male. The majority, that is, 434 (83.62%) people, are between 31 and 60 years old. Regarding the level of income, 247 (47.59%) respondents receive from R$ 9,370.00 to R$ 18,740.00 per month. Following are those in which the income ranges from R$ 3,748.00 to R$ 9,370.00, which correspond to 200 elements (38.54%). There was a predominance of respondents from the Southeast (27.17%) and Northeast (24.47%) of Brazil. Then there is the South (19.08%) and the Center-West (15.03%). Only 9.25% of the sample claimed to belong to the North and 5.01% did not answer this question.

Exploratory Factor Analysis (EFA)

An EFA was implemented to identify constructs and eliminate redundancy (AAKER; KUMAR; DAY, 2001). Although previous researches (FORD; LATOUR, 1996; FORD; LATOUR; HONEYCUTT JR., 1997; LATOUR; HENTHORNE; WILLIAMS, 1998) have already carried out this analysis, it was decided to redo it, since the factorial structures of such studies varied regarding the composition of factor items. The principal components approach and the varimax rotation method were applied.

After the exclusion of the items "AT_10" and "AT_12" for not having significant factor loadings (greater than or equal to 0.5), a KMO of 0.684 and a Bartlett's Test of Sphericity

equal to 0.000 were obtained. All factor loadings were above 0.5 (HAIR JR. *et al.*, 2016). A value greater than 1.0 was used as the parameter for accepting the Eigenvalues (HAIR JR. *et al.*, 2016), so the scores in Table 2 were obtained.

Table 2 – *Eigenvalues*

Total Variance Explained									
Initial Eigenvalues				Extraction sums of squared loadings			Rotation sums of squared loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.14	27.57	27.57	4.14	27.57	27.57	3.17	21.15	21.15
2	2.41	16.04	43.61	2.41	16.04	43.61	2.72	18.11	39.26
3	2.10	14.00	57.61	2.10	14.00	57.61	2.39	15.95	55.20
4	1.19	7.93	65.54	1.19	7.93	65.54	1.55	10.33	65.54

Source: Research data (2017).

Thus, an acceptable solution resulted in 4 factors, since the first dimension of the scale ("Attitudes towards female role portrayals in advertising") was divided into 2 factors. The same number of latent variables was found, as well as factorial matrices similar to those already verified by the literature. For these reasons, it was decided to adopt, with minor adaptations, the same labels used in previous studies, namely: "Offensiveness of female role portrayals" (Factor 1); "Portrayal adequacy" (Factor 2); "Negative company image" (Factor 3) and "Boycott intention" (Factor 4).

Finally, Cronbach's alpha was calculated for each of the factors to verify the precision or internal consistency of the subscales. The alpha values were all higher than the acceptable minimum of 0.70 (HAIR JR. *et al.*, 2016). Table 3 shows the results obtained by the EFA.

Table 3 – Factor matrix and Cronbach's alpha

Construct	Item	Factor Loading	Cronbach's Alpha
1 - Offensiveness of female role portrayals	AT_8	0.814	0.806
	AT_9	0.748	
	AT_11	0.736	
	AT_4	0.667	
	AT_2	0.632	
	AT_6	0.532	

Construct	Item	Factor Loading	Cronbach's Alpha
2 - Portrayal adequacy	AT_3	0.832	0.798
	AT_1	0.785	
	AT_7	0.761	
	AT_5	0.748	
3 - Negative company image	CI_1	0.906	0.723
	CI_2	0.761	
4 - Boycott intention	BI_1	0.896	0.854
	BI_3	0.870	
	BI_2	0.838	

Source: Research data (2017).

In order to validate the measurement model by construct, a Confirmatory Factor Analysis (CFA) was then implemented.

Confirmatory Factor Analysis (CFA)

When there are previous studies on the issue, the CFA is indicated to confirm the factorial structure already known in the literature in a new sample or context (BIDO; MANTOVANI; COHEN, 2016).

The measurement scale was considered reflexive (CHIN, 1998) and the direction of "causality" started from the constructs towards its items (HAIR JR. *et al.*, 2016). Initially, a model was tested containing Factors 1 and 2 as latent variables of first order that formed a second order one called "Attitudes towards female role portrayals in advertising". However, this model presented an inadmissible solution due to the presence of Heywood Cases (parameter estimates with illogical values) (KLINE, 2011).

Therefore, a new model design without the second order variable was tested. In this second attempt, no Heywood Cases were generated. Some modification indexes were applied to improve the Model Fit and the item "AT_6" was eliminated because it had a low factor loading (0.59) and was considered redundant (very similar to "AT_8"), in order to further improve the adjustment of the model and avoid validity problems.

The Model Fit obtained in the second attempt was satisfactory even for the most demanding parameters of Hu and Bentler (1999): CMIN / DF = 2.044; GFI = 0.952; CFI = 0.970; RMSEA = 0.051; and PCLOSE = 0,421[1].

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1   CMIN / DF corresponds to the value of the chi-square test divided by the number of degrees of freedom; GFI (Goodness-of-fit Index); CFI (Comparative Fit Index); RMSEA (Root Mean Square Approximation); SRMR (Standardized root mean square residual); PCLOSE (p of close fit).

Then, the verification of the Composite Construct Reliability (CCR) and validity of the model was carried out. The first calculation of Average Variance Extracted (AVE) resulted in a value of 0.486 (below 0.50) for "Portrayal adequacy". It was noticed that "AT_7" was not truly representative of the latent variable since it had a low factor loading (0.39). Thus, it was eliminated from the model and the measures of validity and reliability were calculated again, which, this time, were all adequate (HAIR JR. *et al.*, 2016).

In Table 4 the numbers in bold are the square roots of AVE and numbers outside the diagonal are the values of the correlations between the constructs.

Table 4 – Model Validity and Reliability

	CCR	AVE	Company Image	Offensiveness	Portrayal Adequacy	Boycott Intention
Company image	0.794	0.669	**0.818**			
Offensiveness	0.846	0.525	0.492	**0.724**		
Portrayal adequacy	0.811	0.599	0.208	0.479	**0.774**	
Boycott intention	0.852	0.660	0.320	0.311	0.226	**0.812**

Source: Research data (2017).

The Model Fit without "AT_7" was verified once again, presenting significant indexes (HU; BENTLER, 1999), as shown in Table 5.
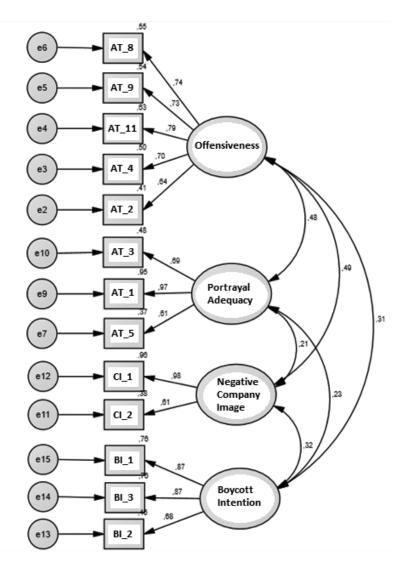
Table 5 – Adjustment of the final measurement model

Adjustment measure	Suggested level	Model index
CMIN/DF	< 3.0	2.106
GFI	>0.95	0.954
CFI	>0.95	0.97
RMSEA	<0.05 good; 0.50 - 0.10 moderate	0.053
PCLOSE	>0.05	0.351
Standardized RMR	<0.90	0.047

Source: Research data (2017).

The final structure of the scale had 13 items and the factorial solution of 4 constructs obtained in the exploratory phase was maintained (Figure 3).

Figure 3 – Final measurement model

Source: Research data (2017).

Bearing in mind that for testing the hypotheses it is necessary to carry out a multigroup analysis (female and male), it is necessary to test the model's invariance at first. The metric invariance test as suggested by Kline (2011) resulted in a non-significant P value (0.442), which indicated that the groups were not different at the model level, however, they could still show distinctions in the path analysis. Thus, there was equivalence in the measurement model between groups and the responses between men and women could be compared.

Structural Model and Hypothesis Verification

In order to test the hypotheses, the Structural Equation Modeling (SEM) method was applied. This method is indicated to analyze dependency relationships between latent variables (HAIR JR. *et al.*, 2016). As the data distribution was close to normal, it was utilized a covariance-based SEM (CBSEM), using IBM® SPSS® Amos v. 20.0, with maximum likelihood estimation.

In this study, it was verified whether, according to gender, the effect of attitudes towards female roles in advertising in general (independent variable) on the boycott intention, through the negative company image, could be reduced, brought to zero (not significant P value) or acquire an inverted sign (+/-). Therefore, for situations like this (a continuous independent variable acting together with a dichotomous modifying variable, that is, the gender), Baron and Kenny (1986) suggest a multigroup model in SEM.

The factor "Negative company image" was considerate a moderator, since it is a third variable that intervenes between two other related constructs (HAIR JR. e*t al.*, 2016). Therefore, there is a moderated mediation. Iacobucci, Saldanha and Deng (2007) indicate that the best way to analyze moderated mediation is, precisely, through SEM and that some software already have a syntax option for this type of calculation using multigroup models. In the present study, the Multigroup Analysis tool available in IBM® SPSS® Amos v. 20.0 was used.
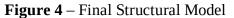
A first analysis of the unstandardized regression weights demonstrated that the impact of the variable "Portrayal adequacy" was not significant ($p > 0.01$) for the prediction of any of the other constructs, as evidenced by the values of C.R. (critical ratios) and P (Table 6). In order to reach significance, the values of C.R. must be greater than 1.96 (BYRNE, 2010).
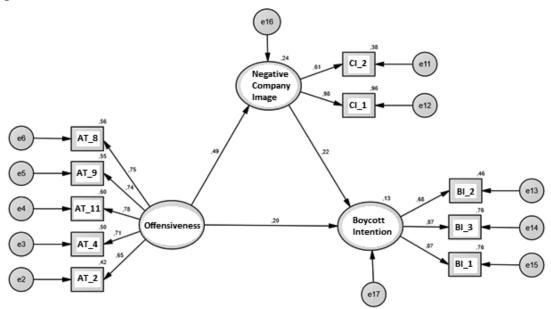
Table 6 – Unstandardized regression weights (Portrayal adequacy)

	Estimates	**S.E.**	**C.R.**	**P value**
Adequacy --> Company image	-0.051	0.08	-0.641	0.522
Adequacy --> Boycott intention	0.180	0.103	1.756	0.079

Source: Research data (2017).

Although a good adjustment of the measurement model was achieved with the construct "Portrayal adequacy", it was decided to discard this construct for the test of the structural model (Figure 4), as the conclusion of Ford and Latour (1996), Ford, Latour and Honeycutt (1997) and Latour, Henthorne and Williams (1998) regarding its non-significance was corroborated.

Figure 4 – Final Structural Model

Source: Research data (2017).

The final Model Fit without the "Portrayal adequacy" generated satisfactory values (HU; BENTLER, 1999), as shown in Table 7.

Table 7 – Adjustment of the final structural model

Adjustment measure	Suggested level	Model index
CMIN/DF	< 3.0	1.715
GFI	>0.95	0.974
CFI	>0.95	0.986
RMSEA	<0.05 good; 0.50 - 0.10 moderate	0.042
PCLOSE	>0.05	0.731
Standardized RMR	<0.90	0.032

Source: Research data (2017).

Thus, the possibility of testing the hypotheses was ensured. Since "Portrayal adequacy" was disregarded, it is possible to conclude that "Negative attitudes towards female role portrayals in advertising" are reflected only by the degree of "Offensiveness of female role portrayals" manifested by the respondents.

The first hypothesis was tested on IBM® SPSS Statistics® using a t-test between two independent samples (male and female) regarding the construct "Offensiveness of female role portrayals". A dependent variable was created by the additive method, with all of the factor items (AT_2, AT_4, AT_8, AT_9, AT_11). Levene's test for equal variances was significant (F = 0.001; Sig. = 0.971; p> 0.05). Table 8 shows the t-test results with equal variances assumed. It is inferred, by the value of p <0.01 (sig. 0.000) that there is a significant difference in the degree of offense given the gender.

Table 8 – T test of independent samples for H1

		t value	Degrees of freedom (df)	Sig.	Mean difference	Standard error difference
Offensiveness	Equal variances assumed	5,02	398	0	3.16776	0.63101

Source: Research data (2017).

The mean values demonstrate that the female group manifested a slightly higher degree of offense than the male group (Table 9).

Table 9 – Group statistics

	Gender	N	Mean	Standard deviation	Standard error mean
Offensiveness	Female	217	23.8618	6.35371	0.43132
	Male	183	20.6940	6.20743	0.45887

Source: Research data (2017).

Adjusting such scores to the 7-point scale used (dividing the mean values by 7), the final mean for the female group was 3.41 and for the male group was 2.96. Thus, H_1 is confirmed in terms of attitudes that reflect offense.

In H_2 and H_3 the significance of the relationships between the latent variables is analyzed and in H_4, the moderating effect of gender. In this way, those hypotheses are verified in the context of the global model, while this one undergoes a multigroup analysis (female and male).

The analysis of the global model regression weights (Table 10) demonstrated significant effects between "Offensiveness of female role portrayals" and "Negative company image" (β = 0.489; p <0.001) and "Negative company image" and "Boycott intention" (β = 0.221; p <0.001). The association between "Offensiveness of female role portrayals" and "Boycott intention" (β = 0.203) can also be considered significant at p <0.01. Therefore, H_2

and H_3 were partially supported, so that the "Offensiveness of female role portrayals" was a direct predictor of the "Boycott intention", as well as indirect, when partially mediated by the "Negative company image". There is a partial mediation, given the significance of all associations between constructs.

Table 10 – Estimated parameters in the global model

	Standardized regression weights	Unstandardized regression weights	S.E.	C.R.	P value
Offensiveness --> Boycott intention	0.203	0.236	0.08	2.962	0.003
Offensiveness --> Company image	0.489	0.488	0.086	5.66	***
Company image --> Boycott intention	0.221	0.257	0.075	3.448	***

Source: Research data (2017).

To verify H_4, when dividing the sample into two groups (217 female and 183 male), Heywood Cases appeared in the female group related to the "Negative company image" (variance of "e12" = - 0.398). The situation was corrected by the suggestions of Dillon, Mulani and Kumar (1987) and then it was possible to run the model containing both groups, which achieved a good fit (CMIN / DF = 1.268; GFI = 0.962; CFI = 0.988; RMSEA = 0.026; PCLOSE = 0.997; SRMR =, 0422).

Using the multigroup analysis tool, a chi-square test was performed between the totally restricted model and the freely estimated model (GASKIN, 2017), the result (p = 0.132) indicates that there is no significant difference between the female and male groups regarding the global model (Table 11).

Table 11 – Chi-square test in the global model

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
Structural weights	10.000	15.005	0.132	0.009	0.010	0.002	0.002

Source: Research data (2017).

For preciosity, a path analysis was ran. The relations of interest were, one by one, forced to be equivalent between the groups (while the others were freely estimated). Then, the distinctions between them were verified (GASKIN, 2017). The values of the chi-square tests can be seen in Table 12. The absence of difference between groups in all associations was confirmed which led to the conclusion of refuting H_4.

Table 12 – Chi-square test with restricted relations one by one

	DF	CMIN	P valor	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
Offensiveness --> Boycott intention	1	0.246	0.62	0	0	-0.001	-0.001
Offensiveness --> Company image	1	0.719	0.396	0	0.000	0	0
Company image --> Boycott intention	1	0.217	0.642	0	0	-0.001	-0.001

Source: Research data (2017).

H_1, H_2 and H_3 were only partially accepted, since the factor "Portrayal adequacy" had to be discarded and, therefore, attitudes towards female roles in advertising were evaluated only in terms of the perceived level of offense. Furthermore, the mediation provided in H_3 was only partial and not total.

Through the H_1 test, it was found that, in Brazil, the female group showed more negative attitudes to the portrait of stereotyped roles, here specifically measured by a greater degree of offense. Thus, the conclusions of previous research were reinforced (LUNDSTROM; SCIGLIMPAGLIA, 1977; LATOUR; HENTHORNE; WILLIAMS, 1998; FORD; LATOUR; MIDLETON, 1999; THEODORIDIS *et al.*, 2013; EISEND; PLAGEMANN; SOLLWEDEL, 2014).

The H_2 test revealed that attitudes towards female roles in advertising in general have a direct and significant association with the boycott intention, in terms of offense. In addition, it was found that this association may suffer partial interference from the negative company image (H_3).

Contrary to expectations, the results of the H_4 test indicated that there was no significant difference between men and women in regard to the impact of the offensiveness on the boycott intention, through the negative company image. In this matter, the results of Ford and Latour (1996) and Latour, Henthorne and Williams (1998) were not corroborated. Table 13 summarizes the results of the hypothesis tests.

Table 13 – Hypothesis test results

Hypothesis	Results
H_1: In Brazil, women express more negative attitudes towards female roles in advertising than men.	Partially accepted
H_2: Attitudes towards female roles in advertising have a positive effect on boycott intention.	Partially accepted
H_3: Attitudes to female roles in advertising have a positive indirect effect on boycott intention through negative company image (mediator).	Partially accepted

Hypothesis	Results
H$_4$: The respondent's gender moderates the indirect effect (company image) of attitudes towards female roles in advertising on boycott intention. For women (vs. men), specifically, the indirect positive effect will be greater (vs. minor).	Refuted

Source: Research data (2017).

In general, it was found that, in a sample of Brazilian consumers, there is significant concern about the issue, which can generate relevant repercussions for the success of advertising in the country.

Conclusions

This study corroborates the factorial structure found by previous research. It also confirms the associations between latent variables, that is, the offense evoked by the portrayal of stereotyped female roles in advertising in general directly influenced the boycott intention of the products and services advertised, as well as indirectly, through the negative company image, whose partial mediation has been confirmed.

In addition, this research adds to the current literature on the effects of stereotyped portraits in advertising on consumers and modernizes the Lundstrom and Sciglimpaglia (1977) scale by applying it in a current and culturally different scenario. Using a sample of respondents from the five regions of Brazil, this research meets the suggestions of Deyoung and Crane (1992), Orth and Holancova (2004) and Tsichla and Zotos (2016), as it expands the study of the subject and takes another step towards a possible universalization of the results. This study represents a first attempt to make up for the lack of work on gender and advertising in the South American context (URIBE *et al.*, 2008). It also represents an advance for research on boycott in the country, still little carried out (CRUZ; PIRES JR.; ROSS, 2013).

The findings of this study also help advertisers to develop more effective communication strategies, given the acknowledgment that stereotyped roles in commercials can intensify the negative perception of the corporate image with regard to the treatment of its female employees and the company's view about the place of the female figure in society.

In addition, the results indicate a negative behavioral reaction by Brazilian women and men to these companies, in terms of avoiding the purchase or discontinuing the use of products or services. It is worth commenting on the possible regulatory repercussions of the findings of this study, which highlights the relevance of gender portraits to the offensiveness of Brazilian advertising. Given the recent decisions by CONAR regarding complaints of sexism, it is reinforced the notion that advertisers need to investigate their targets' attitudes to gender roles (HUHMANN; LIMBU, 2016).

As limitations, this paper investigated attitudes at an aggregate level. Therefore, the results are not directed for a particular market segment or product category of advertising. In view of the incipience of studies on the theme in Brazil, this more general analysis was considered sufficiently interesting at first, however future research may examine the issue in a more singular way.

It is worth considering that the respondents' perceptions can vary a lot, depending on characteristics such as consumption habits, age, race, income, and levels of access to advertising carried in the most diverse means of communication - considering that some of these media may be more open to progressive gender representations than others. The income data obtained may indicate a class cutting in the survey. Such characteristics, although not explicit in this study, can influence the results obtained. Added to the use of a non-probabilistic sample, this prevents generalizations for the entire population.

The scale used can also be improved regarding the "Negative company image", whose composition of just two items may have been the cause for the emergence of Heywood Cases.

It is necessary to pay attention to the fact that this is a cross-sectional research. New studies should carry out longitudinal tests in order to verify changes in attitudes over time.

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