

#NOTBUYINGIT



REPRESENTATION IN SUPER BOWL ADS FROM 2012-2022

THE REP PROJECT

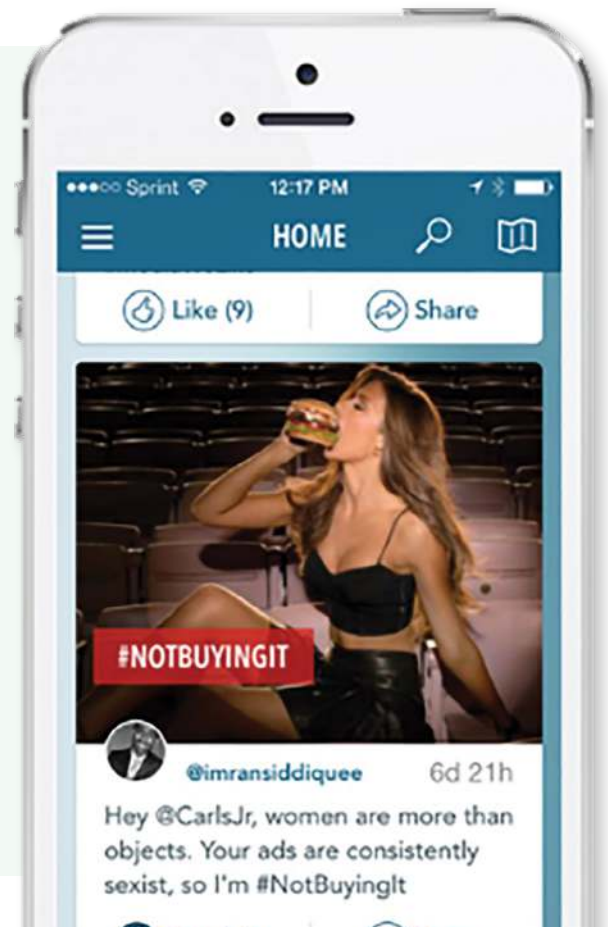
2023

The Super Bowl commands the largest audience of any annual event each year, and has become a major cultural event, as much for the commercials as the game. This report is the first to analyze representations of gender, race, sexuality, ability, age, and body size in Super Bowl ads from the past decade. Furthermore, this study is also the first to employ machine-learning analysis to measure representations in Super Bowl ads.

The primary question of this research is, how inclusive are Super Bowl ads when it comes to representations of women, BIPOC (Black, Indigenous, and people of color), LGBTQ+ individuals, people with disabilities, people ages 50+, and fat¹ people? This is the first study to analyze this range of identities. We find that while some progress has been made in terms of gender and race, we have a long way to go when it comes to achieving equitable representation across marginalized groups. We present our key findings below and analyze them further in the full report.

KEY FINDINGS

- We saw a significant improvement in women's representation in Super Bowl ads over the last decade, but men characters still outnumber women characters (58% compared to 42% in 2022).
- Our 2013 #NotBuyingIt campaign to improve gender representations in Super Bowl ads produced a major shift in ad content in the years that followed.
- BIPOC representation in Super Bowl ads improved considerably in the past decade, and 52.2% of characters were BIPOC in 2022 ads.
- LGBTQ+ people remain underrepresented in Super Bowl ads (1% compared to 7.1% of the US population).²
- Disability representations are virtually non-existent in Super Bowl ads (0.9% compared to 26% of the US population)³, and every single ad with a disabled person in 2021 and 2022 depicted them as harmful stereotypes.
- Americans ages 50+ are underrepresented in Super Bowl ads (10.2% compared to 34.2% of the US population).⁴
- Fat characters are exceedingly underrepresented in Super Bowl ads (6.2% compared to 42.5% of the US population),⁵ and one-in-four ads with fat characters in 2022 perpetuated harmful stereotypes (23.1%).



INTRODUCTION

This report is the first study to examine representations of gender, race, sexuality, ability, age, and body size in Super Bowl ads from the past decade. These ads are the most watched and most expensive available. This is the first quantitative study to analyze so many different marginalized identities in Super Bowl ads. We analyze visually prominent speaking and non-speaking characters in Super Bowl ads from 2012-2022. This study is also the first to employ machine-learning analysis to measure representations in Super Bowl ads. We build on studies from previous decades to paint a picture of how ads aired during the final game of the National Football League (NFL) have shifted in the past thirty years.

Representations in Super Bowl ads are especially important to The Rep Project given our intensive efforts to improve them. In 2013, we ran a campaign to get Super Bowl advertisers to do better– to change their sexist depictions of women. Our #NotBuyingIt campaign called upon consumers to use their buying power to pressure advertisers to be less sexist. As part of the campaign, we created an app where gender justice activists were encouraged to post offensively sexist content all year round, with particular emphasis on the Super Bowl. The immense public pressure we mobilized during the 2013 Super Bowl led to a sea change in commercials aired during this important annual game.

We begin this report with a summary of previous research on representations in Super Bowl ads. We then present our findings and make recommendations for improving representations of marginalized people in future Super Bowl spots.

PREVIOUS RESEARCH

Millions of Americans are glued to their TV sets for the Super Bowl each year, as much for the game as the advertisements. These ads are particularly important to analyze when it comes to representation because more than 40% of households tune in to the big game each year,⁶ and ads run during this final game of the NFL season are the most expensive ads in the world.⁷ Data shows that women not only comprise around half of all Super Bowl viewers, but every aspect of the broadcast– from the game, to the halftime show, to the advertisements– holds women's attention better than men's.⁸ A recent study confirms that Super Bowl viewers are as interested in watching the commercials as they are in watching the big game.⁹

Several longitudinal studies shed light on gender and race representations in Super Bowl ads over time. The earliest study by Bonnie Drewniany examined gender depictions in Super Bowl commercials from 1989 - 2002.¹⁰ She found that 79% of commercials featured men in a leading role compared to just 21% of ads featuring women leads. She also confirmed that Super Bowl ads were rife with gender stereotypes: women portrayed as shopaholics and hypersexualized, and men portrayed as voices of authority.¹¹ Leonidas and colleagues analyzed gender depictions in Super Bowl ads in the following decade (from 1999 - 2009) and found that gender stereotypes persist and women remain underrepresented as leading characters in Super Bowl ads.¹²

A more recent study from Charles Taylor and colleagues analyzed Super Bowl ads from 2008 - 2017 and found that while overall representations of women and people of color have improved, these characters are seldom depicted in leading roles in ads.¹³ Men outnumber women as leads (86% compared to 14%), and white leads are disproportionately represented (86% compared to 10% of Black leads, 1.6% of Asian American leads, 1.4% of Latine leads, .4% South Asian leads, and .2% Middle Eastern leads). They also found that women characters and BIPOC in Super Bowl ads are often depicted in stereotypical ways.

To summarize, previous studies of Super Bowl ads find some improvement for BIPOC and women's representations in the past three decades, but they are still underrepresented and presented in stereotypical ways. This study provides an in-depth analysis of Super Bowl representations beyond gender and race from the past decade.

ANALYSIS

In this section, we present our findings on representations of women, BIPOC, LGBTQ+ people, people with disabilities, people ages 50+, and fat people in Super Bowl ads from 2012 to 2022. We present findings for quantity of representation (how often characters from marginalized groups appear) and quality of representation (whether marginalized characters are presented in stereotypical ways).

Gender

Women make up 50.8% of the US population, and half of the annual Super Bowl audience, but men characters still outnumber women characters in Super Bowl advertisements. We saw a sharp increase in women's representation from 2012 to 2013– the year we ran our #NotBuyingIt campaign, and an overall trend towards gender parity for the remainder of the decade.

When it comes to second-by-second time received on screen (i.e., “face time”), women characters account for an only 34.1% of screen time in Super Bowl ads from the last decade. This means that even though more women are being cast in visually prominent roles in Super Bowl ads, they are actually receiving less screen time than their men counterparts. With that said, we saw a sharp increase in women's screen time from 2012 to 2013, and an overall increase in years since, reaching a high of 40.7% in 2015 and nearly that percentage again in 2022.

Another way of understanding how Super Bowl ads signal the importance of various groups is the quality of their representation. We measure quality of representation by looking at tropes and stereotypes associated with each marginalized identity.

Prior to the launch of the #NotBuyingIt campaign in 2013, Super Bowl ads were known for their sexist depictions of women, including scantily clad models, “sexy” cat fights, depictions of naked women athletes, and frequent sexual objectification. In 2012, two-in-three advertisements that featured women included one or more gender stereotypes, gender slur, or sexist language (65.4%). The data are clear that our #NotBuyingIt led to a major shift. Ads in 2013 looked significantly better than ads in previous years, and 2013 marks the start of progress for gender representations. We see a steady decline in sexist Super Bowl advertisements throughout the decade, and in 2021, there were no sexist or stereotypical depictions of women characters in any Super Bowl ads!



FIGURE 1: CHARACTERS BY GENDER, 2012-2022

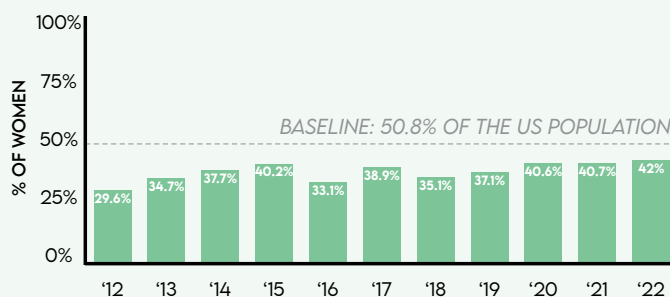


FIGURE 2: SCREEN TIME BY GENDER, 2012-2022

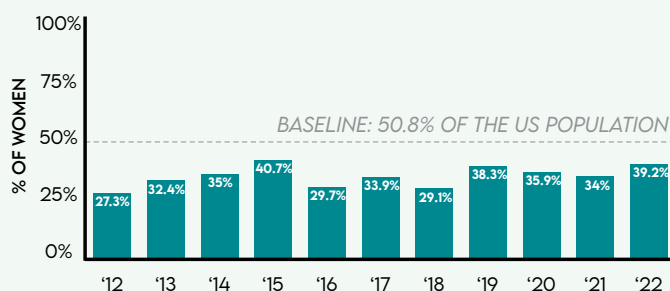
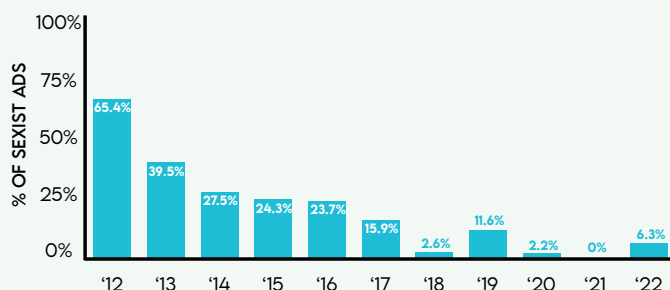


FIGURE 3: PERCENTAGE OF SEXISM IN ADS WITH WOMEN, 2012-2022



Intersectional Representation

Several longitudinal studies have explored representations of women in Super Bowl ads, but very little quantitative research has measured intersectional portrayals of BIPOC women, LGBTQ+ women, women with disabilities, women ages 50+, and fat women. We find some intersectional diversity when it comes to depictions of women with other marginalized identities.

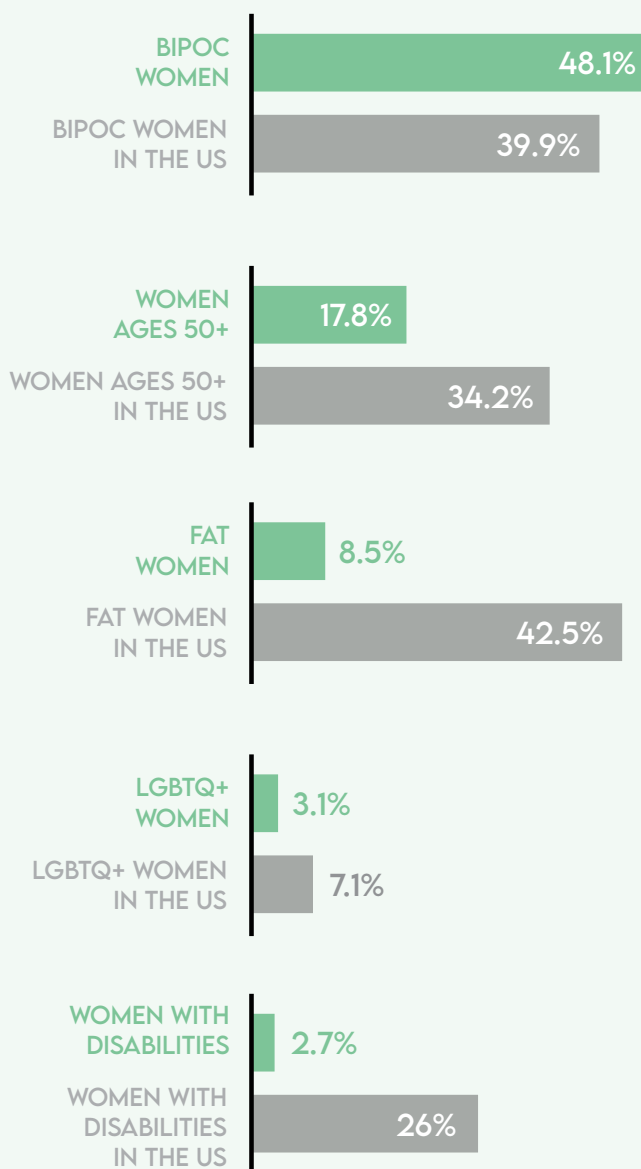
Out of all Super Bowl ads from the past decade with at least one woman character, nearly half feature BIPOC women (48.1%). This means that while women are underrepresented in Super Bowl ads overall, women of color are well-represented among ads featuring women characters. However, when BIPOC women appear, it is often in stereotypical ways. The most common tropes in Super Bowl ads are the “Angry Black Woman,” the “Geisha Girl” (Asian women), and the “Spicy Sexpot” (Latine women).

When it comes to age, 34.2% of women are ages 50+ in the broader population, but only 17.8% of ads with women feature women characters ages 50+. In other words, Super Bowl ads are not inclusive when it comes to older women’s representations. Additionally, older women are commonly presented with the “Technology Challenged” trope, an ageist trope that older adults are inept at using basic technology.

Fat women (8.5%), LGBTQ+ women (3.1%), and women with disabilities (2.7%) are also underrepresented in Super Bowl ads featuring women over the last decade. When it comes to the quality of representation for fat women, the most presented trope is the “Nympho,” a trope that portrays fat women as sexually insatiable and aggressive. Women with disabilities were commonly depicted as “Inspiration Porn,” a trope that depicts the life circumstances of people with disabilities as being an inspiration to people without disabilities.

FIGURE 4: INTERSECTIONAL BREAKDOWN OF SUPER BOWL ADS WITH WOMEN, 2012-2022

PERCENTAGE OF ADS WITH WOMEN THAT FEATURE



Race/Ethnicity

Although BIPOC characters have been underrepresented in Super Bowl ads for decades, we saw steady progress toward more equitable representation in the last decade. In 2021, BIPOC characters in Super Bowl ads achieved parity compared to the US population (41% compared with 39.9% of the US population).¹⁴ The 2022 Super Bowl featured the most BIPOC representation to date, with over half of visually prominent characters being BIPOC (52.2%).

We see similar progress when it comes to actual screen time for characters with medium and dark skin tones over the past decade. In 2012, characters with light skin tones (white characters) received more than three times as much screen time as characters with darker skin tones (76.6% compared to 23.4%). BIPOC characters achieved screen time parity compared to the US population by 2020 and have maintained that high level of representation since.

In 2012, one-in-five Super Bowl ads featuring BIPOC characters perpetuated a racist stereotype. We saw a significant decline in racist depictions of BIPOC characters in 2013, followed by progress over the course of the last decade. The most common racist stereotypes featured in Super Bowl ads are the depiction of Black characters as the “Magical Negro” trope, the “Minstrel” trope, and the portrayal of Black and Latine characters as “criminals.”

Sexuality

LGBTQ+ people are 7.1% of the US population but are underrepresented in Super Bowl advertisements. Almost no ads featured characters who are LGBTQ+ in the decade we analyzed. Representation peaked in 2020, with 4.4% of characters shown as LGBTQ+, but this figure has declined in the years since.

No ads from the last decade perpetuated homophobic or transphobic content. While this finding is encouraging, we believe the lack of problematic representation to be a function of Super Bowl ads largely erasing LGBTQ+ characters from the narrative.

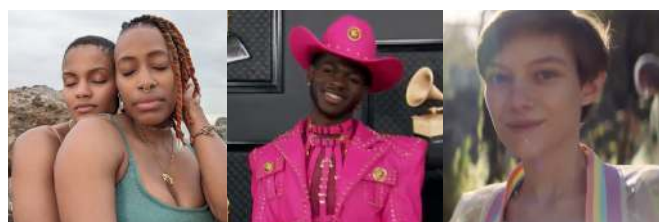


FIGURE 5: CHARACTERS BY RACE, 2012-2022

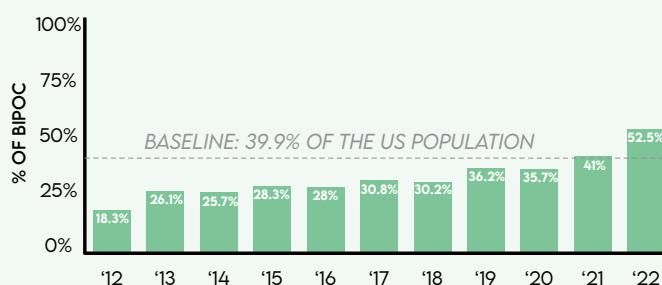


FIGURE 6: SCREEN TIME BY RACE, 2012-2022

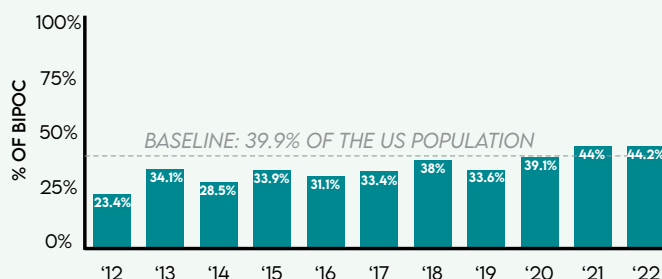


FIGURE 7: PERCENTAGE OF RACISM IN ADS WITH BIPOC, 2012-2022

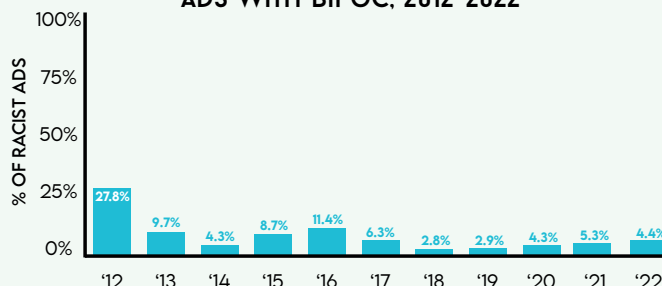


FIGURE 8: CHARACTERS BY SEXUALITY, 2012-2022

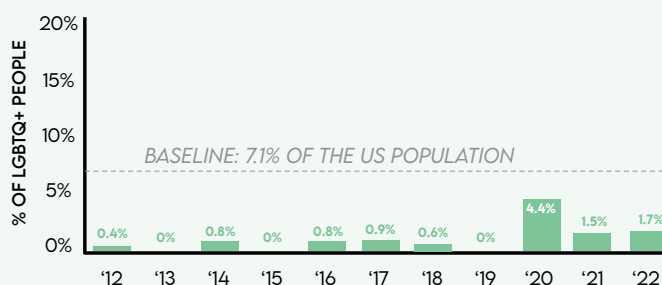
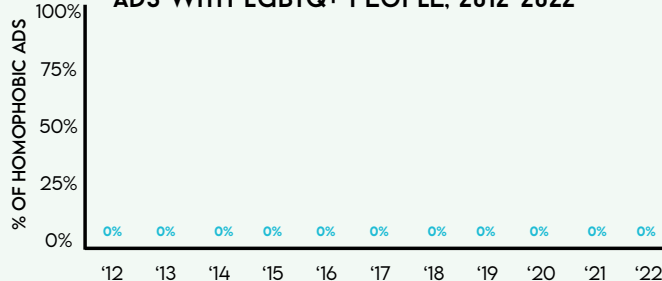


FIGURE 9: PERCENTAGE OF HOMOPHOBIA IN ADS WITH LGBTQ+ PEOPLE, 2012-2022



Disability

Even though one-in-four Americans have a physical, cognitive, communication, or mental health disability, characters with disabilities have been virtually erased from Super Bowl ads for the past decade. As shown in the figure below, disability representations are almost non-existent in Super Bowl ads.

While there were very few ads featuring characters with disabilities over the past decade, the majority of them perpetuated ableist stereotypes. Every Super Bowl ad in 2021 or 2022 that portrayed characters with disabilities used harmful stereotypes. Most commonly, characters with disabilities are portrayed as the “Butt of the Joke” trope, the “Inspiration Porn” trope, or they are referred to using an ableist slur.



Age

People ages 50+ make up 34.2% of the US population, but characters 50+ are underrepresented in Super Bowl ads. We have seen no real improvement in the last decade. Only about one-in-ten characters in Super Bowl commercials are older adults.

Similarly, when it comes to actual screen time, characters ages 50+ received an average of 11.8% of screen time between 2012 and 2022. We have seen no real improvement in the last decade when it comes to more inclusive age representations.

The figure below shows the percentage of ads featuring older adults that depict them in ageist ways. When older adults are depicted in stereotypical ways, the most common tropes are the “Technology Challenged” trope and the “Sickly” trope.

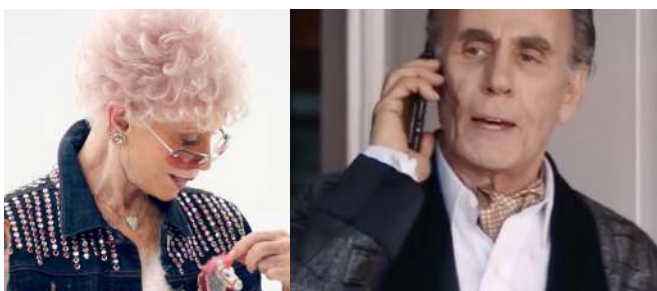


FIGURE 10: CHARACTERS BY DISABILITY, 2012-2022

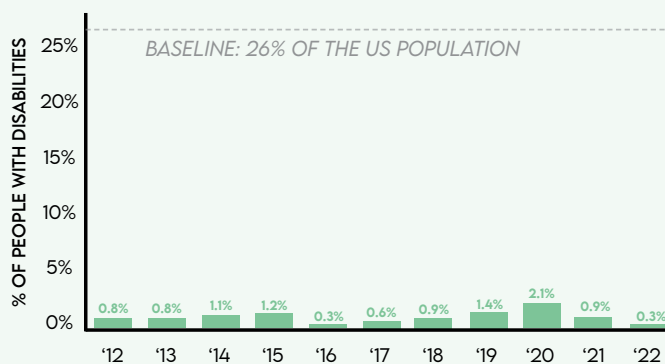


FIGURE 11: PERCENTAGE OF ABLEISM IN ADS WITH DISABLED PEOPLE, 2012-2022

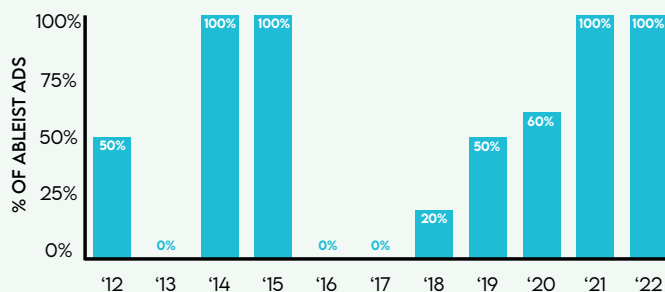


FIGURE 12: CHARACTERS BY AGE, 2012-2022

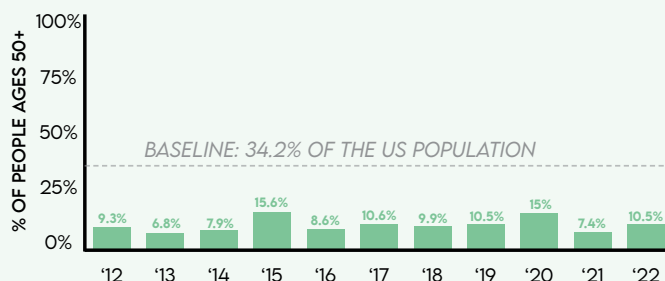


FIGURE 13: SCREEN TIME BY AGE, 2012-2022

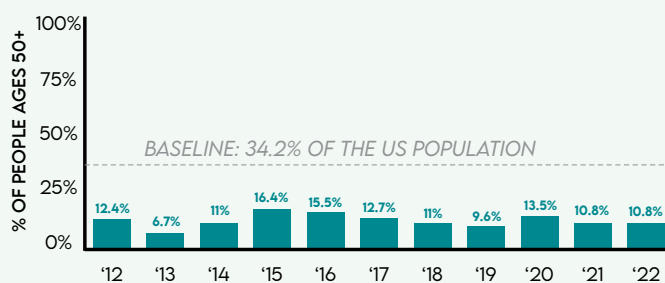
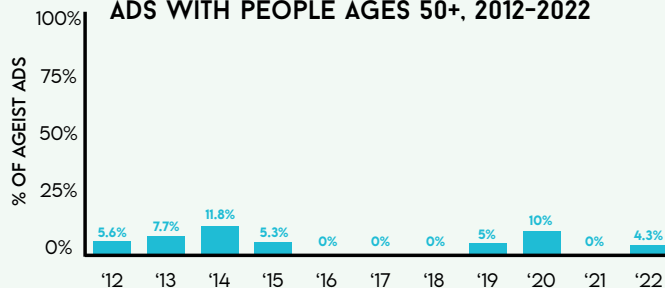


FIGURE 14: PERCENTAGE OF AGEISM IN ADS WITH PEOPLE AGES 50+, 2012-2022



Body Size

Over 40% of Americans are classified as fat by federal guidelines, but fat characters remain vastly underrepresented in Super Bowl ads. We have seen no real improvement in the last decade when it comes to body size inclusion.

When it comes to screen time, fat characters received an average of only 6.8% of screen time between 2012 and 2022. We have seen no real improvement in the last decade, despite the fact that four-in-ten Americans have a larger body type. This is a major gap in representation that is just starting to be recognized by advertisers and other media content producers.

When it comes to the quality of representation, one-in-ten ads featuring fat characters include sizeist tropes or stereotypes. Although we saw some progress in terms of humanizing representations of fat characters across the decade, in 2022, nearly one-in-four ads with fat characters perpetuated sizeist stereotypes. When ads contained sizeist content, they most often featured fat characters as the “Lazy” trope, the “Slob” trope, and the “Comic Relief” trope.



FIGURE 15: CHARACTERS BY BODY SIZE, 2012-2022

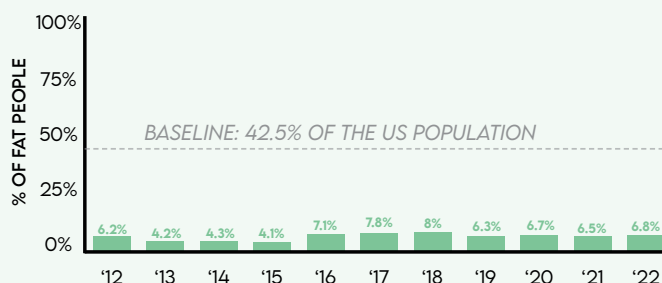


FIGURE 16: SCREEN TIME BY BODY SIZE, 2012-2022

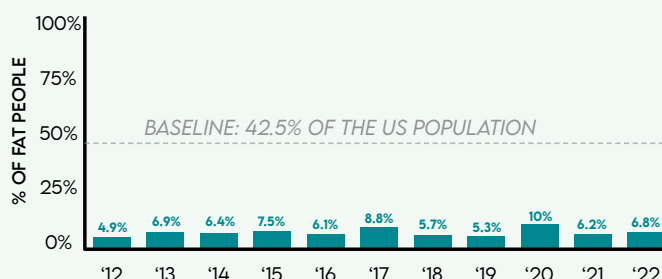
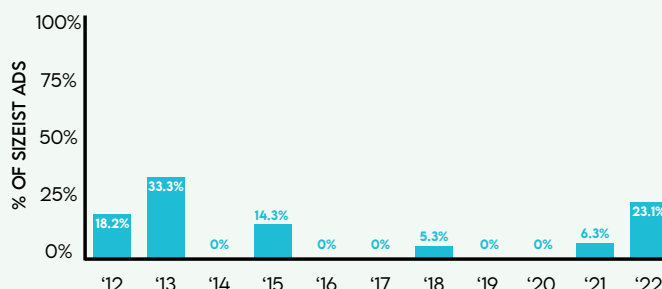


FIGURE 17: PERCENTAGE OF SIZEISM IN ADS WITH FAT PEOPLE, 2012-2022



CONCLUSION

Women and BIPOC have a long history of being erased and reduced to harmful tropes in Super Bowl ads. From depicting women as sexual objects to portraying BIPOC people as criminals, many studies have documented the Super Bowl's history of sexist and racist advertisements. Our study builds on this body of work. We find progress and stagnation in the past decade when it comes to inclusive representation.

On a positive note, our analysis demonstrates that Super Bowl ads feature more women and BIPOC characters, and portray them in less damaging ways, than a decade ago. The data reveal a significant shift away from sexist and racist advertisements after the launch of the Rep Project's #NotBuyingIt campaign in 2013.

While Super Bowl ads have come a long way in terms of better gender and race representations, they have a long way to go with representations of LGBTQ+ characters, characters with disabilities, characters ages 50+, and fat characters. These groups are not only underrepresented, when they do appear, it is often as a damaging stereotype or trope.

ACTION STEPS

FOR AD CONTENT CREATORS

- Hire underrepresented people as writers, directors, producers, and in other key decision-making positions.
- Write and produce advertisements that center the lives of women, BIPOC, LGBTQ+ people, people with disabilities, people ages 50+, and fat people.
- Commit to avoid gratuitously sexualizing women with camera angles in ads.
- Continue to depict women with meaningful storylines in ads that are taken seriously, avoiding sexist stereotypes (e.g., unintelligent, weak, hyperemotional, nagging, etc.).
- Continue to depict BIPOC with meaningful storylines that don't reduce characters to racist tropes (e.g., the "Gangster/Criminal," the "Magical Negro," the "Spicy Sexpot," etc.).
- Depict more people with physical, cognitive, communication, and mental health disabilities, without resorting to ableist language and stereotypes (e.g., inspirational, infantilized, embittered, etc.).
- Depict more LGBTQ+ characters in leading and supporting roles in Super Bowl ads.
- Depict more people ages 50+ without relying on tired ageist tropes (e.g., the "Tech-challenged," the "Senile," the "Creepy Grandpa," etc.).
- Depict more fat people in non-stereotypical ways in Super Bowl ads, and avoid making fat characters the "punchline."

FOR SUPER BOWL VIEWERS

- Use the hashtag #NotBuyingIt to call out sexist, racist, homophobic, transphobic, ableist, ageist, and sizeist advertisements, at the Super Bowl and beyond.
- Boycott brands that "punch down" and portray marginalized people in harmful ways.
- Support brands that go out of their way to prioritize inclusivity and positive representation for all marginalized people in their advertisements.



METHODOLOGY

Human Coding

Three researchers coded the Super Bowl ads in this study. Prior to fielding the study, the team engaged in 25 hours of training on general coding procedures and for this specific project. At the end of the training period, the team achieved interrater reliability to ensure that the coding was uniform. The coders analyzed 568 Super Bowl ads from 2012 to 2022. The team analyzed Super Bowl advertisements by accessing Ad Age's Super Bowl Ad Archive, which houses every Super Bowl advertisement (excluding movie and tv trailers) to air during a Super Bowl game.

Automated Coding

Using a multi-stage face detection and classification algorithm, we are able to use machine learning to analyze Super Bowl advertisements for screen time by gender, skin tone, age, and body size. The algorithm we used in this study consists of two distinct parts, the first being a YOLOv5 convolutional neural network integrated with a Deep SORT object tracker to both detect and track faces in video. We fine-tuned this model on a publicly available dataset, WIDER FACE,¹⁵ as well as a collection of hand-annotated data to be able to recognize a diverse set of faces in televised content. We then use each cropped face output from the object detection model as input into a multi-task classification network that aims to classify the identities of each face. We trained this model on refined sets of publicly available data, including refined subsets of both FairFace¹⁶ and UTKFace¹⁷ datasets, and another hand-coded dataset of faces collected from a collection of films, television, sports coverage, and advertisements.

We ran all Super Bowl advertisements aired from 2012 to 2022 through the algorithm and analyzed the quantity of coverage by segment for faces with high enough detection and classification confidence. For this report, the automated findings use faces as the unit of analysis, with the denominator for findings being every face shown throughout every frame of the advertisement. We filter down the number of considered faces to only those not in the background of a frame by only considering faces whose bounding box size is greater than a predetermined area. This removes faces from consideration that would be considered to be background characters (i.e. someone sitting in the far back stands of an arena, an out of focus character who briefly passes in the corner of the frame, etc.) and only leaves us with faces larger than this threshold.

GLOSSARY

STEREOTYPE: A commonly held, oversimplified idea of a group or person.

TROPE: A stereotypical storyline, narrative, or character.

INTERSECTIONAL: The theory that marginalized identity categories, such as race, class, gender, sexuality, etc., overlap in ways that create more intense experiences of discrimination or disadvantage than a single marginalized identity. This concept first emerged in the US in the 1830s and was coined by scholar Kimberlé Crenshaw in 1989.

REPORT AUTHORS



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ABOUT THE ORGANIZATION

The Representation Project is a leading global gender justice non-profit organization. We use films, education, research, and activism to challenge harmful gender norms and stereotypes. In 2011, Jennifer Siebel Newsom founded The Rep Project in response to the overwhelming public demand for ongoing education and social action in support of her first film, *Miss Representation*. Since then, Siebel Newsom has released two more acclaimed films, *The Mask You Live In* (2015) and *The Great American Lie* (2019). Her latest film, *Fair Play*, premiered earlier this year. The organization also runs a global youth filmmaker program to train the next generation of change agents. The Rep Project is also known for its impactful social activism campaigns, including #NotBuyingIt, #AskHerMore, and #RepresentHer.

FOR MORE, VISIT WWW.THEREPPROJECT.ORG



THE
REPRESENTATION
PROJECT

ENDNOTES

1. We are intentionally using the word “fat” because it is not an insult. We are part of a growing number of organizations and individuals reclaiming the word “fat.” We celebrate bodies in whatever form they come, with bumps, lumps, stretch marks, and curves.
2. Jones, J. (2022). LGBT Identification in U.S. Ticks Up to 7.1%. *Gallup*, April 13, <https://news.gallup.com/poll/389792/lgbt-identification-ticks-up.aspx>
3. Centers for Disease Control (2020). Disability Impacts All of Us. https://www.cdc.gov/ncbddd/disabilityandhealth/documents/disabilities_impacts_all_of_us.pdf
4. Joint Center for Housing Studies of Harvard University (2014). Demographics of an Aging America, https://www.jchs.harvard.edu/sites/default/files/jchs-housing_americas_older_adults_2014-ch2_0.pdf
5. Centers for Disease Control and Prevention (2018). FastStats: Obesity and Overweight, <https://www.cdc.gov/nchs/fastats/obesity-overweight.htm>
6. Wesley R. Hartmann and Daniel Klapper (2017). “Super Bowl Ads,” *Marketing Science*, 37(1), DOI: <https://doi.org/10.1287/mksc.2017.1055>
7. Hatzithomas Leonidas, Christina Boutsouki and Paschalina Ziamou (2016). “A Longitudinal Analysis of the Changing Roles of Gender in Advertising: A Content Analysis of Super Bowl Commercials.” *International Journal of Advertising*, 35(5), DOI: <https://doi.org/10.1080/02650487.2016.1162344>
8. Rob Salkowitz (2018). “Data Shows Women Paid More Attention To Super Bowl LII Than Men,” *Forbes*, February, <https://www.forbes.com/sites/robsalkowitz/2018/02/05/data-shows-women-paid-more-attention-to-super-bowl-lii-than-men/?sh=7de4244e5c4a>
9. Nathalie Tadena (2015). “Super Bowl Ad Prices Have Gone Up 75% Over a Decade,” *The Wall Street Journal*, January, <http://blogs.wsj.com/cmo/2015/01/12/super-bowl-ad-prices-have-gone-up-75-over-a-decade/>
10. Bonnie Drewniany (2003). “We’ve Come a Long Way Maybe: An Analysis of the Portrayal of Women in Super Bowl commercials from 1989 to 2002,” in *Images That Injure*, Paul Martin Lester and Susan Dente Ross, Eds. Westport: Praeger Publishers, 149-156.
11. Ibid.
12. Leonidas et al.
13. Charles R. Taylor, Alexander Mafael, Sascha Raithel, Carissa M. Anthony, and David W. Stewart (2019). “Portrayals of Minorities and Women in Super Bowl Advertising.” *The Journal of Consumer Affairs*, 53(4), DOI: <https://doi.org/10.1111/joca.12276>
14. United States Census (2019). Quick Facts, <https://www.census.gov/quickfacts/fact/table/US/PST045219>
15. Yang, S., Luo, P., Loy, C. C., & Tang, X. (2016). WIDER FACE: A Face Detection Benchmark. IEEE Conference on Computer Vision and Pattern Recognition (CVPR).
16. Karkkainen, K., & Joo, J. (2021). FairFace: Face Attribute Dataset for Balanced Race, Gender, and Age for Bias Measurement and Mitigation. Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision, 1548-1558.
17. Zhang, Z., Song, Y., & Qi, H. (2017). Age progression/regression by conditional adversarial autoencoder. Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition, 5810-5818.

HOW TO CITE THIS STUDY

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