Marketing Communications of Brand-Related Stereotypes and Consumer Responses: A Mixed-Methods Approach

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Abstract

Brand-related stereotypes are widely encountered in consumers' every day marketplace interactions but little is known regarding how companies use them in their marketing communications. This study explores the types and content of different brand-related stereotypes depicted in marketing communications and their impact on consumers' brand attitudes. Specifically, drawing on the Stereotype Content Model (SCM) and using a mixed-methods approach, we offer empirically-based insights into (a) the types of brandrelated stereotypes portrayed in print advertisements of brands, (b) the deployment of warmth and competence in the communicated stereotypes, and (c) consumers' responses in terms of brand attitudes. We find that firms heavily rely on brand stereotypes and that brand competence and brand buyer warmth are particularly influential in shaping consumers' brand attitudes.

Keywords: brand buyer/user stereotype, brand origin stereotype, brand stereotype, content analysis, multi-level modeling, mixed-methods

1. INTRODUCTION

In recent years, research on stereotypes in general and brand-related stereotypes in particular has been gaining momentum (Diamantopoulos et al., 2021; Gidaković et al., 2022; Kolbl et al., 2020). Broadly defined, stereotypes capture a "socially shared set of beliefs about traits that are characteristic of members of a social category" (Greenwald and Banaji, 1995, p. 14) and function as "energy-saving devices that serve the important cognitive function of simplifying information processing and response generation" (Macrae et al., 1994, p. 14). Brand-related stereotypes refer to consumers' shared and oversimplified beliefs about (a) individuals/groups perceived to be users or buyers of a particular brand, commonly referred to as the *brand user/buyer stereotype* (e.g. Antonetti and Maklan, 2016;), (b) the country from which the brand originates, known as the *brand origin stereotype* (e.g., Diamantopoulos et al., 2017;), and (c) the brand itself, namely the *brand stereotype* (e.g., Kervyn, Fiske and Malone, 2012).

Extant studies in the field have invariably adopted a *consumer perspective* to investigate the role of stereotypes in branding, relying on consumers' self-reports of their stereotypical perceptions of brand users/buyers, brand origins, and specific brands. However, relevant research has neglected the *company perspective*: the question of whether and how firms portray stereotypes in their advertising communications remains unanswered. Therefore, it is not clear which brand-related stereotypes are actually deployed by companies (and with what frequency) nor is it known what particular stereotype content (in terms of warmth and/or competence) is communicated and how the latter impacts consumer responses.

Against this background, the current study seeks to address the following research questions which, to the best of our knowledge, have not been investigated in prior research:

- 1. What stereotype content do firms emphasize when communicating different brandrelated stereotypes?
- 2. How does the content of the communicated brand-related stereotypes shape consumer attitudes toward the brand?

To address these questions, we employ a two-phase, mixed-methods research design. In a first phase, we apply content analysis to identify brand-related stereotypes in a sample of print advertisements of brands in different product categories. In a second phase, we use multi-level modeling to investigate consumer responses to the brand-related stereotypes identified in the first phase of our study.

Our intended contribution is threefold. First, we contribute to stereotyping literature in a consumption context by offering the first assessment of the communication of brand-related stereotypes in practice. Specifically, we document the relative popularity of brand user/buyervs. brand origin- vs. brand stereotypes portrayed in print advertisements as well as the configurations reflecting different stereotype combinations. Second, we reveal the extent to which firms emphasize the stereotypical dimension of warmth versus the dimension of competence in their deployment of brand-related stereotypes. We thus offer a complementary (supply-side) perspective on the role of warmth and competence in determining stereotype content, the latter having heretofore been studied only from a consumer (demand-side) perspective. Third, we investigate how the warmth/competence of the communicated stereotypes impact consumers' attitudes towards the focal brand.

2. THE SCM AND BRAND-RELATED STEREOTYPES

The Stereotype Content Model (SCM; Fiske et al., 1999, 2002) is the most prominent theoretical framework for capturing the content of people's stereotypical beliefs about "others", the latter being both social groups and non-human/inanimate entities (Fiske 2015, 2018; Fiske, Cuddy and Glick, 2007; Zhou et al., 2018). According to the SCM, stereotypical beliefs are

reflected in two fundamental dimensions: *warmth* and *competence*. The former dimension relates to whether "others" have positive or negative *intentions*, while the latter dimension captures whether these "others" are actually *able* to enact these intentions (Fiske et al., 2002). Thus, stereotyped entities would be described as warm (cold), if they signal good (bad) intentions, and competent (incompetent) if they exhibit the capability (or lack of) to enact these intentions (Cuddy et al., 2008). Note that both dimensions involve *cognitive* appraisals about "others", although the warmth dimension is sometimes misinterpreted as capturing affect (e.g. Chattalas, Kramer and Tanaka, 2008; Stokburger-Sauer, Ratneshwar and Sen, 2012)¹. Note also that stereotypes can often be 'mixed' or 'ambivalent', that is, a particular target entity may score high on one dimension but low on the other (Fiske et al., 2002; Glick et al., 2001; Judd et al., 2005).

Recent empirical research has revealed that the three brand-related stereotypes are not unrelated/independent; instead, there is stereotype content *transfer* from the brand origin and the brand user stereotypes to the brand stereotype (Diamantopoulos et al., 2021; Gidaković et al., 2022). This suggests that "consumers navigate their brand preference through *simultaneously* stereotyping brands, their origin, and their users. Therefore, investigating stereotypes in isolation of each other as documented in previous research … can lead to a fragmented and possibly biased view of the role of brand-related stereotypes in a consumer behaviour context" (Gidaković et al., 2022, p. 1941, added emphasis). This last point is of particular relevance for the current investigation which seeks, on the one hand, to document how companies deploy brand stereotypes in their communications and, on the other, assess how consumers' attitudes towards the brand are actually affected by the communicated stereotypes.

3. METHODOLOGY

In a first phase, we conducted a content analysis of print advertisements as this is a widely used approach in stereotyping research (e.g. Plakoyiannaki & Zotos, 2009). In doing so, we followed Gaur and Kumar's (2018) six-step procedure, which involves (1) selecting a database, (2) setting selection criteria, (3) developing a valid coding instrument, (4) coding the sample, (5) assessing coding accuracy, and (6) summarizing and interpreting the coded text.

Opting for maximum variation sampling, we first generated a pool of print advertisements of brands in five distinct product categories (soft drinks, furniture, sweets, online platforms, beer). We intentionally did not limit ourselves to a single product category but rather opted for a variety of product categories for generalizability purposes. Within each product category, we collected several print advertisements of a global and a local brand as previous research indicates that stereotypical perceptions of global and local brands may differ (Davvetas and Halkias, 2019; Kolbl et al., 2019). The final database consisted of a sample of 100 advertisements for the 10 brands in the five aforementioned product categories (two brands per category). Two of the authors then independently coded the ads in terms of (a) which brandrelated stereotype(s) were depicted, and (b) which stereotype dimension(s) were deployed. Inter-coder reliability was very high (Cohen's kappa = 0.98).

In a second phase, we recruited a sample of Austrian consumers with different demographic backgrounds (i.e., age, gender, education) and generated a multi-level dyadic dataset comprising a total of 84 consumers (Level 1) grouped by 10 brands (Level 2), with 8 to 10 consumers allocated to each of the 10 brands analyzed in Phase 1. In assigning brands to consumers, we made sure that respondents were familiar with the brand in question and asked them to complete a questionnaire regarding their attitudes toward the assigned brand (measured on the adapted Fuchs and Diamantopoulos's (2010) scale; $\alpha = 0.87$); perceived brand globalness

¹ As Diamantopoulos et al. (2021, p. 1145, original emphasis) state, "the *content* of stereotypes does not mirror a simple evaluative or affective response but instead reveals *cognitive* judgements on separate dimensions of (dis)like and (dis)respect."

and localness (measured respectively on Steenkamp, Batra and Alden's (2003) and Swoboda, Pennemann and Taube's (2012) scales; $\alpha_{PBG} = 0.80$, $\alpha_{PBL} = 0.71$); brand familiarity (captured by the item "How familiar would you say you are with [BRAND]?", anchored at 1 = not at all familiar to 7 = very familiar); and demographic information.

4. FINDINGS

The content analysis revealed that brand stereotypes are portrayed most often (in 91 out of 100 print advertisements), followed by brand buyer/user stereotypes (in 43 out of 100 advertisements) and brand origin stereotypes (portrayed in 22 out of 100 advertisements). While approximately half the ads depicted only a single stereotype, the rest portrayed a combination of stereotypes (Figure 1).

Insert Figure 1 about here

To explore how the stereotypical dimensions of warmth and competence are deployed in print advertisements, we created a contingency table for each brand-related stereotype and compared the frequencies of the warmth/competence cues being simultaneously present (absent) in the relevant print advertisements.

Focusing on brand stereotypes (Table 1), there is a significant relationship between warmth and competence (χ^2 =50.07, df=1, p<0.001). The odds ratio of 0.0197 demonstrates that there is a negative association between the occurrence of brand warmth and competence. Specifically, when brand competence is present, the odds of brand warmth being also present are much lower than when brand competence is not present.

Insert Table 1 about here

Regarding brand buyer/user stereotypes (Table 2), the relevant contingency table is also associated with a significant result (χ^2 =4.42, df=1, p<0.05), with the odds ratio (0.14) indicating that when brand buyer/user warmth is present, the odds of brand buyer/user competence being present are much lower than when brand buyer warmth is not present.

Insert Table 2 about here

As far as brand origin stereotypes are concerned, the contingency table does not show a significant relationship between warmth and competence (χ^2 = 0.0496, df = 1, p = 0.823). While the odds ratio of 1.3 suggests a 30% increase in the odds of warmth being displayed when competence is displayed compared to when competence is not displayed, the result is not statistically significant.

Insert Table 3 about here

To summarize, in practice, firms seem to deploy all three brand-related stereotypes, but to a different extent and, importantly, in different combinations. Brand stereotypes on their own are the most widely used by firms in their marketing communications, with a particular emphasis on the competence dimension.

We next conducted a multi-level analysis by combining the data from the content analysis (company perspective) with the questionnaire data (consumer perspective). Specifically, we estimated the model shown in Figure 2 in order to test the (cross-level) effect of the warmth and competence dimensions on consumer attitudes towards the focal brand. In doing so, and in line with recent evidence indicating interrelationships among each stereotypical dimension across different brand- related stereotypes (see Gidaković et al., 2022), we considered the effects of brand buyer/user warmth, brand origin warmth, and brand warmth *simultaneously* (and did the same for competence). Thus, the multi-level model assessing the impact of warmth (competence) on attitudes towards the brand contains *three* (count) variables capturing warmth (competence) at Level 2, with each variable capturing the *frequency* with which warmth (competence) was portrayed in the 10 ads of a particular brand (min = 0, max = 10).

Insert Figure 2 about here

At Level 1, in addition to consumer attitude towards the brand (the dependent variable), we specify as predictors consumers' perceptions of the focal brands' globalness (PBG) and localness (PBL) as well as brand familiarity; age and gender are also included as control variables. The reasons for including PBG and PBL as Level 1 predictors in the model are two-fold. First, PBG and PBL have repeatedly been shown to impact several consumer outcomes, including brand attitudes (Xie et al., 2015; Halkias et al., 2016; Sichtmann et al., 2019). Second, prior research shows that PBG and PBL influence consumers' stereotypical perceptions of brands in terms of brand warmth and competence (Davvetas and Halkias, 2019; Kolbl et al., 2019). By explicitly including PBG and PBL as drivers of consumer attitudes towards the brand at Level 1, we thus guard against overestimating the influence of the *communicated* stereotype dimensions in Level 2. Brand familiarity is also included as a Level 1 predictor since more favorable attitudes are likely to be held by consumers when faced with familiar brands (Diamantopoulos, Schlegelmilch and Palihawadana, 2011).

Hierarchical linear modeling, with HLM v.8.0 software, was used to test the relevant cross-level effects (Castro, 2002; Hofmann & Gavin, 1998; Hox et al., 2017). Pseudo R² coefficients were calculated according to Bosker and Snijders (2011). Table 4 summarizes the specifications and equations of the various models tested. Level 2 stereotype dimensions, PBG, and PBL, were grand mean centered; brand familiarity was group mean centered; controls (age and gender) were uncentered.

Insert Table 4 about here

Although our data set is of moderate size for the purposes of multi-level analysis ($N_{Level1}=84$, $N_{Level2}=10$), there is evidence that "estimates of the regression coefficients are unbiased, even in if the sample is as small as 10 groups of five units" (Maas and Hox, 2005, p. 91). Relevant psychometric information and descriptive statistics for all Level 1 and Level 2 variables in our model can be found in Table 5.²

Insert Table 5 about here

Estimation results are presented in Table 4. We first tested the intercept-only model (Table 4, Equation 1) with an overall brand attitudes mean of 5.33 that differs significantly from 0 (Hox *et al.*, 2017); the inter-class correlation coefficient came to 0.08, indicating that 8% of total variance in consumer attitudes is explained at the brand level (Level 2).

Insert Table 6 about here

 $^{^{2}}$ Care should be exercised in interpreting the correlations at Level 2 since the relevant constructs capture the *incidence/frequency* with which warmth or competence is highlighted in each brand-related stereotype and not the *strength/magnitude* of the dimensions. For example, the -0.72 correlation between brand stereotype warmth and competence indicates that the more often warmth is depicted in the ads of a brand, the less often is competence depicted (and vice versa).

We then assessed a baseline specification, that is, the regression-based model in a multilevel context (Table 4, Equation 2). Consistent with prior literature (e.g., Batra et al., 2000; Davvetas et al., 2015), all three Level 1 predictors are positively and significantly related to brand attitudes; perceived brand localness ($\gamma = 0.33$, p <0.001), brand familiarity ($\gamma = 0.26$, p <0.001) and perceived brand globalness ($\gamma = 0.13$, p <0.05). The baseline model explains 15% of the variance in brand attitudes.

Next, we examined the direct cross-level effects of the warmth dimension (of all three stereotypes) on brand attitude as captured by the cross-level model (Table 4, Equation 3). The results show that brand warmth positively influences brand attitudes ($\gamma = 0.14$, p <0.05) and that brand buyer/user warmth is negatively related to brand attitudes ($\gamma = -0.10$, p <0.05) over and above the influences of the Level 1 antecedents. This model explains 29% of the variance in brand attitudes, which almost doubles the explanatory power in comparison to the baseline model.

We then repeated the analysis by testing the cross-level effect of the competence dimension (again of all three stereotypes) on brand attitudes (Table 4, Equation 3). Brand competence is positively related to brand attitudes ($\gamma = 0.20$, p < 0.05) as is brand origin competence ($\gamma = 0.10$, p < 0.001), while brand buyer/user competence is negatively related to brand attitudes ($\gamma = -0.39$, p < 0.05) – again, over and above the influences of the Level 1 antecedents. The explanatory power (28%) of the model is comparable to the warmth-based model. None of the control variables were significant in any of the models tested.

In summary, the multi-level analysis reveals that both warmth and competence have notable diagnosticity in shaping consumers' brand attitudes. Moreover, when tested independently, the two dimensions demonstrated comparable levels of explanatory power in accounting for variance in brand attitudes.

5. CONCLUSIONS

Our study extends current knowledge on brand-related stereotypes by explicitly linking the content of (multiple) stereotypes depicted in print advertisements to consumer responses as captured by their attitudes towards the brand. Regarding the warmth dimension, our findings show that the nature of its impact depends on *which* particular stereotype is communicated. Specifically, warmth has a positive influence when associated with the brand stereotype but a negative influence when it relates to the brand buyer/user stereotype. The latter finding is broadly aligned with Antonetti and Maklan (2016, p. 796), who argue that "warm groups are not envied and envy plays a central role in fueling a desire to emulate a consumption group".

The diagnosticity of the competence dimension has often been highlighted in previous studies (e.g., Gidaković et al., 2022; Halkias et al., 2016; Kolbl et al., 2020) and our findings add to this rich body of research. In this context, while our resultd show that brand-, and brand origin competence both positively influence brand attitudes, brand buyer/user competence negatively impacts brand attitudes. It can thus be speculated that consumers do not like companies to "impose" who their typical brand buyers/users are and that stereotypical perceptions of brand buyers/users are perhaps "spontaneously" formed through social interactions during brand use. Having said that, given that brand buyer/user stereotypes represent a very under-researched area (see Antonetti & Maklan, 2016; Saracevic, 2018 for exceptions), our findings should be treated with caution. and subjected to further research.

From a managerial perspective, our study offers insights regarding which brand-related stereotypes and stereotypical dimensions to employ in marketing communications and highlights that emphasizing buyer/user stereotypes may actually prove counterproductive.

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Figure 2: Multi-Level Model Specification



	WARMTH YES	WARMTH NO	TOTAL
COMPETENCE YES	3 (15.65)	76 (63.35)	79
COMPETENCE NO	18 (5.35)	9 (21.65)	27
TOTAL	21	85	106

Table 1:	Stereotype	Content:	Brand	Stereoty	pes
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Notes: Observed values are shown in cells, while expected values are listed in brackets.

Table 2: Stereotype Content: Brand Buyer/User Stereotypes

	WARMTH YES	WARMTH NO	TOTAL
COMPETENCE YES	1 (4.39)	13 (9.61)	14
COMPETENCE NO	31 (27.61)	57 (60.39)	88
TOTAL	32	70	102

Notes: Observed values are shown in cells, while expected values are listed in brackets.

Table 3: Stereotype Content: Brand Origin Stereotypes

	WARMTH YES	WARMTH NO	TOTAL
COMPETENCE YES	1 (0.82)	20 (20.18)	21
COMPETENCE NO	3 (3.18)	78 (77.82)	81
TOTAL	4	98	102

Notes: Observed values are shown in cells, while expected values are listed in brackets.

Table 4: Multi-Level Model Specifications and Equations

	Description	Specification
Equation 1	Intercept-only model	$BATT_{ij} = \gamma_{00} + u_{0j} + r_{ij}$
Equation 2	Baseline model	$BATT_{ij} = \gamma_{00} + \gamma_{10} * PBG_{ij} + \gamma_{20} * PBL_{ij} + \gamma_{30} * BFAM_{ij} + \gamma_{40} * CON_{ij} + u_{0j} + r_{ij}$
Equation 3	Cross-level model	$BATT_{ij} = \gamma_{00} + \gamma_{01} *BS(W/C)_{j} + \gamma_{02} *BOS(W/C)_{j} + \gamma_{03} *BBS(W/C)_{j} + + \gamma_{10} *PBG_{ij} + \gamma_{20} *PBL_{ij} + + \gamma_{30} *BFAM_{ij} + \gamma_{40} *CON_{ij} + u_{0j} + r_{ij}$

Notes: BATT_{ij} is brand attitude (dependent variable) for observation i in group j, γ_{00} is the fixed regression coefficient for the intercept of the regression equation, u_{0j} is the random regression coefficient for the intercept of the regression equation for group j, r_{ij} is the observation- and group-specific residual, PBG_{ij} is perceived brand globalness (Level 1 predictor) for observation i in group j, PBL_{ij} is perceived brand localness (Level 1 predictor) for observation i in group j, BFAM_{ij} is brand familiarity (Level 1 predictor) for observation i in group j, CON_{ij} is representing a vector of controls – age and gender (Level 1 controls), γ_{10} is the fixed regression coefficient for the main effect of PBG_{ij}, γ_{20} is the fixed regression coefficient for the main effect of BFAM_{ij}, γ_{40} is the fixed regression coefficient for the effect of vector of controls CON_{ij}, BS(W/C)_j represents brand warmth or competence for group j, γ_{01} is the fixed regression coefficient for the main effect of BFAM_{ij}, γ_{40} is the fixed regression coefficient for the main effect of BS(W/C)_j, BOS(W/C)_j represents brand origin warmth or competence for group j, γ_{02} is the fixed regression coefficient for the main effect of group j, γ_{01} is the fixed regression coefficient for the main effect of BS(W/C)_j, BOS(W/C)_j represents brand origin warmth or competence for group j, γ_{02} is the fixed regression coefficient for the main effect of the main effect of the main effect of the main effect of BBS(W/C)_j.

		Mean (SD)	α	Min	M	Correlations					
Ħ	Construct				Max	1	2	3	4	5	6
Level I	! (n = 84)										
1	Perceived brand globalness - PBG	4.92 (1.73)	0.80	1.00	7.00	1.00					
2	Perceived brand localness - PBL	4.02 (1.66)	0.71	1.00	7.00	-0.51***	1.00				
3	Brand familiarity	5.37 (1.39)	-	1.00	7.00	0.07	0.26^{**}	1.00			
4	Brand attitude	5.33 (1.35)	0.87	1.00	7.00	-0.03	0.36***	0.42***	1.00		
5	Gender	0.45 (0.50)	-	0.00	1.00	0.02	0.05	-0.04	0.08	1.00	
6	Age	34.94 (13.40)	-	21.00	83.00	-0.09	0.09	0.22^{**}	0.09	0.07	1.00
Level 2	2(n=10)					8	9	10	11	12	13
8	Brand origin stereotype – warmth	0.30 (0.67)	-	0	2	1.00					
9	Brand origin stereotype - competence	2.00 (3.09)	-	0	10	-0.05	1.00				
10	Brand stereotype – warmth	1.80 (1.73)	-	0	6	-0.46	-0.35	1.00			
11	Brand stereotype – competence	7.60 (1.26)	-	5	10	0.16	0.17	-0.72**	1.00		
12	Brand buyer/user stereotype - warmth	3.10 (2.33)	-	0	8	-0.37	-0.32	0.25	-0.44	1.00	
13	Brand buyer/user stereotype - competence	1.30 (1.06)	-	0	3	0.02	0.68^{**}	-0.40	0.35	-0.60^{*}	1.00

Table 5: Descriptive Statistics and Psychometric Information for Level 1 and Level 2 Constructs

Notes: $\alpha = Cronbach's alpha; *** p < 0.001, ** p < 0.05, * p < 0.1; two-tailed significance test; Level 2 constructs coding addressed the presence/absence of the stereotype dimension in an ad, and since 10 ads of each brand were evaluated, the relevant range is from 0 to 10.$

Constant	Baseline Cross		-level models	
Constructs	Model	Warmth	Competence	
Level 1 – fixed effects (γ)				
Laton ont	5.14***	5.15***	5.07***	
Intercept	(0.56)	(0.54)	(0.47)	
Controls				
Candan	0.22	0.24	0.26	
Gender	(0.28)	(0.29)	(0.26)	
A ~~	0.01	0.01	0.01	
Age	(0.02)	(0.02)	(0.01)	
Main effects				
Derasived brend globalness	0.13**	0.08^{**}	0.11	
referived brand globalliess	(0.05)	(0.04)	(0.09)	
Democired brand localness	0.33^{***}	0.36***	0.30**	
Perceived brand localitiess	(0.10)	(0.09)	(0.17)	
Drand familiarity	0.26^{***}	0.25^{***}	0.25^{***}	
Brand fammarity	(0.07)	(0.07)	(0.07)	
Level 2 – fixed effects (γ)				
Main effects				
Brand staraotype warmth		0.14^{**}		
Brand stereotype – warmin		(0.06)		
Brand origin stereotype – warmth		0.10		
Brand Origin sereotype – warmin		(0.11)		
Brand huver/user stereotype – warmth		-0.10**		
brand buyer/user screetype warmin		(0.04)		
Brand stereotype – competence			0.20^{**}	
brand sereotype competence			(0.09)	
Brand origin stereotype – competence			0.10^{***}	
Brund offgin sereotype – competence			(0.04)	
Brand buyer/user stereotype – competence			-0.39**	
			(0.19)	
Model information				
Pseudo R ²	0.15	0.29	0.28	
Deviance (-2 log likelihood)	283.39	284.83	289.29	

Table 6: Multi-Level Analysis Results

Notes: Brand attitudes are dependent variable; Coefficients are unstandardized; n (Level 1) = 84; n (Level 2) = 10; *** p<0.001, ** p<0.05;(one-tailed); Standard errors are shown in brackets.