

STITCHING REFUTATIONS: DEBUNKING MISOGYNY AND MISINFORMATION ON TIKTOK

**Kunjika Apurvabhai :: M. Riley Tinlin :: Leticia Bode :: Merielle Angelie Agorilla ::
Carol Balassa :: Evan Cain :: Randy Cantz :: Maria Fernanda Chanduvi :: Yanpei Chen ::
Yige Chen :: Giselle Guadiana :: Meghan Landsberg :: Hannah McDonnell ::
Bryan Murphy :: Kashaf Rashid**

ORIGINAL RESEARCH ARTICLE / DOI: 10.20901/ms.17.33.6 / SUBMITTED: 15.12.2025.

ABSTRACT *Misogyny, a deep-seated prejudice against women, thrives on misinformation. This study explores one approach to mitigating the effects of misogynistic misinformation on TikTok, a popular short-form video platform. Misogyny and associated misinformation have flourished on TikTok, fueled by user-generated content and algorithmic amplification. This preregistered experiment (N = 2,756) examined the effectiveness of different types of Stitch-based refutations. Specifically, we tested the impact of TikTok Stitches that varied in refutation approach (targeting misinformation, misogyny, or both) and the refuter's race (Black or White) and gender (presenting as a man or as a woman) on viewers' misinformation- and misogyny-related beliefs. The study employed a 3 × 2 × 2 factorial design, supplemented by a misinformation-only condition and a pure control condition, resulting in 14 experimental conditions. This project addresses a research gap by examining the intricate interplay among misogyny, misinformation, race, and gender within the context of TikTok's short-form video format. Our findings highlight the effectiveness of corrective Stitches of misinformation in countering misinformation across refuters from diverse intersectional identities, while also underscoring the difficulty of shifting misogynistic attitudes.*

KEYWORDS

MISOGYNY, MISINFORMATION, CORRECTION, TIKTOK, STITCH

Authors' note

Kunjika Apurvabhai :: Georgetown University :: ka913@georgetown.edu
M. Riley Tinlin :: Georgetown University :: mt1527@georgetown.edu
Leticia Bode :: Georgetown University :: lb871@georgetown.edu
Merielle Angelie Agorilla :: Georgetown University :: mga66@georgetown.edu
Carol Balass :: Georgetown University :: cb1495@georgetown.edu
Evan Cain :: Georgetown University :: emc321@georgetown.edu
Randy Cantz :: Georgetown University :: rc1574@georgetown.edu
Maria Fernanda Chanduvi :: Georgetown University :: mc2692@georgetown.edu
Yanpei Chen :: Georgetown University :: yc1096@georgetown.edu
Yige Chen :: Georgetown University :: yc1095@georgetown.edu
Giselle Guadiana :: Georgetown University :: gg741@georgetown.edu
Meghan Landsberg :: Georgetown University :: mll120@georgetown.edu
Hannah McDonnell :: Georgetown University :: hem81@georgetown.edu
Bryan Murphy :: Georgetown University :: bam164@georgetown.edu
Kashaf Rashid :: Georgetown University :: ktr31@georgetown.edu

INTRODUCTION

One form of character assassination involves gendered attacks (Shiraev et al., 2021). Misogyny – a deep-seated prejudice against women, manifesting as devaluation, discrimination, or hostility (Rottweiler & Gill, 2024) – is rooted in misinformation (U.S. Department of State, 2023). In recent years, misogynistic misinformation has found a new home in short-form video on the internet (Oladipo, 2023). TikTok, a platform for hosting and amplifying short-form videos, has skyrocketed in popularity in recent years, growing to at least 150 million U.S. users (TikTok, 2023), including 68% of teens (more than any other platform except YouTube, Faverio & Sidoti, 2025), and more than one billion global users (TikTok, 2025). Paralleling the rise in use, there has also been a rise in the production and dissemination of misogynistic content and misinformation on the platform (Regehr et al., 2024).

TikTok's viral nature creates an environment ripe for the dissemination of misogynistic misinformation, particularly regarding gender roles and women's rights, contributing to the erosion of factual understanding and perpetuating harmful societal norms (Regehr et al. 2024). One mechanism through which users refute misinformation on TikTok is the platform's Stitch feature, where users 'stitch' two videos together, generally in conversation with one another (Kasana, 2020; TikTok, 2024). For instance, the first user might make a claim about the dangers of a vaccine, and then a doctor, addressing that video, could correct the claim with information about vaccine safety and effectiveness (Law, 2021).

Research has consistently demonstrated the effectiveness of corrective refutations in combating misinformation (Walter et al., 2020; 2021), including experiments simulating TikTok (Bhargava et al., 2023; Heiss et al., 2024). However, there is a gap in the literature regarding the specific impact of Stitch-based refutations. Our project aims to explore this gap, considering various Stitch-based approaches to refutation of misogynistic misinformation.

While misinformation, misogyny, race, and gender have been studied individually and in relation to one another extensively, there is a dearth of research on the intersection of all four, particularly in online spaces like TikTok. Our project therefore seeks to provide a more complete understanding of how the identity of the corrector affects the endorsement of misinformation and misogynistic claims.

MISOGYNY

In its literal definition, misogyny refers to the hatred of women, but a generally accepted definition includes the dislike of and prejudice against women (Hyde & Nicks, 2018). Misogyny serves both as a consequence and an enforcer of gender roles, unfolding through a spectrum of attitudes and behaviors that overtly and subtly oppress women (Rudden, 2022; Srivastava et al., 2017). This attitude is often reflected within the norms of

patriarchy, which reinforces women's inferiority and justifies gender oppression (Manne, 2017; Srivastava et al., 2017).

Misogynistic attitudes are high, with 89.9% of men indicating at least *some bias* towards women (United Nations Development Programme, 2020). From a behavioral perspective, misogyny includes acts designed to control, police, and punish women who oppose male dominance, ranging from direct violence and derogatory statements to the perpetuation of systemic inequalities and cultural biases that restrict women's opportunities (Ahianté & Ndaguba, 2022; Manne, 2017). Fueled by hatred and a desire for control, misogynists often resort to violence to punish, silence, control, or oppress women who defy traditional gender roles or challenge the "patriarchal order" (UNDP, 2020; Padda, 2025). In short, misogyny is rampant, harmful to women, and perpetuates gender-based stereotypes, underscoring how important it is to curb misogynistic attitudes.

Misogyny Online

Misogyny online is related to technology-facilitated gender-based violence (TFGBV) – gendered violence that is conducted or mobilized using digital media (UNPF, 2023). While the widespread nature of misogyny online is reflective of misogynistic attitudes in the physical world (Horowitz et al., 2017), there are noticeable distinctions between how misogynistic behaviors manifest in the physical world and in the virtual world. TFGBV has been shown to have serious physical and emotional effects on women and often leads to offline violence (Regehr, 2022; UNPF, 2023). Online misogynistic rhetoric may allow for more extreme attitudes that defy standard social norms due to anonymity, lack of supervision, and the absence of any tangible accountability (Moloney & Love, 2018). Research shows that 46% of women have received "sexist or misogynistic comments as a form of online abuse" (Barker & Jurasz, 2019, p. 97).

Over the past decade, online platforms have been increasingly utilized to spread misogynistic ideas and to establish "manosphere" communities in which they gather as "men's rights activists" and "involuntary celibates" (also known as incels; Ribeiro et al., 2021). Men in these increasingly popular communities (Ribeiro et al., 2021) perceive women as the root cause of their unhappiness and regularly use violent, toxic, and misogynistic language. Through extended use design elements (Knight-Georgetown Institute, 2025), algorithms significantly increase the exposure of such harmful content to users (Ribeiro et al., 2021; Sahebi & Formosa, 2022), including users outside those communities. For example, TikTok's recommendation algorithms have been shown to escalate the visibility of misogynistic content (Regehr et al., 2024), despite the fact that the company's guidelines explicitly ban misogynistic content (Banet-Weiser & Maddocks, 2023).

MISOGYNY AND MISINFORMATION

There is a long, intertwining history between misinformation and misogynistic rhetoric. In the legal (and social) ecosystem, misinformation includes claims that women who have survived sexual violence are 'asking for it' or retroactively changed their minds (Grubb

& Turner, 2012). In medical spheres, women with chronic pain often struggle to receive treatment because they are said to be more sensitive to pain (Fillingim et al., 2009), more emotional (Côté & Coutu, 2009), more likely to complain (Werner et al., 2004), or hysterical – fabricating the pain entirely (Barsky et al., 2001). This idea of gendered sensitivity to pain is integral to our study, as the misogynistic misinformation we incorporate is the idea that women don't exercise because they cannot 'handle the pain.'

This idea that men are more equipped to deal with discomfort is not only misogynistic, but also rooted in misinformation. Studies show that testosterone not only reduces pain intensity (Li et al., 2023; Craft, 2007), but that women wait longer to report experiencing pain (Banco et al., 2022). In terms of physical fitness, though, exercise has also been historically gendered: for instance, women make up less than a quarter of weight room users (Norris, 2019) because they are intimidated by the male-dominated space, or fear they will get too bulky, losing their 'feminine physique' (Johansson, 1996).

This idea of a singular, inherently feminine physique is misogynistic in itself, built upon decades of unrealistic expectations of the female body. Studies have also found men to be more critical of women in fitness settings, with one study finding that men with misogynistic beliefs rated women's physical performances more harshly and selectively than the performances of other men (Schaefer et al., 2021). This gendered scrutiny around physical physique and performance reflects how misogynistic beliefs undermine evaluations of women, particularly in physically demanding or male-dominated environments.

INFORMATION CORRECTION

Spreading misinformation about women using pseudoscience and other techniques is an important facet of online misogyny. Given this reliance on misinformation, the question of how to combat misogyny is partly one of how to combat the misinformation upon which it is built. Evidence shows that corrective information can mitigate belief in misinformation (Walter et al., 2021; Wood & Porter, 2019), which is why we focus our efforts on refutation.

Most of the informational content on social media platforms comes from non-experts, and the quality of the information itself is often not evaluated before posting (Xue et al., 2022). The volume of content on social media has shifted the traditional, 'professional filter' of news delivery to a 'social filter,' where users disseminate information through their social networks (Grover, 2023). Such a shift increases the rate at which users are exposed to unverified information, and traditional fact-checking approaches are not equipped to deal with the spread of misinformation at this level (Grover, 2023).

This leads to an uptake in user-led debunking efforts (Micallef et al., 2020), including the use of the 'Stitch' feature. Studies have shown that exposure to corrective information

via TikTok videos is effective in decreasing false beliefs and strengthening factual beliefs (Bhargava, 2023; Heiss et al., 2024; MacDonald, 2022).

Bringing this all together, we would expect that participants who see corrective Stitches would have lower belief in whichever claim the Stitch is correcting. This brings us to our first set of hypotheses:

H1: Participants who see a refutation of the misinformation claim will believe the misinformation claim less than people who do not.

H2: Participants who see a refutation of the misogynistic claim will reject the misogynistic claim more than people who do not.

Finally, because misinformation correction research shows that multiple corrections are more effective (Sanderson et al., 2023), and given the intertwined nature of misinformation and misogyny, we hypothesize that:

H3: A refutation of *both* misinformation and misogynistic claims will be more effective than either alone at reducing a) belief in the misinformation claim and b) increasing rejection of the misogynistic claim.

IDENTITY

Given that misogyny is tied to gender and race, it is also critical to understand the impact of who is refuting the misinformation or misogynistic content. Socially constructed identities are reflected in “a set of persons marked by a label and distinguished by rules deciding membership and (alleged) characteristic features or attributes” (Fearon, 1999, p. 2). Research has shown that perceived similarity, such as facial similarity (manifesting through both the race and/or gender of the presenter), increases trust in the source (Farmer et al., 2013; DeBruine, 2002). This is relevant as correction research shows that perceived trustworthiness is even more important than expertise (Ecker & Antonio, 2021).

Gender Identity

Particularly relevant to misogyny is gender identity. Stereotypes and offensive generalizations based on identity influence how individuals make judgments about individuals who identify with or are identified with particular communities. For example, studies have shown that without additional contextual information, men automatically view women as “less assertive and less competent” in leadership roles (Hentshel et al., 2019, p. 1). A recent high profile case of this was gendered attacks on Kamala Harris during her presidential run in 2024 (Keohane et al., 2025).

In the context of information correction, misogynistic attitudes can manifest through the “gender credibility gap” – a variety of observed instances in which women are positioned as less credible than men (Newton, 2019). For example, one study (MacNell et al., 2014) showed that students rated an online professor as more confident when they believed “he” was a man. Another study (Larson & Brodsky, 2010) showed that juries were

more likely to believe evidence presented by male experts, especially if the expert is part of a traditionally male-dominated field (Schuller et al., 2005).

Racial Identity

Racial stereotypes are perhaps the most commonly tested stereotypes in social science research. For instance, in one study (Dovidio, 1986), researchers presented participants with stereotypes associated with Black and White individuals, and asked participants to determine if such characteristics were accurate, emphasizing how attitudes we hold about others are often rooted in misinformation. Following the experiment, researchers concluded that positive characteristics were more frequently linked to White individuals, and negative characteristics were more commonly associated with Black individuals. In another study (Banaji, 2021), researchers demonstrated how biases and stereotypes of Black Americans, such as associations with “negative valences, criminal stereotypes, and low status, including *animal* rather than *human*,” largely influence treatment towards this community (p. 1).

It should also be noted that gender and racial identities intersect in meaningful ways. For instance, when viewing a conversation between a supervisor and an employee, “participants were more likely to attribute the anger of Black female employees to internal characteristics, or her personality,” reflecting a common racial stereotype of the “Angry Black Woman” (Motro et al, 2022).

Social media has been shown to harbor hate speech using “misogynoir” – a term combining “misogyny” with “noir,” French for black – which targets Black women through both racism and sexism (Kwarteng et al., 2022). In particular, misogynoir is manifested through persistent stereotypes that Black women are aggressive, loud, or hypersexualized, and gender and race are salient identities experienced differently by various groups of people (Crenshaw, 1989). Since different identity-based characteristics affect people’s perceptions of others and their associated content, we test refutations from a White man, a White woman, a Black man, and a Black woman, and investigate their impact in two ways:

RQ1: How do the identity characteristics of the refuter – in terms of their (a) race and (b) gender – affect (1) belief in the misinformation claim and (2) rejection of the misogynistic claim?

RQ2: How does a respondent’s match with the refuter’s identity characteristics—in terms of (a) race and (b) gender—affect (1) belief in the misinformation claim and (2) rejection of the misogynistic claim?

METHODS

This study incorporates a between-subjects design, varying the message (refuting misogyny, refuting misinformation, refuting both), as well as the identity of the refuter (White/Black and woman/man), with one control group that sees only the original poster with no refutation, and one control group that sees only an unrelated video. It is

therefore a 3 (message) x 2 (race) x 2 (gender) design, plus two control conditions (14 total conditions). The design, hypotheses, research questions, and analysis plan were all pre-registered before data collection.¹

Materials

TikTok Video Template

We focused our study on TikTok primarily because of its widespread popularity and influence on the social dynamics of Generation Z (Stahl & Literat, 2022; Guinaudeau et al., 2022). As of December 2025, TikTok had over 1 billion global users (TikTok, 2025), including “power users” who spend more than four hours per day on the platform (Gilbert et al., 2025). TikTok’s ethos of open creativity has both nurtured a lively community and been a catalyst for the emergence of fresh modes of cultural expression and activism (Stahl & Literat, 2022). However, its design has also been criticized for being intentionally manipulative and addictive, referred to as “an addiction machine” in a recent lawsuit brought against the media giant (*Commonwealth of Kentucky v. TikTok, Inc.*, 2024).

In the 12 treatment conditions, the first half of the video featured a male-presenting poster ranting with misogynistic rhetoric (see Appendix A1 for a full transcript of the original poster’s video). This content was taken directly from a video online, which made both a misinformation claim (women don’t work out) and a misogynistic claim (women are reduced to their bodies, born with a responsibility to look good).

The second half of the video consists of a TikTok Stitch refutation (Kasana, 2020), addressing the misinformation claim (women don’t work out), the misogynistic claim (women are reduced to their bodies, born with a responsibility to look good), or both (see Appendix A2). While the script was intended to mimic discourse on TikTok, it is also informed by a number of empirical studies dismantling the sexist assumption that women are incapable of handling discomfort (Elgaddal, 2022; World Health Organization, 2022).

The original poster and refuters’ accounts feature neutral usernames, Sam3245876 and Alex123452874, respectively, which were chosen to mitigate any bias participants might have had about more gender – or race-evoking names. The hashtag #stitch is included in the caption to reflect the video’s format, a common practice on TikTok.

Refuters

To ensure treatments were believable, we hired four actors (mostly university students) – presenting as a White man, a Black man, a White woman, and a Black woman, respectively² – to read the three scripts we developed.

To limit potential confounding variables, each treatment was filmed in the same environment, against a neutral, well-lit background, in a vertical medium close-up with chest-up framing. This is meant to replicate the typical, casual filming style found on

¹ https://osf.io/xrdw7/?view_only=28a46c961137480a9bf8e528a0359760

² Manipulation checks showed that participants were aware of the refuters’ presented race and gender: 97.5% correctly identified the race of the refuter, and 99.1% correctly identified the gender.

TikTok. Each actor was provided with a gray t-shirt and asked to keep their hair away from their face.

To enhance the video's credibility, we encouraged the actors to employ a variety of nonverbal cues that signal intimacy, engagement, and trustworthiness, including maintaining eye contact and reducing head turns and hand movements (Kaisler & Leder, 2016). While actors' talking speeds varied, each take was under one minute to standardize the level of attention required from participants.

To ensure our actors' privacy, we generated artificial faces using two generative AI image programs.³ The actors consented to us using their voice with the AI-generated faces. AI-generated faces were evaluated by the researchers to ensure they were perceived as roughly equally attractive, neutral, and authentic. Those faces were then applied to the videos using a "deepfake" software, Rope-Opal (Hillobar, 2024).

A TikTok interface was overlaid on the video footage to ensure the most realistic experience for participants. Captions were included for both the original video and refutations, as was white text on a green background reading "Stitch incoming" for any of the treatment conditions, all of which are typical on TikTok.⁴

Study Participants

Participants were recruited from the online survey firm, Connect (CloudResearch, 2023). Participants received \$3 to complete the study, which we anticipated would take about 10 minutes based on pre-testing (the survey took an average of 9 minutes and 35 seconds per participant). Recruitment and data collection took place on April 23, 2024, and it took just over three hours to recruit our target of 2800 participants (roughly 200 per condition), all of whom had to be over 18, located in the United States, and able to complete the study on a computer rather than a mobile device.⁵

Participants were roughly evenly split by gender (48.9% men, 49.4% women, 1.8% third gender, non-binary, other, or preferred not to say), somewhat racially diverse (73.2% White, 12.8% Black, 10.3% Asian, 9% Hispanic, with roughly 2% other, unknown, or preferred not to say⁶), and the typical respondent was between 30 and 39 years old (the mean, median, and modal category of age). The sample overrepresents Democrats compared to the general U.S. population (47.3%), as is typical for online samples (Levay et al., 2016). It is also worth noting that the sample uses TikTok more than the general population – 65% of participants are at least occasional TikTok users, as compared to roughly 33% of the general U.S. population (Gottfried, 2024), which makes sense, given

³ Our initial software choice was unable to produce realistic faces of young Black women, which led to the use of a software specifically designed to generate Black faces. This is an important implication both for our study and general conversations around AI software and the biases it (re)produces.

⁴ Captions were written in Proxima Nova-Semibold with black text on a white background, one of the standard text configurations for user-created TikTok captions (Crawford, 2024).

⁵ During pretesting, we found that the videos did not display clearly on mobile devices. For this reason, we limited participants to completing the study on non-mobile devices, recognizing that this presents a trade-off in external validity given that most people access TikTok on mobile devices (Gelles-Watnick, 2024).

⁶ Note that these do not sum to 100% because the question allowed participants to choose multiple races.

that they were recruited from an online survey panel. For additional information about participant characteristics, please see Appendix B.

Participants were asked two attention check questions, one in the pre-test and one in the post-test. 44 of the 2,800 participants failed the first attention check, and their data was removed from analysis, following our pre-registration plan.⁷

Measurement

All study materials, including the pre-test, experimental videos, and post-test, are available in the pre-registration link in footnote 1.

The dependent variables in this study are *the belief in misinformation claims*, and *the rejection of the misogynistic claim*. Both were hidden in a larger battery of questions asking about politics and culture (e.g., “The government should cancel all student loans,” “There should be term limits for members of Congress,” etc.).

Belief in Misinformation Claim. Participants were asked to rate their level of agreement with the statement “Women don’t work out” using a 5-point Likert scale (from “Strongly disagree” to “Strongly agree,” so higher numbers reflect *greater* belief in misinformation, mean = 1.29, S.D. = 0.67).

Rejection of Misogynistic Claim. Participants were asked to rate their level of agreement with the statement “Women are held to impossible beauty standards,” using a 5-point Likert Scale (from “Strongly disagree” to “Strongly agree,” so higher numbers reflect *rejection* of misogyny, mean = 3.92, S.D. = 1.18).

Ethical Considerations for Participants. This study was approved by the Institutional Review Board at Georgetown University, protocol number STUDY00007778. While we did not collect any personally identifying information from participants, we were sensitive to the fact that our study involves information and language that may be potentially triggering. In particular, it may affect women because the focus of our study is rooted in misogynistic discrimination. For this reason, we included a content warning in our consent form before participants entered the study. Furthermore, for any potentially sensitive questions within the survey, we included the option “prefer not to say,” ensuring participants had full agency over what they disclosed.

Finally, to ensure there were no lasting effects of the misinformation or the misogyny in the videos, a debrief was conducted to inform participants of the manipulations in the experiment and to provide accurate information on the topic.⁸

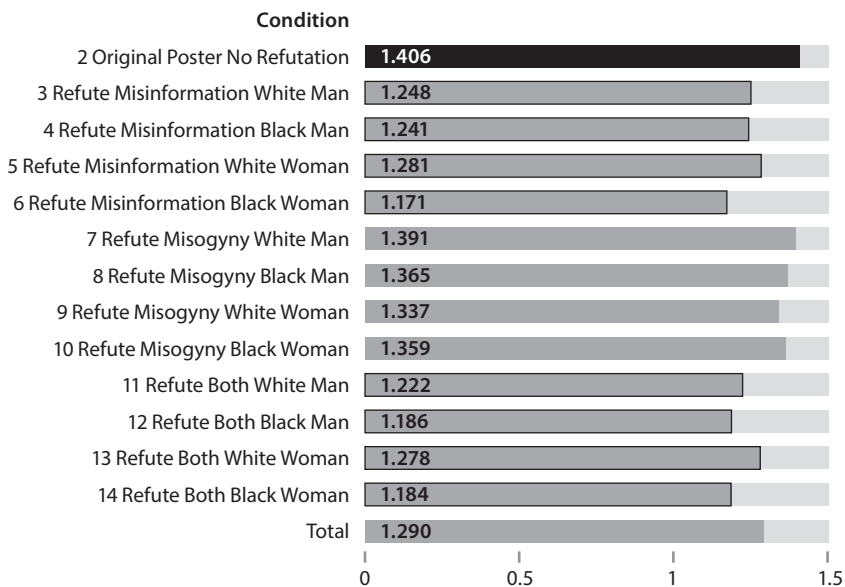
⁷ We used only the pre-test attention check to avoid post-treatment bias (Montgomery et al., 2018), but only 37 participants failed the post-test attention check, 18 of whom also failed the first. The attention check question was part of a randomized set of questions that included a racial resentment scale and filler questions about current events. Participants were instructed to select “strongly agree.”

⁸ See <https://osf.io/xrdw7/files/osfstorage> to view the full participant debrief.

RESULTS

Belief in misinformation claim

To test H1, we consider whether *misinformation* embedded in a misogynistic claim could be corrected. To test this, we estimated an ANOVA, appropriate for Likert scales such as the one used for these dependent variables (Norman, 2010). Specifically, we tested the impact of misinformation correction conditions compared to those that did not address the misinformation claim, with the outcome variable measuring belief in the statement that “women don’t work out.”⁹ It is worth noting that the sample overwhelmingly disagreed with this statement – even in the pure control condition, which can be thought of as a baseline belief, the mean was 1.4 on a 1 to 5 scale (the overall mean is 1.29, and 93.1% of the sample disagreed or strongly disagreed with the claim).



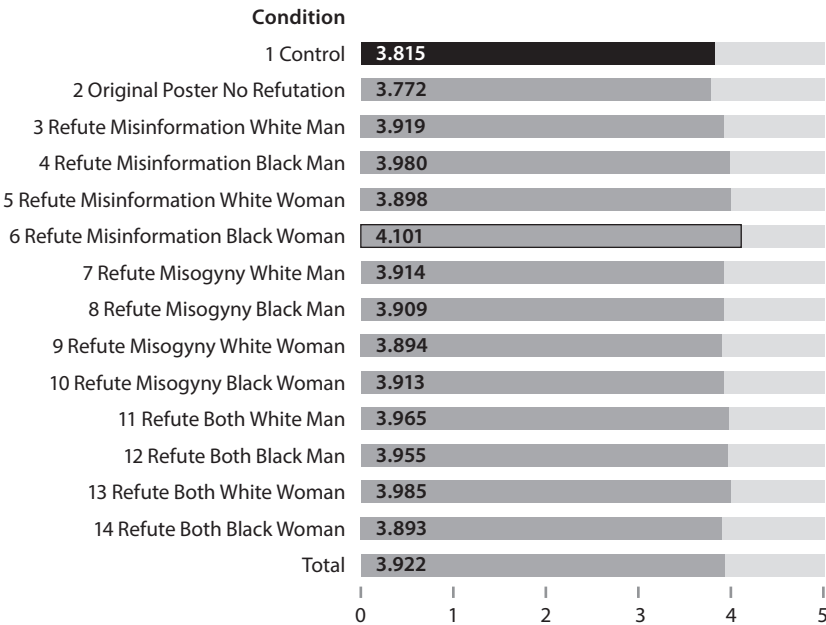
▲ Figure 1.
Mean Levels Endorsing the Statement, “Women Don’t Work Out”
Source: authors’ data. See text for more information.
Outlined bars are statistically significant from the control condition.

As seen in Figure 1, conditions that included a message refuting the misinformation successfully reduced belief in the misinformation ($F(1, 2756) = 34.70, p < .001$). These are substantively small but statistically significant impacts. The most effective correction came from a Black woman, reducing the mean belief in the misinformation statement from 1.40 in the control condition to 1.17 in the black woman correcting misinformation condition.

⁹ To facilitate interpretation, all analyses are presented graphically. Full regression results are available in Appendix C.

Rejection of misogynistic claim

We pursued the same strategy for H2, testing the impact of refutations that focus on misogyny, compared to those that did not. Once again, the sample showed a predisposition against endorsing the misogynistic idea of double standards for women, with an overall sample mean of 3.92 on a scale of 1 to 5 (where lower numbers reflect greater misogynistic beliefs) and the baseline control condition mean of 3.82.



▲ Figure 2.
Mean Levels Endorsing the Statement,
“Women are Held to Impossible Beauty Standards”
Source: authors’ data. See text for more information.

As seen in Figure 2, refutations of misogyny were not successful at increasing rejection of a misogynistic statement ($F(1, 2756) = 0.10, p = .75$). Indeed, no refutation of misogyny altered attitudes on this measure in a statistically significant way. Again, this may be due to a ceiling effect, given how willing our sample was to reject this misogynistic idea across the board.

Effects of race and gender of the refuter

To address RQ1, which asked whether the race or gender of the refuter affected the impact of their refutations, we ran a series of analyses.

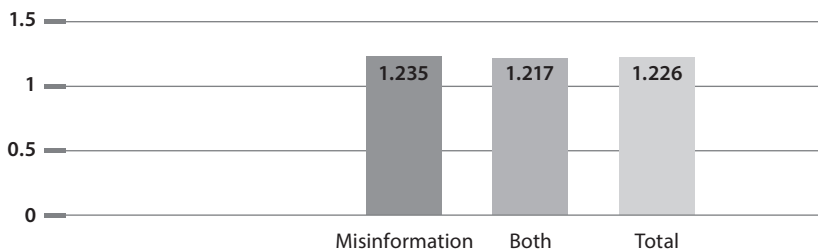
First, we estimated a regression predicting support for the misinformation claim, including covariates for whether the refutation came from a man or a woman, and whether it came from a Black or White person. Neither race ($\beta=.02$, $p=.45$) nor gender ($\beta=.02$, $p=.53$) of the refuter significantly predicted whether a participant endorsed the misinformation claim. The same was true for the misogynistic claim - neither race ($\beta=-.04$, $p=.15$) nor gender ($\beta=-.02$, $p=.47$) significantly predicted whether a participant rejected the misogynistic claim.

But perhaps these effects are not consistent, as we know that people respond differently to those they perceive as similar to themselves. For this reason, we also tested the impact of refuter characteristics matching characteristics of the participants (testing RQ2). Two variables reflected whether a participant matched the refuter – one for gender, and one for race. These were then included in two regressions estimating support for the misinformation claim and support for the misogynistic claim.

Matching a refuter's race did not impact support for the misinformation claim ($\beta=.01$, $p=.46$), nor rejection of the misogynistic claim ($\beta=.02$, $p=.36$). However, matching the refuter's gender seemed to play more of a role, significantly predicting support for the misinformation claim ($\beta=-.05$, $p=.01$), and coming close to significance in predicting support for the misogynistic claim ($\beta=.03$, $p=.12$). However, these effects were quite small.

Which refutation strategy works best?

Finally, we turn to H3, which proposed that a refutation of both misinformation and misogynistic claims will be more effective than either alone at reducing belief in the misinformation claim or rejection of the misogynistic claim. To test the first part of this hypothesis, we compared the misinformation beliefs of participants who were shown a refutation of misinformation versus those who were shown *both* a refutation of misinformation and misogyny. We did not find statistically significant differences between those two groups ($F(1, 1581) = 0.34$, $p = 0.56$), suggesting that belief in misinformation can be effectively reduced without directly confronting the accompanying misogyny.

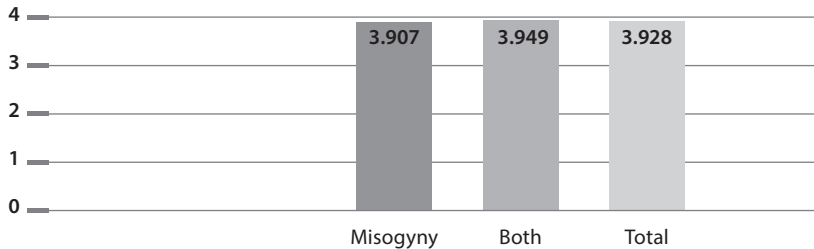


▲ Figure 3.

Mean Belief in Misinformation by Refutation Type

Source: authors' data. See text for more information.

Similarly, to test the second part of the hypothesis, we compared participants who saw a refutation of misogyny against those who saw a refutation of both misogyny and misinformation, to examine belief in a misogynistic statement. Again, we saw no statistically significant difference between those two sets of participants ($F(1, 1577) = 0.49, p = 0.49$). But this should also be interpreted within the analysis presented above – refutations of misogyny were generally ineffective at changing misogynistic beliefs at all.



▲ Figure 4.
Mean Rejection of Misogynistic Claim by Refutation Type
Source: authors' data. See text for more information.

DISCUSSION

This study highlights the implications of refuting misinformation and misogyny in a short-form video Stitch on TikTok. Our findings address a clear gap in the literature surrounding the efficacy of TikTok's Stitch feature to mitigate the rapidly evolving nature of online misinformation and misogyny. Understanding the ways users engage with content that propagates misinformation or misogyny is an important factor in understanding the perceived social acceptance of these behaviors.

For example, in 2024, the platform X saw a 4600% increase in misogynistic rhetoric like "your body, my choice" and "get back in the kitchen" in the 24 hours after Election Day (Barrón-López & Lane, 2024). As this hateful rhetoric becomes more common online, the more we see it transition into our physical world – one parent of an elementary school student reported that male students in their 10-year-old daughter's class told her that her body was "their choice" and she should "sleep with her eyes open tonight" (Frances-Wright & Ayad, 2024). If we can understand effective strategies for curbing the spread of misinformation (i.e. "women belong in the kitchen," or, in the case of this study, "women cannot handle pain") and misogynistic rhetoric ("your body, my choice," or an "inherently feminine physique") online, it will become less normalized in both digital and physical social environments.

In general, consistent with previous research (Bode & Vraga, 2025; Walter et al., 2020), we found that refuting misinformation was effective at reducing belief in misinformation.

These effects were small in magnitude, so we do not intend to overstate them, but given the ceiling effect, since most of the sample was well informed on the issue to start (Wang et al., 2008), we still believe this to be a meaningful finding. This is particularly important given the embedded nature of the misinformation we tested, intertwined with a more deeply held belief about misogyny.

In contrast, the refutation Stitches we showed to participants were relatively ineffective at increasing rejection of the misogynistic claim. This is perhaps not surprising. Whereas opinions about how often women exercise are probably not terribly ingrained in one's set of values or identity, the very belief of women's subordination to men is perhaps the most persistent form of group discrimination in human history (Nolan & Lenski, 1999). It is also worth keeping in mind that levels of misogyny were extremely low in the sample – even among those in the baseline control condition who saw an unrelated video, the vast majority of participants (71%) agreed that women are held to impossible beauty standards (essentially the opposite of the misogynistic claim). This could reflect the skewed nature of online convenience samples such as the one we rely on (Levay et al., 2016). Future research should consider novel ways of recruiting more misogynistic samples to test effective ways to reduce their animosity towards women; effecting change among those with greater misogynistic attitudes could be more impactful.

Finally, to our surprise, refuters' identity characteristics generally did not play a role in how participants accepted the information. This may also be due to the consistency of emotional distress expressed across all refuters, as displays of emotion are effective techniques for persuasion (Nabi, 2009). However, this outcome also reflects additional studies, which have found similar results, in that race and gender differences make little difference in persuasion (Fields et al., 2022). This is important because it means anyone, no matter their race or gender, should feel empowered to engage in refutation online. However, we would be remiss not to point out that women and people of color are more likely to be harassed online (Duggan, 2017; Sobieraj, 2020), and stitching refutations could very well make someone a target for such harassment.¹⁰ Members of historically marginalized populations should therefore proceed with caution when engaging in this sort of activity.

LIMITATIONS

Our work is limited in several ways. In particular, as already noted, we rely on an online sample. While online samples have been shown to have less bias than other similar samples like college undergraduates (Roulin, 2015), they do have their own limitations, including failure to mimic the political breakdown of the U.S. population. Because of technical limitations, we also required participants to complete the study on a computer, further limiting our ability to mimic a true social media experience, which most people access via mobile devices (Gelles-Watnick, 2024). In addition, our

¹⁰ In the survey, we asked an open-ended question asking participants how they would reply to the Stitch and did not observe any harassing comments. However, due to the skewed nature of our sample and the difference between self-reports and behavior on a live social media platform, we are cautious about drawing firm conclusions from these data.

study only focuses on U.S. adults. While there is still much progress to be made, the U.S. scores relatively high on the Women Peace and Security Index, suggesting that women are less at risk of discrimination than in many other countries (Georgetown Institute for Women, Peace and Security, 2023). We therefore have reason to believe the results of this project would look quite different if conducted in other cultural contexts.

We are also limited by the scale of the project, both in terms of its scope and its timing. On the first point, we are only considering the impact of a single message at one point in time, whereas social media tends to amplify emotionally-charged content through repeated exposure to content over time (Bouchaud et al., 2023). Longitudinal research, in which repeated exposure has an opportunity to accumulate, would be an important next step in understanding this topic. In addition, we measured relevant outcomes only directly after exposure to the Stitch, but our study cannot conclude whether the impacts we see would last over any period of time longer than that.

Both of our dependent variables – belief in the misinformation claim and rejection of the misogynistic claim – rely on single-item measures, which is inherently limiting, and constrains our confidence in the results. Future research should implement more robust measures to determine whether these results hold. In addition, we cannot know whether participants interpreted the videos differently because they used AI technology. While no participant noted a perception that the videos were inauthentic in their end-of-survey comments, we did not explicitly ask about perceptions of authenticity, and the perception that videos were AI-generated could have impacted the way participants processed their information. Future research should replicate the study without the use of AI video technology, to explore whether the results are robust.

We may also have experienced ceiling effects in several ways. The sample was very low in misogyny and belief in the misinformation claim, so movement on those attitudes was limited. The sample also strongly disliked the original poster, which may have amplified the effects we saw, particularly concerning liking and sharing content. A more “likable” misogynist might have been harder to correct, especially one with an existing following or relationship with their viewers.

CONCLUSION

However, this study offers some key takeaways. First, we demonstrate evidence that Stitch-based refutations of short-form videos can effectively reduce belief in misinformation, extending existing research on correction and debunking. Second, by considering the identity characteristics of refuters, we meaningfully expand on previous research. Finally, concerning inaccurate content, we show that misinformation can be corrected even when intertwined with politically fraught concepts like misogyny. These findings highlight the important role that Stitch-based refutations – from people from varied and diverse backgrounds – can play in reducing misinformation.

We hope that this study encourages researchers in this field to further consider new means of preventing exposure to harmful or inaccurate social media content, as the digital landscape only continues to broaden.

References

- >Ahiente, J., & Ndaguba, E. (2022). Misogynistic influences of female managers in local governments: A social construction or lived experience. *Social Sciences*, 11(11), Article 11. <https://doi.org/10.3390/socsci11110533>
- >Banaji, M.R., Fiske, S.T. & Massey, D.S. (2021). Systemic racism: individuals and interactions, institutions and society. *Cognitive Research: Principles and Implications*, 6, 82. <https://doi.org/10.1186/s41235-021-00349-3>
- >Banco, D., Chang, J., Talmor, N., Wadhera, P., Mukhopadhyay, A., Lu, X., Dong, S., Lu, Y., Betensky, R., Blecker, S., Safdar, B., & Reynolds, H. (2022). Sex and race differences in the evaluation and treatment of young adults presenting to the emergency department with chest pain. *Journal of the American Heart Association*, 11(10), 1-24. <https://doi.org/10.1161/JAHA.121.024199>
- >Banet-Weiser, S., & Maddocks, S. (2023). Networked misogyny on TikTok. In K. Boyle & S. Berridge (Eds.), *The Routledge Companion to Gender, Media and Violence*. Routledge. <https://doi.org/10.4324/9781003200871>
- >Barker, K., & Jurasz, O. (2019). Online misogyny: A challenge for digital feminism? *Journal of International Affairs*, 72(2), 95–114.
- >Barrón-López, L., & Lane, S. (2024, December 11). Researchers report stunning surge of misogyny after the election. *PBS News*. <https://www.pbs.org/newshour/show/researchers-report-stunning-surge-of-misogyny-in-schools>
- >Barsky, A. J., Peekna, H. M., & Borus, J. F. (2001). Somatic symptom reporting in women and men, *Journal of General Internal Medicine*, 16(4), 266–275. <https://doi.org/10.1046/j.1525-1497.2001.016004266.x>
- >Bhargava, P., MacDonald, K., Newton, C., Lin, H., & Pennycook, G. (2023). How effective are TikTok misinformation debunking videos?. *Harvard Kennedy School Misinformation Review*.<https://misinforeview.hks.harvard.edu/article/how-effective-are-tiktok-misinformation-debunking-videos/>
- >Bode, L., & Vraga, E. K. (2025). *Observed correction: How we can all respond to misinformation on social media*. Oxford University Press.
- >Bouchaud, P., Chavalarias, D., & Panahi, M. (2023). Crowdsourced audit of Twitter's recommender systems. *Scientific Reports*, 13(1), 16815. <https://doi.org/10.1038/s41598-023-43980-4>
- >Commonwealth of Kentucky v. TikTok, Inc. (2024). Complaint filed 10/08/2024.
- >Côté, D. & Coutu, M.F. (2009). A critical review of gender issues in understanding prolonged disability related to musculoskeletal pain: how are they relevant to rehabilitation? *Disability and Rehabilitation*, 32(2), 87–102. <https://doi.org/10.3109/09638280903026572>
- >Crawford, M. (2024, March 19). What fonts does TikTok use (and how to get them)?. Kapwing Resources. <https://www.kapwing.com/resources/what-fonts-does-tiktok-use-and-how-to-get-them/>
- >Craft, R. M. (2007). Modulation of pain by estrogens. *Pain*, 132. 3–12 doi:10.1016/j.pain.2007.09.028
- >DeBruine, L. M. (2002). Facial resemblance enhances trust. *Proceedings of the Royal Society B: Biological Sciences*, 269(1498), 1307–1312. <https://doi.org/10.1098/rspb.2002.2034>
- >Dovidio, J. (1986). Racial stereotypes: The contents of their cognitive representations. *Journal of Experimental Social Psychology*, 22(1), 22-37.
- >Duggan, M. (2017). Online Harassment 2017. *Pew Research Center*. <https://www.pewresearch.org/internet/2017/07/11/online-harassment-2017/>
- >Ecker, U. K., & Antonio, L. M. (2021). Can you believe it? An investigation into the impact of retraction source credibility on the continued influence effect. *Memory & Cognition*, 49(4), 631–644. <https://doi.org/10.3758/s13421-020-01129-y>

- >Elgaddal, N., Kramarow, E. A., & Reuben, C. A., (2022). 443 *NCHS Data Brief*. Centers for Disease Control and Prevention. <https://www.cdc.gov/nchs/data/databriefs/db443.pdf>
- >Farmer, H., McKay, R., & Tsakiris, M. (2013). Trust in me. *Psychological Science*, 25(1), 290–292. <https://doi.org/10.1177/0956797613494852>
- >Faverio, M., & Sidoti, O. (2025). Teens, social media and AI chatbots 2025. *Pew Research Center*. <https://www.pewresearch.org/internet/2025/12/09/teens-social-media-and-ai-chatbots-2025/#which-online-platforms-teens-use>
- >Fearon, J. D. (1999). What is Identity (as we now use the word)? *Stanford University*. web.stanford.edu/group/fearon-research/cgi-bin/wordpress/wp-content/uploads/2013/10/What-is-Identity-as-we-now-use-the-word-.pdf
- >Fields, L., Marji, Z., & Licato, J. (2022). Of a Different Persuasion: Perception of Minority Status and Persuasive Impact. In J. Culbertson, A. Perfors, H. Rabagliati, & V. Ramenzoni (Eds.), *Proceedings of the 44th Annual Conference of the Cognitive Science Society*.
- >Fillingim R. B., King C. D., Ribeiro-Dasilva M. C., Rahim-Williams B., & Riley J. L. (2009). Sex, gender, and pain: a review of recent clinical and experimental findings, *Journal of Pain*, 10(5), 447–485. <https://doi.org/10.1016/j.jpain.2008.12.00>
- >Frances-Wright, I., & Ayad, M. (2024, November 8). “Your body, my choice:” Hate and harassment towards women spreads online. ISD. https://www.isdglobal.org/digital_dispatches/your-body-my-choice-hate-and-harassment-towards-women-spreads-online/
- >Gelles-Watnick, R. (2024). Americans’ Use of Mobile Technology and Home Broadband. *Pew Research Center*. <https://www.pewresearch.org/internet/2024/01/31/americans-use-of-mobile-technology-and-home-broadband/>
- >Georgetown Institute for Women, Peace and Security. (2023). Women, peace, and security index 2023/24: Tracking sustainable peace through inclusion, justice, and security for women. GIWPS & PRIO. <https://giwps.georgetown.edu/wp-content/uploads/2023/10/WPS-Index-full-report.pdf>
- >Gilbert, C., Sima, R., Shapiro, L., Steckleberg, A., & Morse, C. (2025). How TikTok keeps its users scrolling for hours a day. *The Washington Post*. <https://www.washingtonpost.com/wellness/interactive/2025/tiktok-addiction-algorithm-scrolling-mental-health/>
- >Gottfried, J. (2024, January 31). *Americans’ social media use*. *Pew Research Center*. <https://www.pewresearch.org/internet/2024/01/31/americans-social-media-use/>
- >Grover, S. (2023). The People’s Choice: Pairing User-Centered Design With Crowdsourcing to Combat Misinformation on TikTok (Order No. 30424483). Available from ProQuest Dissertations & Theses Global. (2829662256). <https://www.proquest.com/dissertations-theses/people-s-choice-pairing-user-centered-design-with/docview/2829662256/se-2>
- >Grubb, A. & Turner, E. (2012). Attribution of blame in rape cases: A review of the impact of rape myth acceptance, gender role conformity and substance use on victim blaming. *Aggression and Violent Behavior*, 17(5). <https://doi.org/10.1016/j.avb.2012.06.002>
- >Guinaudeau, B., Munger, K., & Votta, F. (2022). Fifteen seconds of fame: TikTok and the supply side of Social Video. *Computational Communication Research*, 4(2), 463–485. <https://doi.org/10.5117/ccr2022.2.004.guin>
- >Heiss, R., Bode, L., Adisuryo, Z. M., Brito, L., Cuadra, A., Gao, P., ... & Zhang, P. (2024). Debunking mental health misperceptions in short-form social media videos: an experimental test of scientific credibility cues. *Health Communication*, 39(13), 3059–3071. <https://doi.org/10.1080/10410236.2023.2301201>
- >Hillobar. (2024, March). *Hillobar/Rope: Gui-focused Roop*. GitHub. <https://github.com/Hillobar/Rope>
- >Hoffmann, D. E., & Tarzian, A. J., (2001). The girl who cried pain: a bias against women in the treatment of pain, *Journal of Law, Medicine & Ethics*, (28), 4, 13–27. <https://doi.org/10.1111/j.1748-720x.2001.tb00037.x>
- >Horowitz, J. M., Parker, K., & Stepler, R. (2017, October 18). *Wide partisan gaps in U.S. over how far the country has come on gender equality*. *Pew Research Center*. <https://www.pewresearch.org/social-trends/2017/10/18/wide-partisan-gaps-in-u-s-over-how-far-the-country-has-come-on-gender-equality/>

- >Hyde, D., & Nicks, A. (2018, October 25). *The evolution of misogyny, as a word*. KUOW–NPR Network. <https://www.kuow.org/stories/evolution-misogyny-word>
- >Johansson, T. (1996). Gendered spaces: The gym culture and the construction of gender. *Young*, 3(4), 32–46 <https://doi.org/10.1177/110330889600400303>
- >Kaisler, R. E., & Leder, H. (2016). Trusting the looks of others: Gaze effects of faces in social settings. *Perception*, 45(8), 875–892. <https://doi.org/10.1177/0301006616643678>
- >Kasana, M. (2020, September 3). TikTok's new feature lets users 'Stitch' their videos to other creators' clips. Input. <https://www.inverse.com/input/culture/tiktok-launches-stitch-amid-strong-threats-to-its-future>
- >Keohane, J., Icks, M., Shiraev, E., & Samoilenko, S. A. (2025). Character assassination in politics: Gendered and racialized attacks on Kamala Harris. In S. A. Samoilenko & S. Simmons (Eds.), *The handbook of social and political conflict* (pp. 281–290). Wiley.
- >Knight-Georgetown Institute. (2025). *Better Feeds: Algorithms That Put People First*. <https://kgi.georgetown.edu/research-and-commentary/better-feeds/>
- >Kwarteng, J., Perfumi, S. C., Farrell, T., Third, A., & Fernandez, M. (2022). Misogynoir: challenges in detecting intersectional hate. *Social Network Analysis and Mining*, 12(1), 166. <https://doi.org/10.1007/s13278-022-00993-7>
- >Larson, B. A., & Brodsky, S. L. (2010). When cross-examination offends: How men and women assess intrusive questioning of male and female expert witnesses. *Journal of Applied Social Psychology*, 40(4), 811–830. <https://doi.org/10.1111/j.1559-1816.2010.00599.x>
- >Law, T. (2021). Health Workers Are Going Viral on TikTok for Debunking COVID-19 Myths. *TIME*. <https://time.com/5926397/health-workers-tiktok-covid-19/>
- >Levay, K. E., Freese, J., & Druckman, J. N. (2016). The demographic and political composition of mechanical turk samples. *SAGE Open*, 6(1), 215824401663643. <https://doi.org/10.1177/2158244016636433>
- >MacDonald, K. L. (2022). *Misinformation on TikTok: does it increase false belief and can debunking videos remediate it?* [Doctoral dissertation, University of Regina]. <https://uregina.scholaris.ca/items/cd927e3c-e01e-4416-bc0f-076309e8bc59>
- >Manne, K. (2017). *Down Girl: The Logic of Misogyny*. Oxford University Press.
- >Mantilla, K. (2013). Gendertrolling: Misogyny adapts to new media. *Feminist Studies*, 39(2), 563–570. <https://doi.org/10.1353/fem.2013.0039>
- >MacNeill, L., Driscoll, A., & Hunt, N. (2014). What's in a Name: Exposing Gender Bias in Student Ratings of Teaching. *Innovative Higher Education*, 40, 4, 291–303. <https://doi.org/291-303.10.1007/s10755-014-9313-4>
- >Micallef, N., He, B., Kumar, S., Ahamad, M., & Memon, N. (2020, December). The role of the crowd in countering misinformation: A case study of the COVID-19 infodemic. In *2020 IEEE International Conference on Big Data (Big Data)* (pp. 748–757). IEEE. <https://doi.org/10.1109/BigData50022.2020.9377956>
- >Moloney, M. E., & Love, T. P. (2018). Assessing online misogyny: Perspectives from sociology and feminist media studies. *Sociology Compass*, 12(5), e12577. <https://doi.org/10.1111/soc4.12577>
- >Montgomery, J. M., Nyhan, B., & Torres, M. (2018). How conditioning on posttreatment variables can ruin your experiment and what to do about it. *American Journal of Political Science*, 62(3), 760–775. <https://doi.org/10.1111/ajps.12357>
- >Motro, D., Evans, J., Ellis, A., & Benson, L. (2022). The 'Angry Black Woman' stereotype at work. *Harvard Business Review*. <hbr.org/2022/01/the-angry-black-woman-stereotype-at-work>.
- >Nabi, R. L. (2009). Emotion and persuasion: A social cognitive perspective. In D.R. Roskos-Ewoldsen & J.L. Monahan (Eds.) *Communication and Social Cognition* (pp. 389–410). Routledge.
- >Newton, J. (2019, October 2). *Why and How Women Aren't Taken Seriously When They Talk*. TEDxMileHigh: Ideas Worth Spreading. <https://www.tedxmilehigh.com/gender-credibility-gap/>
- >Nolan, P. & Lenski, G. (1999). *Human Societies*. McGraw Hill.
- >Norman, G. (2010). Likert scales, levels of measurement and the "laws" of statistics. *Advances in Health Sciences Education*, 15(5), 625–632. <https://doi.org/10.1007/s10459-010-9222-y>

- >Norris, C. (2019). Gender discrepancy in the weight room [Thesis, Bryant University]. Bryant Digital Repository. https://digitalcommons.bryant.edu/honors_appliedpsychology/18/
- >Oladipo, T. (2023, May 30). *A short-form video explainer (and five tips for using it)*. Buffer Resources. <https://buffer.com/resources/short-form-video/>
- >Padda, K. (2025). I analyzed more than 100 extremist manifestos: Misogyny was the common thread. *The Conversation*. https://theconversation.com/i-analyzed-more-than-100-extremist-manifestos-misogyny-was-the-common-thread-259347?utm_source=bluesky&utm_medium=bylineblueskybutton
- >Regehr, K., Shaughnessy, C., Zhao, M., & Shaughnessy, N. (2024). *Safer scrolling: How algorithms popularize and gamify online hate and misogyny for young people*. UCL IOE, University of Kent. <https://www.alignplatform.org/resources/safer-scrolling-how-algorithms-popularise-and-gamify-online-hate-and-misogyny-young>
- >Ribeiro, M. H., Blackburn, J., Bradlyn, B., De Cristofaro, E., Stringhini, G., Long, S., Greenberg, S., & Zannettou, S. (2021). The evolution of the Manosphere across the Web. *Proceedings of the Fifteenth International AAAI Conference on Web and Social Media*, 15, 196-207. <https://ojs.aaai.org/index.php/ICWSM/article/view/18053/17856>
- >Rottweiler, B., & Gill, P. (2024). Measuring Individuals' Misogynistic Attitudes: Development and Validation of the Misogyny Scale. *PsyArXiv*. <https://doi.org/10.31234/osf.io/6f829>
- >Roulin, N. (2015). Don't throw the baby out with the bathwater: Comparing data quality of Crowdsourcing, online panels, and student samples. *Industrial and Organizational Psychology*, 8(2), 190-196. <https://doi.org/10.1017/iop.2015.24>
- >Rudden, M. G. (2022). Misogyny and Gender Role Straight-Jackets: A Psychoanalytic Perspective. *Psychoanalytic Inquiry*, 42(7), 557-566. <https://doi.org/10.1080/07351690.2022.2121146>
- >Sahebi, S., & Formosa, P. (2022). Social media and its negative impacts on autonomy. *Philosophy & Technology*, 35(70), 1-24. <https://doi.org/10.1007/s13347-022-00567-7>
- >Sanderson, J. A., Bowden, V., Swire-Thompson, B., Lewandowsky, S., & Ecker, U. K. (2023). Listening to misinformation while driving: Cognitive load and the effectiveness of (repeated) corrections. *Journal of Applied Research in Memory and Cognition*, 12(3), 325-334. <https://doi.org/10.1037/mac0000057>
- >Schaefer, H. S., Bigelman, K. A., Gist, N. H., Lerner, R. M. (2021). But how many push-ups can she do? The influence of sexism on peer ratings in a military setting. *Personality and Individual Differences*, 177, 110805. <https://doi.org/10.1016/j.paid.2021.110805>
- >Schuller, R., Terry, D., & McKimmie, B. (2005). The Impact of Expert Testimony on Jurors' Decisions: Gender of the Expert and Testimony Complexity. *Journal of Applied Social Psychology*, 35 (6), 1266-1280. <https://doi.org/10.1111/j.1559-1816.2005.tb02170.x>
- >Shirayev, E. B., Keohane, J., Icks, M., & Samoilenko, S. A. (2021). *Character assassination and reputation management: Theory and applications*. Routledge.
- >Sobieraj, S. (2020). *Credible threat: Attacks against women online and the future of democracy*. Oxford University Press.
- >Srivastava, K., Chaudhury, S., Bhat, P. S., & Sahu, S. (2017). Misogyny, feminism, and sexual harassment. *Industrial Psychiatry Journal*, 26(2), 111-113. https://doi.org/10.4103/ipj.ipj_32_18
- >Stahl, C., & Literat, I. (2022). #Genz on TikTok: The Collective Online Self-portrait of the Social Media Generation. *Journal of Youth Studies*, 26(7), 925-946. <https://doi.org/10.1080/13676261.2022.2053671>
- >TikTok. (2023). Celebrating our thriving community of 150 million Americans | Tiktok Newsroom. <https://newsroom.tiktok.com/en-us/150-m-us-users>
- >TikTok. (2024). Stitch. TikTok Help Center. <https://support.tiktok.com/en/using-tiktok/creating-videos/stitch>
- >TikTok. (2025). TikTok World '25: Driving Full-Funnel Growth with AI, Creativity, and Community. <https://newsroom.tiktok.com/tiktok-world-2025?lang=en>

- >United Nations Development Programme (2020). Gender Social Norms Index (GSNI): Tackling Social Norms: A game changer for gender inequalities. <https://hdr.undp.org/content/2020-gender-social-norms-index-gsni>
- >United Nations Population Fund. (2023). *What is technology-facilitated gender-based violence?*
- >UNFPA. Retrieved January 15, 2025, from https://www.unfpa.org/sites/default/files/resource-pdf/TFGBV_Brochure-1000x560.pdf.
- >U.S. Department of State. (2023). Gendered disinformation: Tactics, themes, and trends by foreign malign actors. <https://www.state.gov/gendered-disinformation-tactics-themes-and-trends-by-foreign-malign-actors>
- >Walter, N., Brooks, J. J., Saucier, C. J., & Suresh, S. (2021). Evaluating the impact of attempts to correct health misinformation on social media: A meta-analysis. *Health Communication*, 36(13), 1776–1784. <https://doi.org/10.1080/10410236.2020.1794553>
- >Walter, N., Cohen, J., Holbert, R. L., & Morag, Y. (2020). Fact-checking: A meta-analysis of what works and for whom. *Political Communication*, 37(3), 350–375. <https://doi.org/10.1080/10584609.2019.1668894>
- >Wang, L., Zhang, Z., McArdle, J. J., & Salthouse, T. A. (2008). Investigating ceiling effects in longitudinal data analysis. *Multivariate Behavioral Research*, 43(3), 476–496. <https://doi.org/10.1080/00273170802285941>
- >Werner, A., Isaksen L. W., & Malterud, K. (2004). 'I am not the kind of woman who complains of everything': illness stories on self and shame in women with chronic pain. *Social Science & Medicine*, 59(5), 1035–1045. <https://doi.org/10.1016/j.socscimed.2003.12.001>
- >World Health Organization. (2022). Physical activity. World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>
- >Wood, T., & Porter, E. (2019). The elusive backfire effect: Mass attitudes' steadfast factual adherence. *Polit Behavior* 41, 135–163 <https://doi.org/10.1007/s11109-018-9443-y>
- >Xue, X., Yang, X., Xu, W., Liu, G., Xie, Y., & Ji, Z. (2022). TikTok as an information hodgepodge: Evaluation of the quality and reliability of genitourinary cancers related content. *Frontiers in Oncology*, 12, 789956. <https://doi.org/10.3389/fonc.2022.789956>

Appendices

Appendix A1: Original poster video (transcript)

They [women] interpret the quality of reality through the type of sensory input they're receiving. That's why girls don't work out. They are fortunate enough to be born with a nice-looking body, and then it just wastes away. They don't work out. They could preserve their body a little bit by working out, but that's why. It's because it hurts. Working out hurts. Anything that hurts is a bad thing. They can't handle it. They literally can't handle working out.

Full videos are available at

https://osf.io/xrdw7/?view_only=28a46c961137480a9bf8e528a0359760.

Appendix A2: Refutation videos (transcripts)

Refuting both misinformation and misogyny

I don't even know where to start with this one. Have you ever stepped foot in a gym? Newsflash: tons of women work out. I thought we were past holding women to unrealistic, outdated beauty standards. Women are good for more than sitting around and looking pretty. You're making a lot of claims with zero evidence to back it up. It's not like women live in a different reality from men. If women can't handle pain, then how would you explain, I don't know, childbirth?

Full videos are available at

https://osf.io/xrdw7/?view_only=28a46c961137480a9bf8e528a0359760.

Appendix B: Participant characteristics

Education:

11.8% high school or less
 29.4% more than high school but less than four-year degree
 43.0% bachelor's degree
 15.9% master's, professional, or doctorate

Political ideology:

21.3% conservative
 49.9% liberal
 22.9% moderate/centrist
 5.8% other/prefer not to say

Geography:

29.4% urban
 54.5% suburban
 15.6% rural

Income:

15.2% less than \$30,000
 18.2% \$30,000 – \$50,000
 18.5% \$50,000 – \$70,000
 13.9% \$70,000 – \$90,000
 12.0% \$90,000 – \$110,000
 20.2% \$110,000+

Appendix C: Full analysis tables

Table C1: ANOVAs predicting belief in the misinformation claim and the misogynistic claim

	No related refutation		Related refutation		$F(1, 2766) \eta^2$	
	M	SD	M	SD		
<i>Measure</i>						
<i>Misinformation claim endorsement (higher = more misinformation)</i>						
	1.38	0.75	1.23	0.59	34.70*	.01
<i>Misogyny claim endorsement</i>						
	3.91	1.15	3.93	1.20	0.10	.00

* $p < .05$.

Table C2: Regressions predicting belief in misinformation and misogynistic claims, accounting for the refuter's race and gender

Variable	Misinformation			Misogyny		
	Estimate	SE	p	Estimate	SE	p
Intercept	1.21	.04	.01	4.05	.07	.01
Message	.13	.04	.01	-.09	.07	.16



Race	.03	.04	.45	-.10	.07	.15
Gender	.02	.04	.53	-.05	.07	.47
Three way interaction	.01	.07	.98	.10	.12	.38

Note. $N = 1580$

Table C3: Regression predicting belief in misinformation, accounting for participants' matching with the refuter's race and gender

Variable	Misinformation			Misogyny		
	Estimate	SE	p	Estimate	SE	p
Intercept	1.32	.02	.01	3.87	.04	.01
Race match	.02	.03	.46	.04	.05	.36
Gender match	-.07	.03	.01	.07	.05	.12

Note. $N = 2768$

Table C4: ANOVAs predicting belief in the misinformation claim and the misogynistic claim, accounting for whether participants received a refutation of one claim or both claims

	Related refutation only		Related refutation+ second refutation		$F(1, 2766) \eta^2$	
	M	SD	M	SD		
<i>Measure</i>						
<i>Misinformation claim endorsement (higher = more misinformation)</i>						
	1.24	0.02	1.22	0.02	0.34	.00
<i>Misogynistic claim endorsement (higher = less misogyny)</i>						
	3.91	1.22	3.95	1.18	0.49	.00

* $p < .05$.

STITCH VIDEOZAPISI U SLUŽBI OPOVRGAVANJA: RAZOTKRIVANJE MIZOGINIJE I DEZINFORMACIJA NA TIKTOKU

Kunjika Apurvabhai et al.

SAŽETAK Mizoginija, duboko ukorijenjena predrasuda prema ženama, opstaje i jača zahvaljujući dezinformacijama. Ova studija istražuje jedan pristup ublažavanju učinaka mizoginih dezinformacija na TikToku, popularnoj platformi za kratke videozapise. Mizoginija i s njom povezane dezinformacije intenzivno se šire TikTokom, potaknute sadržajem koji stvaraju korisnici i algoritamskim povećavanjem dosega. U ovom predregistriranom eksperimentu ($N = 2756$) ispitana je učinkovitost različitih vrsta opovrgavanja koji se temelje na TikTokovoj funkciji Stitch. Konkretno, ispitali smo utjecaj Stitch videozapisa – koji su se razlikovali prema pristupu opovrgavanju (usmjeren na dezinformacije, mizoginiju ili oboje) te prema rasi osobe koja opovrgava sadržaj (crna ili bijela) i njezinu rodnom predstavljanju (muškarac ili žena) – na uvjerenja gledatelja povezana s dezinformacijama i mizoginijom. U istraživanju je primijenjen faktorijski nacrt $3 \times 2 \times 2$, dopunjen uvjetom koji je uključivao samo dezinformaciju i čistim kontrolnim uvjetom, što je rezultiralo s ukupno 14 eksperimentalnih uvjeta. Ovaj projekt popunjava istraživačku prazninu analizirajući složeni međuodnos mizoginije, dezinformacija, rase i roda u kontekstu TikTokova formata kratkih videozapisa. Naši nalazi pokazuju učinkovitost korektivnih Stitch videozapisa u suzbijanju dezinformacija, neovisno o različitim intersekcijskim identitetima osoba koje ih opovrgavaju, ali istodobno upozoravaju na poteškoće u mijenjanju mizoginih stavova.

KLJUČNE RIJEČI

MIZOGINIJA, DEZINFORMACIJE, ISPRAVAK, TIKTOK, STITCH

Bilješka o autorima

Kunjika Apurvabhai :: Sveučilište Georgetown :: ka913@georgetown.edu

M. Riley Tinlin :: Sveučilište Georgetown :: mt1527@georgetown.edu

Leticia Bode :: Sveučilište Georgetown :: lb871@georgetown.edu

Merielle Angelie Agorilla :: Sveučilište Georgetown :: mga66@georgetown.edu

Carol Balass :: Sveučilište Georgetown :: cb1495@georgetown.edu

Evan Cain :: Sveučilište Georgetown :: emc321@georgetown.edu

Randy Cantz :: Sveučilište Georgetown :: rc1574@georgetown.edu

Maria Fernanda Chanduvi :: Sveučilište Georgetown :: mc2692@georgetown.edu

Yanpei Chen :: Sveučilište Georgetown :: yc1096@georgetown.edu

Yige Chen :: Sveučilište Georgetown :: yc1095@georgetown.edu

Giselle Guadiana :: Sveučilište Georgetown :: gg741@georgetown.edu

Meghan Landsberg :: Sveučilište Georgetown :: mll120@georgetown.edu

Hannah McDonnell :: Sveučilište Georgetown :: hem81@georgetown.edu

Bryan Murphy :: Sveučilište Georgetown :: bam164@georgetown.edu

Kashaf Rashid :: Sveučilište Georgetown :: ktr31@georgetown.edu