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# Diverse and inclusive representation in online advertising: An exploration of the current landscape and people's expectations

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## Abstract

Although there have been numerous studies about underrepresentation and misrepresentation of people in advertising, most have focused on traditional channels such as television, print, and radio, rather than on digital channels. In this paper, we seek to contribute to the body of knowledge by utilizing a mix of quantitative and qualitative methods to explore people's attitudes toward diversity in online advertising, the current state of representation, and the impact of diversity on digital campaign performance. Our work includes a consumer survey, analysis of Facebook ads, and brand lift studies.

The findings reveal that certain groups are underrepresented in online advertising and that stereotypes continue to be present in campaigns. The research also suggests that people want more inclusion in online advertising, that more frequent and positive portrayals of underrepresented and diverse groups has a measurably positive impact on business outcomes, and that today's advertisers have a powerful opportunity to communicate and change behavior.

## Introduction

Advertising is key to how brands convey their identities; promote their products and services; and attract, engage and retain consumers. Often campaigns include portrayals of people in order to tell stories, evoke emotions and compel actions. These depictions do not always reflect their lived experiences and their communities, nor do they always accurately portray their subjects. For example, ads may fail to include members of underrepresented groups or they may rely on stereotypes. On the other hand, by including

accurate, nuanced and diverse portrayals in their campaigns, advertisers can provide visibility and empower marginalized groups, combat negative stereotypes, and have a positive impact on society.

The pervasiveness and impact of underrepresentation and misrepresentation in advertising and media has been studied in depth. Some examples include examinations of representations in television (Gerbner & Signorielli, 1979; Gerbner et al., 1993; Gerbner et al., 2002), depictions of women in print (e.g., Courtney and Lockeretz, 1971; Belkaoui and Belkaoui, 1976; Mager and Helgeson, 2011), and depictions of ethnic groups in advertising overall (Grier and Brumbaugh, 1999).

However, to our knowledge, only a few studies have focused on diversity in online advertising to look at representation through the lens of its impact on business outcomes using scientific methodologies (e.g., Aggiunti, 2018).

This investigation aims to further the exploration of underrepresentation and misrepresentation in online advertising by taking a multipronged approach. Our efforts included a survey of 1,200 consumers, an analysis of more than 1,000 Facebook video ads, and a review of more than 1,200 brand lift studies. The core goals of our research were to look at the ways that people are currently depicted in online advertising, to understand what people expect from businesses in terms of diversity in campaigns and to see the business impact when advertisers increase representation. While there are many potential forms of diversity in advertising, we focused primarily on gender, sexual orientation, ethnicity and people with disabilities in order to narrow the scope of the research.

## Methodology overview

In order to explore diverse representation in online advertising, the following hypotheses were tested:

- Stereotypes and underrepresentation are present in online advertising;
- People have favorable attitudes toward diverse representation in advertising;
- Having more diverse representation in online ads has a positive business impact.

Our research efforts consisted of three parts: A creative analysis, a consumer survey and a review of brand lift studies. These three approaches were undertaken because they complemented each other and promoted triangulation. Mixed methods enabled us to explore the hypotheses through the lenses of creative choices, audience sentiment and business outcomes.

Both qualitative and quantitative methodologies contributed to provide insights into the research questions. Here we provide an overview of each element; for more details please see the full methodology in the appendix.

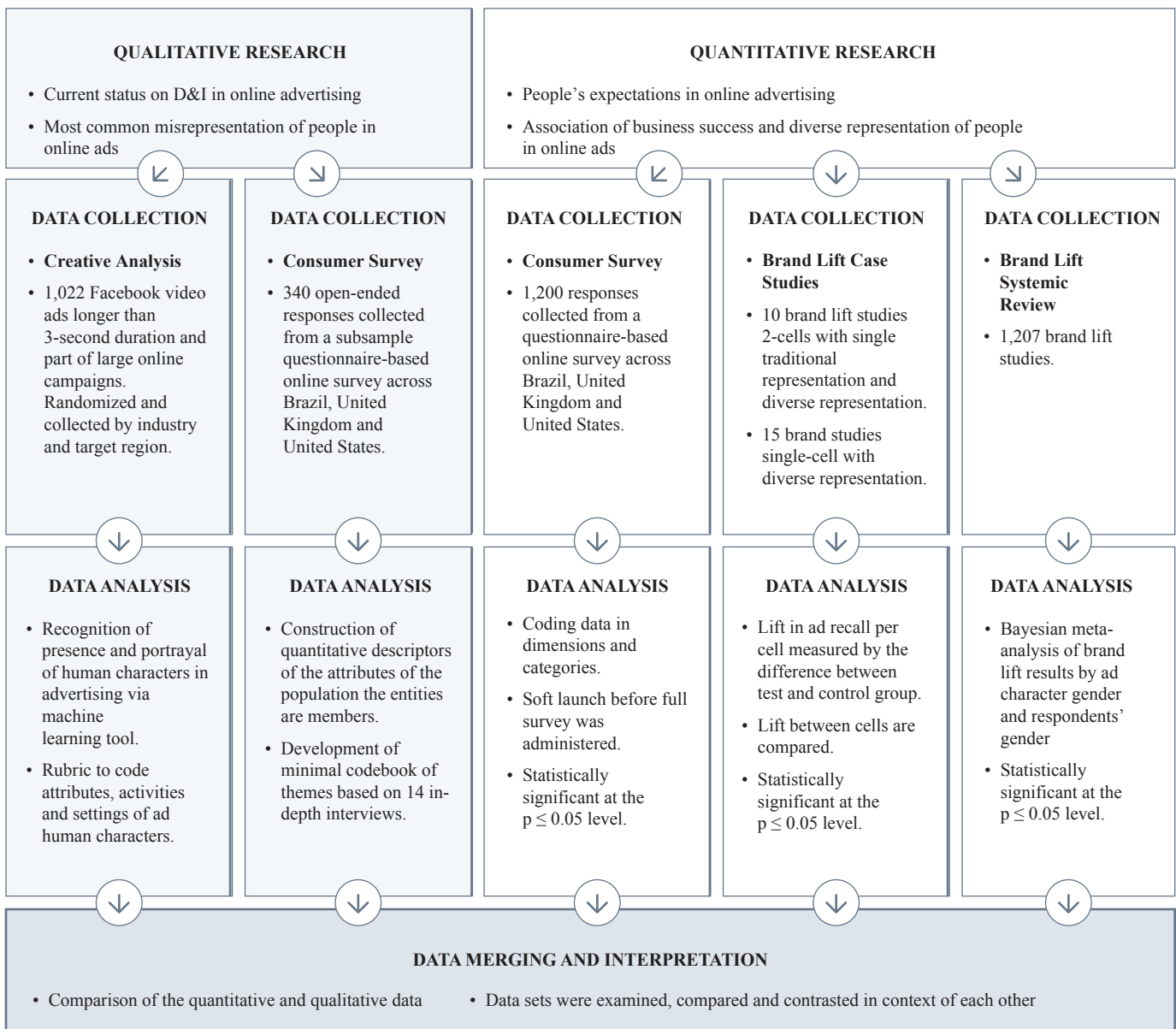


Figure 1: Convergent parallel mixed methods design

## CREATIVE ANALYSIS

In partnership with the Geena Davis Institute on Gender in Media at Mount Saint Mary's University, a non-profit organization that researches representation in media, we examined a sample of global Facebook online video ads (N=1,022). These News Feed-based ads were part of large campaigns and provide a general picture of online advertising. Each ad was analyzed using a machine learning tool, then randomly assigned to one of 11 researchers. The aim was to assess the way people in the ad were depicted (e.g., intelligent, humorous), the activities the people were engaging in (e.g., cooking) and the location in which they were shown (e.g., office).

## CONSUMER SURVEY

A 10-minute online questionnaire developed by the Facebook Research team was administered to 1,200 participants ages 18 and older in Brazil, the United Kingdom and the United States who use Facebook regularly. Respondents were surveyed on their opinions and perceptions of diversity in online advertising. The sample balance reflected each country's population distribution for gender, age, region and ethnicity.

In addition to responding to the exploratory questions with multiple-choice options, a subset of participants (n=340) provided additional details in three free-text boxes with no character limit. This delivered a deeper qualitative perspective on negative stereotypical representations in online advertising.

## BRAND LIFT STUDIES

We examined the results from 25 Facebook brand lift studies—randomized control tests that measure the impact of advertising on brand outcomes—across Automotive, Consumer Packaged Goods, E-commerce, Entertainment and Media, Finance, Retail, and Technology advertisers in order to understand the incremental effect of having diverse and inclusive representation in online campaigns. The key metric looked at was ad recall lift, a measure of how likely people are to say they recall seeing an ad after being exposed to it.

In addition, a global meta-analysis of Facebook Brand Lift studies (N=1,207) was conducted to better understand the relationship between people's identification with the content of an online ad and lift in ad recall. Gender was the focus of this examination.

## Results

### CREATIVE ANALYSIS

A stereotype can be described as an image of a person derived culturally rather than based on experience (Lippman, 1922). Similarly, portrayals in media and advertising can be distorted stereotypes, which can lead to inaccurate perceptions.

The results of the investigation of Facebook video ads in partnership with Geena Davis Institute indicate that **limiting and stereotypical representations are present in online advertising.**

For example, the creative analysis found these gender-based issues:

- Women are 14.1x more likely than men to be shown in revealing clothing, 6.9x more likely to be visually or verbally objectified and 6.1x more likely to be shown in a state of partial nudity. Moreover, they are 4.8x more likely to be shown as very skinny, reinforcing unrealistic expectations of women's bodies. This enhanced attention on women's bodies rather than on their full persons can reinforce the perception of women as objects (Nussbaum, 1995).
- Men are 2.4x more likely than women to be presented as angry and 1.4x less likely to be shown as happy. This idea of restrictive emotionality can reinforce the perception that the only acceptable emotion for men is anger and can have a negative impact on men's mental health. (Levant, 1995).
- Men are 1.3x more likely than women to be shown working and 1.6x more likely to be shown in the office. On the other hand, women are 2x more likely to be depicted in situations related to the household such as cooking and caregivers. These depictions can reinforce the stereotypical expectations that men are the primary providers for the family while women are in the home.

In addition to stereotypical portrayals in ads (misrepresentation), another key issue can be underrepresentation. This is a failure to depict groups as they truly fit into society, which can lead to feelings of exclusion. As researchers Gerbner and Gross (1976) put it: "Representation in the fictional world signifies social existence; absence means symbolic annihilation."

The creative analysis revealed that underrepresentation is an issue in online advertising as well. For example, people with disabilities are severely underrepresented in online ads (present in only 1.1% of the ads examined) as are members of the LGBTQ+ community (0.3%).

Even when groups are represented in online advertising, the depictions can be improved. For example, characters of diverse ethnicities in the United States are 2.1x more likely to be shown at sporting events and 2.9x more likely to be shown working out than white characters. Although this isn't inherently negative, when groups are represented more in certain situations and underrepresented in other roles, stereotypes can be reinforced (Kidd, 2015).

CATEGORY	FINDING
WOMEN	Female characters are 14.1x more likely than male characters to be shown in revealing clothing, 6.9x more likely to be visually or verbally objectified and 6.1x more likely to be shown in a state of partial nudity or to be physically objectified.
	Female characters are 4.8x more likely than male characters to be shown as very skinny.
	Female characters are 2x more likely than male characters to be shown cooking and to be depicted as primary caregivers.
MEN	Male characters are 1.3x more likely than female characters to be shown working, and 1.6x more likely to be shown in the office.
	Male characters are 2.4x more likely than female characters to be shown angry, and 1.4x less likely to be shown as happy.
DIVERSE ETHNICITY	Characters of diverse ethnicity are 2x less likely than white characters to be shown as a member of a family, and 1.9x less likely to be shown driving.
	Characters of diverse ethnicity in the US are 2.9x more likely than white characters to be shown working out*, 2.1x more likely to be shown at sporting events*.
PEOPLE WITH DISABILITIES	Only 1.1% of all characters analyzed had some form of cognitive or physical disability.
LGBTQ+	Only 0.3% of all characters analyzed were represented as part of the LGBTQ+ community.

\*Data available only for the US.

Table 1: Representation of people in online ads according to Geena Davis Institute's analysis. All reported differences are statistically significant at the .05 level.

## CONSUMER SURVEY

Among the 1,200 online survey participants in Brazil, the United Kingdom and the United States, **the majority (54%) say they do not feel fully culturally represented in online advertising and most (64%) say they would like to see more diversity in online advertising.** More than a quarter (27%) say they often see online ads with stereotypical representations of people.

Members of diverse groups often feel most impacted. For example, Latino and Black Americans are 1.8x more likely to say they see stereotypical representation in online ads.

Some 41% of respondents report seeing sexualization or partial state of nudity of women in online ads, and 48% report seeing women's bodies represented in unrealistic ways. Just over a quarter (26%) report seeing people who are overweight, introverted or from diverse ethnic backgrounds depicted as comical or lazy.

When a subset of respondents was asked to freely describe the negative representations encountered in online advertising, most responses concerned nine key areas: Age, body, culture, household, income, race, religion, sexualization and transgression.

## Representation Themes

<b>Sexualization</b>	BR: Women are shown as sex symbols to attract consumer attention. UK: Gay and trans people are sexualized or shunned. US: Women are only seen as sexy rather than independent and intelligent.
<b>Transgression</b>	BR: Members of diverse communities are portrayed in ads related to violence and criminality. UK: Members of diverse communities are portrayed as gangsters. US: Members of diverse communities are shown breaking the law.
<b>Household</b>	BR: Women are shown as dependents and men are shown as incapable of doing house and family chores. UK: Men are shown as inept and disconnected from their families. US: Women are shown as housewives, with perfect families and houses.
<b>Body</b>	BR: People often look the same, usually with white skin and straight hair. UK: Beauty is idealized and shown unrealistically. US: There is a lack of diverse body types.
<b>Age</b>	BR: The elderly are represented as extremely frail and dependent. UK: The elderly are nearly always represented as being frail. US: Older people are represented as being in need of a makeover.
<b>Income</b>	BR: Diverse groups are often shown living in poverty. UK: In work situations (e.g., offices), every person is white. US: Diverse groups are used to show lower income profiles.
<b>Religion</b>	BR: Religious people are shown without integrity. UK: Catholics and Muslims are represented in negative ways. US: Jewish people are shown to be greedy.
<b>Race</b>	BR: There are prejudiced jokes related to skin color, hair, gender and body type. UK: White people are featured more often rather than a mix of races. US: Most diverse groups are shown in ads about having struggles (e.g., financial).
<b>Culture</b>	BR: There is a lack of cultural diversity in ads. Everything is standardized. UK: Culture is misappropriated. US: There are parodies based on race and accents.

Table 2: Examples of negative stereotypical representations in the online ads according to respondents

Consumers believe advertisers should address issues with representation, with nearly three-quarters (71%) agreeing with the statement: “I expect brands to promote diversity and inclusiveness in their online advertising.”

When brands do address representation, it has a wide range of positive effects, including driving purchases and loyalty. Some 61% of consumers say they believe brands seem more authentic when they bring diversity to their online advertising, 59% say they are more loyal to brands that stand for diversity and inclusion in online advertising, and 59% say they prefer to buy from brands that stand for diversity and inclusion in online advertising.

**I believe brands seem authentic when they bring diversity into their online advertising.**

ALL	US	UK	BR
61%	58%	47%	79%

**I am more loyal to brands that stand for diversity and inclusion in online advertising.**

ALL	US	UK	BR
59%	54%	48%	74%

**I prefer to buy from brands that stand for diversity and inclusion in online advertising.**

ALL	US	UK	BR
59%	52%	50%	74%

Table 3: Opinion survey

**BRAND LIFT STUDIES**

In the first phase of our lift analysis, we compared ad recall for Facebook campaigns that included diverse representation with control groups as well as product category and regional baselines.

Of the 15 campaigns featuring diverse representation examined, nine had much higher ad recall compared with the control group and 13 had higher ad recall compared with the category and regional baselines. These findings suggest that online campaigns with more diverse representation tend to have higher ad recall.

**Diverse representation campaigns: Test and control groups**

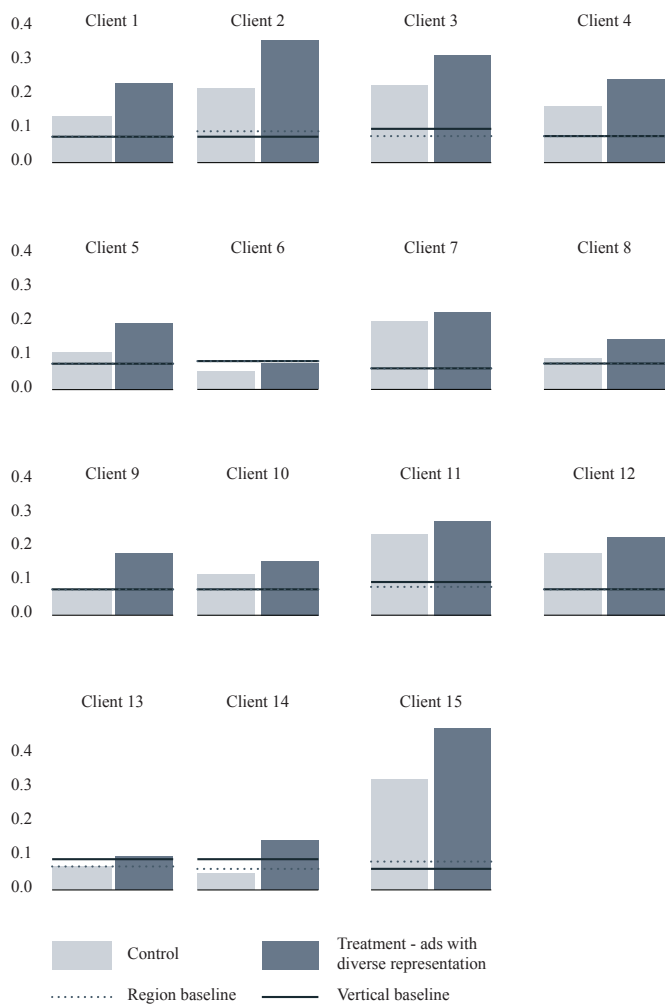


Figure 2: Ad recall lift results from 15 campaigns with diverse representation and the baseline by region and vertical (product category)

In phase two, we compared ad recall lift results of campaigns with diverse representation with those for ads featuring a single traditional representation.

Again, **we observed a higher lift in ad recall for campaigns with diverse representation:** Of the 10 brands examined, eight had an ad recall lift of 1.5 points or higher—some garnering as high as 5.8 points—with diverse campaigns compared with campaigns featuring a single traditional representation.

In addition to ad recall, we examined other metrics such as favorability, message association, message recall, preference and purchase intent. Campaigns featuring diverse representation often outperformed campaigns featuring a single traditional representation by these measures as well.

BRAND	CATEGORY	ADDITIONAL AD RECALL LIFT FOR CAMPAIGNS WITH DIVERSE REPRESENTATION	ADDITIONAL LIFT METRICS FOR CAMPAIGNS WITH DIVERSE REPRESENTATION
		(compared with campaigns with a single traditional representation)	(compared with campaigns with a single traditional representation)
1	Consumer Packaged Goods	+2.4pt* additional lift in Ad Recall	+0.9pt* additional lift in Message Association
2	Consumer Packaged Goods	+4.5pt* additional lift in Ad Recall	+3.4pt* additional lift in Purchase Intent
3	Automotive	+1.8pt* additional lift in Ad Recall	+4.3pt* additional lift in Favorability
4	Automotive	+5.8pt* additional lift in Ad Recall	+2.8pt* additional lift in Favorability
5	Consumer Packaged Goods	+0.3pt additional lift in Ad Recall	+1.1pt* additional lift in Message Association; +1pt* additional lift in Purchase Intent
6	Consumer Packaged Goods	+3.3pt* additional lift in Ad Recall	+0.8pt* additional lift in Message Association
7	Consumer Packaged Goods	+3.3pt* additional lift in Ad Recall	+9.2pt* additional lift in Purchase Intent
8	Finance	+1.6pt* additional lift in Ad Recall	
9	Automotive	No additional lift in Ad Recall	
10	Consumer Packaged Goods	+3.3pt* additional lift in Ad Recall	+1.2pt* additional lift in Message Recall

\*Difference between test and control group is statistically significant: Chance of brand lift 90% or greater.

Table 4: Ad recall comparison between 10 campaigns with diverse and single traditional representation

In order to further understand the effects of running online campaigns featuring diversity over those featuring a single traditional representation, we conducted a Bayesian analysis on 4,000 simulations. **In more than 90% of the simulations, diverse representation was the winning strategy for ad recall lift.**

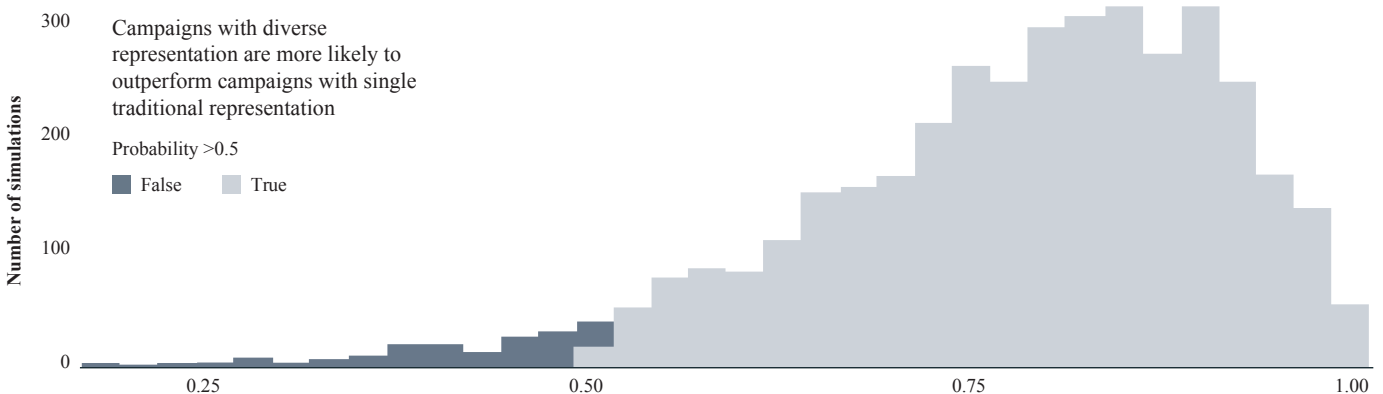


Figure 3: Probability of diverse representation campaigns outperform single traditional representation campaigns

In phase three, we ran a meta-analysis of brand lift studies on ads featuring male and female characters, which were targeted at specific genders to observe the impact on ad recall. The results indicate **people seem to better recall online advertising featuring characters similar to themselves**: Women tended to have higher ad recall for ads with female characters and men tended to have higher recall for ads with male characters. The results are statistically significant, though it should be noted many other factors were not explicitly manipulated. Therefore, the outcome of this analysis should be considered exploratory and serve as a complement to the other research elements.

### Representation in ads

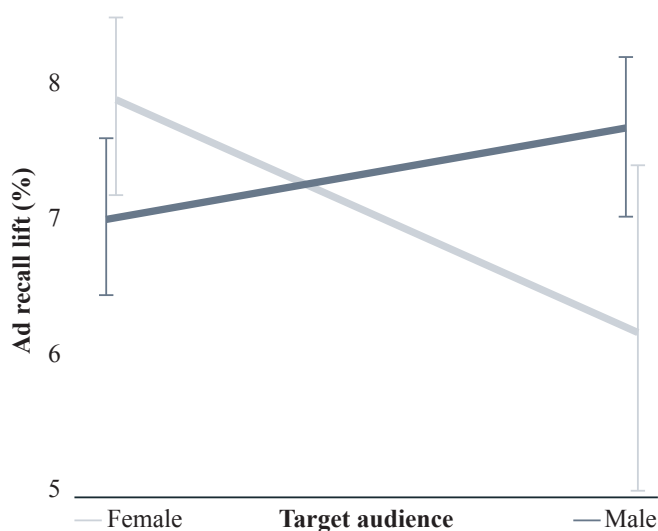


Figure 4: Interaction between audience target gender and gender representation on ads

### Conclusion

To recap, some of the key learnings from our quantitative and qualitative studies include:

- Misrepresentation and underrepresentation are present in online advertising;
- Many people, especially those who are part of diverse groups, do not feel that they are authentically represented in advertising today;
- Consumers want brands to feature more diversity, equality and inclusion in advertising. They say they are more likely to be loyal to brands that make these efforts;
- Increasing diversity and inclusion in online advertising tends to increase ad recall.

The research reveals that digital channels, like traditional channels, currently face challenges with misrepresentation and underrepresentation. By leveraging these insights when planning new campaigns, brands can turn to data-driven approaches to measure and promote inclusive representation throughout the development process.

It's everyone's responsibility to speak up about bias and stereotypes, and the online advertising industry has a powerful opportunity to make campaigns more inclusive, empowering, accurate and effective by moving away from limiting and negative stereotypes and by increasing the diversity of people featured in ads. In doing so, brands will be creating stronger connections, nurturing positive perceptions and—most importantly—making a positive impact on society.



## Appendix

### ACKNOWLEDGEMENTS

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## FULL METHODOLOGY

### Creative Analysis

The examination of a sample of global Facebook online video ads (N=1,022) assessed the presence of diverse representation of people in ads, and the characteristics of the narrative in which they were portrayed. The ads were analyzed using GD-IQ, a machine learning based tool from the Geena Davis Institute, and then randomly

assigned to one of 11 researchers. These researchers assessed the way people in the ads were depicted (e.g., intelligent, humorous), the activities they were engaging in (e.g., shopping, cooking) and the location in which they were shown (e.g., kitchen, office)

Intercoder reliability tests were performed to assess the accuracy of representations and to ensure members of the research team reached agreement on evaluations. Intercoder reliability was achieved in terms of both absolute agreement and Cohen's Kappa measures.

### Consumer survey

A 10-minute online questionnaire developed by the Facebook Research team was administered to 1,200 participants ages 18 and older in Brazil, the United Kingdom and the United States who use Facebook regularly. Respondents were surveyed on their opinions and perceptions of diversity in online advertising. The sample balance reflected each country's population distribution for gender, age, region and ethnicity.

In addition to responding to the exploratory questions with multiple-choice options, a subset of participants (n=340) provided additional details in three free-text boxes with no character limit. This delivered a deeper qualitative perspective on negative stereotypical representations in online advertising.

Prior to the analysis, a codebook was created to facilitate organization of the dataset. This codebook was developed in partnership with a research vendor which conducted 14 in-depth interviews with participants, and it was used to help determine the direction and themes covered by the survey respondents.

### Brand lift studies

Between 2018 and 2019, a set of brands across Automotive, Consumer Packaged Goods, E-commerce, Entertainment and Media, Finance, Retail, and Technology implemented randomized controlled studies using test and control groups to understand the incremental effect of having diverse and inclusive representation of people incorporated in ads. The audience was randomly split into two groups: People who saw the advertising and people who were intentionally held back from seeing the advertising.

Test and control groups were equivalent and comparable across demographics features and received identical survey polls consisting of business-related questions. The difference in responses between these groups was calculated to compare the campaign performance over time. Each test and control group was considered a “cell.”

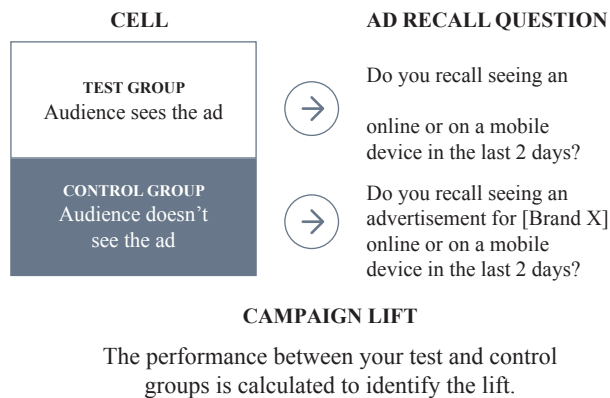


Figure 5: Lift study design

The key metric for comparison was Ad Recall Lift, a measure of how likely the two audience groups—the cell exposed to the advertising and the cell not exposed—said they recalled seeing the campaign.

This investigation consisted of two phases:

**Phase one: One cell**

Fifteen brands ran advertising campaigns that reached tens of millions of people on Facebook across Asia-Pacific, Europe, North America, and Latin America. Each brand ran one campaign with a diverse representation of characters. A sample of people exposed to those campaigns (N=42,000) was randomly assigned to the test group or the control groups, and the ad recall lift between people exposed to the campaign and people not exposed to the campaign was calculated. The ad recall lift achieved by the campaign with diverse representation was compared to the ad recall baseline by vertical (product category) and region the ads were targeted.

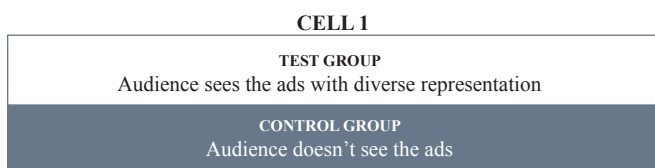


Figure 6: One-cell lift study design for campaign with diverse representation

**Phase two: Two cells**

Ten brands ran advertising campaigns that reached tens of millions of people on Facebook across Asia-Pacific, Europe, North America, and Latin America. Each brand ran two campaigns: One campaign with characters with diverse representation and another with a single traditional representation.

- *Single traditional representation:* Ads featuring a specific character profile the brand uses regularly (e.g., male actors only)
- *Diverse representation:* Ads featuring characters the brand does not use regularly (e.g., a combination of male and female actors)

The variable of interest for the test was creative representation. All other variables remained constant (objective, target audience, optimization, dates, etc.) ensuring that the variable of interest was sufficiently isolated.

A sample of people exposed to those campaigns (N=41,327) was randomly assigned to test or control groups, and the business results of campaigns portraying diverse characters and single traditional characters was measured.

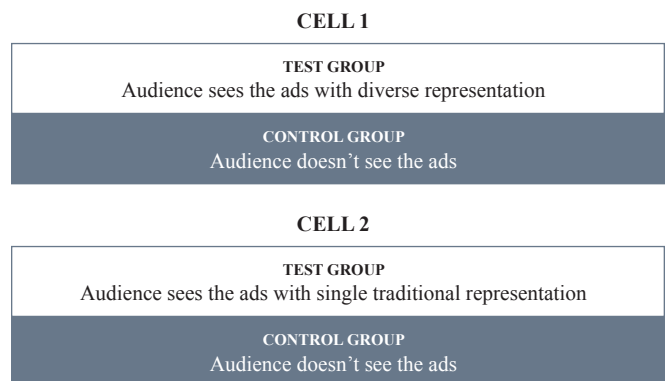


Figure 7: Two-cell lift study design comparing the results of campaigns with diverse representation and single traditional representation

**Phase three: Global meta-analysis**

A global meta-analysis of Facebook Brand Lift studies from 2017 and 2018 was also conducted using Bayesian meta-regression model to better understand the relationship between people’s identification with the content of advertising and recall. The unit of analysis was gender expression because this variable was simpler to identify in the ad than other

variables of comparison. Gender was coded, analyzed and interpreted based on the ways people presented themselves through visuals, actions and demeanors.

A random sample of global Facebook campaigns (N=1,207) was analyzed using regression modeling to assess whether there was a significant interaction between gender representation and ad recall lift.