Bridging the Ideological Divide:

Advertising Strategies for Promoting Stigmatized Products

Abstract

Many socially relevant sexual and reproductive health products remain stigmatized by some consumers due to enduring socio-cultural taboos, despite broader acceptance by others. Such stigma limits product adoption and poses public health risks. Political ideology offers a critical lens for understanding these divergent consumer responses, as conservatives and liberals differ in moral values and sensitivity to stigma. This research examines how political ideology shapes responses to stigmatized products and how advertising can bridge ideological divides. A secondary data study shows that conservatives respond more negatively than liberals to stigmatized products (Study 1), while a survey reveals that this effect is mediated by conservatives' lower endorsement of the individualizing moral foundation (fairness and care) and reduced perceptions of social acceptability (Study 2). Two experiments further examine how practically relevant persuasion strategies affect individuals across the ideological spectrum. The negative effect of conservative ideology is weakened when advertising features artificial intelligence rather than human or neutral agents (Study 3) and strengthened when it discloses government rather than corporate or collaborative sponsorship (Study 4). The findings advance research on stigma and political ideology and offer guidance for marketers and policymakers on leveraging advertising cues to promote stigmatized products across ideological groups.

Keywords: political ideology; stigmatized products; Moral Foundations Theory; artificial intelligence; government sponsorship disclosure; advertising strategies; persuasion

Introduction

"After "Roe v. Wade" - when the U.S. Supreme Court legalized abortion in 1973 - I thought the national conversation about abortion and birth control would be over. It was not."

(Karen DeCrow, former President of the National Organization for Women)

Despite rapid socio-cultural change, many sexual and reproductive health products, such as sexually transmitted infection (STI) self-test kits and Human Papillomavirus (HPV) vaccines, continue to face stigma and consumer resistance. These products, however, are critical to public health: 93% of cervical cancer cases are preventable through HPV vaccination and screening (Centers for Disease Control and Prevention [CDC], 2014), and 98% of unintended pregnancies could be prevented with proper contraceptive use (National Health Service [NHS], 2024). Yet, stigma often triggers shame or embarrassment during purchase or discussion (Bailey & Waronska, 2015; Dahl et al., 2001), hindering adoption. In 2019, only 20.4% of sexually active U.S. adolescents received an STI test (Liddon et al., 2022). Low adoption not only harms individuals but also strains public health systems. As of 2019, unintended pregnancy rates remained high (41.6% in the U.S. and 36% in Europe) and, globally, 68% resulted in abortion (CDC, 2024; Guttmacher, 2022; World Health Organization [WHO], 2022). This gap between public health needs and suboptimal consumer adoption highlights the importance of developing more effective advertising strategies to reduce stigma and encourage uptake.

Consumer rejection of these products often occurs due to their stigmatized nature, particularly when associated with topics like sex. The marketing literature has described them as sensitive, unmentionable, embarrassing, offensive, or taboo (Barnes & Dotson, 1990; Dahl et al., 2001; Fahy et al., 1995; Sabri & Obermiller, 2012). This research adopts Bailey and Waronska's (2015) definition of stigmatized products as legally sold products whose consumption may cause anxiety, controversy, embarrassment, shame, or unease.

Based on this definition, we focus on sexual and reproductive health products, a relatively narrow but highly relevant category of stigmatized products. Despite stigma, sexual and reproductive health is a fundamental human right, enabling individuals to make informed decisions and maintain control over their bodies (WHO, 2024). These products often receive support from public institutions and represent a critical area of inquiry in marketing research (Fitzgerald et al., 2023; Ponnappan et al., 2025; Yu et al., 2022).

Beyond emotional responses, deeper motivations, like ideological beliefs, often drive consumer rejection of stigmatized products. Political ideology, a set of "moral and political attitudes that possesses cognitive, affective, and motivational components" (Jost, 2006, p. 653), has been highlighted in the business press as a key influence on such responses (Kornfield et al., 2022). For instance, following the U.S. Supreme Court's decision to overturn abortion rights, Justice Clarence Thomas proposed revisiting access to contraceptives, a stance supported by many conservatives (Kornfield et al., 2022). Conservative states like Texas report lower rates of contraceptive use (Douglas-Hall et al., 2018). Against this backdrop, surprisingly little marketing research has explored the relationship between consumers' political ideology and their responses to stigmatized products.

We address this gap by exploring how political ideology affects consumer responses to stigmatized products, focusing on sexual and reproductive health products that support both individual and societal well-being. We also explore how specific persuasive advertising cues, namely the use of artificial intelligence (AI) versus a human agent, and the disclosure of government versus corporate involvement, moderate the relationship between political ideology and consumer responses to stigmatized products.

The findings advance research on stigma, which has largely focused on consumers' own stigmatized identities (Chaney et al., 2019; Homburg & Ukrainets, 2021; Lamberton,

2019), by shifting the focus to consumer responses to products that are stigmatized despite their public health benefits. They also contribute to the growing literature on political ideology, which has primarily examined responses to either widely accepted (Irmak et al., 2020; Kidwell et al., 2013) or rejected (Goenka & Van Osselaer, 2023) products. This research highlights an overlooked category: socially beneficial yet stigmatized products. The findings provide guidance for managers and policymakers on how to design advertising strategies that align with consumers' political ideology to increase adoption of stigmatized products.

Theoretical Background and Hypotheses Development

Stigma

Stigma plays a crucial role in shaping consumer behavior and has received increasing attention in marketing research (Chaney et al., 2019; Harmeling et al., 2021). Existing work falls into three main streams. The first explores how possessing a stigmatized identity, such as limited financial resources (Homburg & Ukrainets, 2021), membership in racial (Lamberton, 2019) or sexual minorities (Eichert & Luedicke, 2022), higher-weight bodies (Srivastava et al., 2024), older age (Rosenthal et al., 2020), or ex-offender status (Milfeld et al., 2021), affects consumer experiences. For example, Chaney et al. (2019) suggest that consumers with stigmatized identities are particularly sensitive to cues signalling identity devaluation or a company's ideological stance. Similarly, Rosenthal et al. (2020) find that older consumers reject stereotypical portrayals in advertising, even when positive.

The second stream examines the strategic use of stigma in advertising, including messages that frame a discreditable attribute as a problem (Srivastava et al., 2024) and the use of stigmatized symbols such as sex and death (Sabri, 2017) or homosexual imagery (Eisend & Hermann, 2019).

The third stream focuses on inherently stigmatized products. Some, like cigarettes and prostitution, are intentionally stigmatized by policymakers (Wilson & West, 1981) due to their harmful health and social consequences. Others, particularly sexual and reproductive health products, are stigmatized by consumers despite their significant benefits. For instance, condoms are often stigmatized due to associations with sex and bodily functions (Krishna et al., 2019).

Prior research identifies various antecedents of consumer responses to stigmatized products, including product attributes (Waller, 1999), individual characteristics (Fam et al., 2004), cultural and societal influences (Shao & Hill, 1994), communication strategies (Prendergast & Hwa, 2003), and message framing (Srivastava et al., 2024).

A summary of these studies is provided in Appendix A. Building on this work, our research introduces political ideology as a meaningful lens for understanding consumer responses to stigmatized products.

Political Ideology and Consumer Responses to Stigmatized Products

Prior research highlights how political ideology influences consumer decision-making in both socially beneficial behaviors (e.g., charitable giving, recycling; Farmer et al., 2020; Kidwell et al., 2013) and more controversial ones (Goenka & Van Osselaer, 2023). Goenka and Van Osselaer (2023) show that while both liberals and conservatives morally oppose practices like prostitution and organ trade, they do so for different reasons. While liberals emphasize exploitation, conservatives focus on sanctity. Despite these insights, little is known about how political ideology affects consumer responses to socially beneficial yet stigmatized products, such as sexual and reproductive health products. We argue that conservatives will respond more negatively to stigmatized products than liberals.

Core ideological differences between conservatives and liberals center around attitudes toward inequality and preferences for tradition versus social change (Jost, 2006,

2017). Conservatives place less emphasis on egalitarian ideals, such as equality across income, gender, and health conditions (Duckitt, 2006), and are more resistant to change, making them less receptive to products that challenge traditional norms, even when those products offer clear social value (Jost, 2006). Stigmatized products often carry symbolic associations, such as links to sex or promiscuity, which may trigger concerns about being associated with devalued groups (Ndichu & Rittenburg, 2021). Given their higher risk-aversion (Jost, 2003), conservatives may be particularly sensitive to these stigma-related risks, leading them to overlook utilitarian and public health benefits. This logic suggests more negative responses to stigmatized products among conservatives than liberals. Hence:

H1: As consumers' conservative (vs. liberal) ideology increases, their responses to stigmatized products become more negative.

Moral Foundations and Perceived Social Acceptability

To further examine the mechanism linking political ideology to consumer responses to stigmatized products, we draw on Moral Foundations Theory (MFT; Graham et al., 2009; Haidt, 2007). MFT distinguishes between two moral domains: the individualizing foundation, which emphasizes fairness (protecting rights and preventing exploitation) and care (preventing harm and promoting well-being), and the binding foundation, which emphasizes loyalty (ingroup protection), authority (respect for hierarchy), and purity (moral and physical cleanliness).

Conservatives place less emphasis on the individualizing foundation than liberals (Graham et al., 2009), making them less likely to prioritize the welfare of stigmatized product users or to support fair, stigma-free treatment, even for themselves. Consequently, they may be less inclined to recognize the societal value of harm-preventing products rooted in fairness and care, such as sexual and reproductive health products. Instead, such products may be viewed as socially unacceptable or misaligned with traditional norms. In contrast, liberals'

stronger emphasis on fairness and care fosters greater acceptance. Research shows that perceived social acceptability plays a key role in shaping consumer decisions (Wang & Yu, 2023). We therefore propose that conservatives' lower endorsement of the individualizing foundation reduces perceived social acceptability, which in turn triggers more negative responses to stigmatized products. Hence:

H2: The negative relationship between conservative ideology and responses to stigmatized products is mediated by lower adherence to the individualizing moral foundation and lower perceived social acceptability.

Persuasion Across the Ideological Divide: AI versus Human Advertising Cues

Next, we examine how conservatives' and liberals' responses to stigmatized products can be changed through persuasion, a symbolic process in which communicators influence attitudes or behaviors under conditions of free choice (Perloff, 2009). Cakanlar and White (2023) categorize persuasive strategies for changing conservatives' or liberals' responses into three levels: self (rooted in ideological differences in personality), social (in differences in susceptibility to social influence), and system (in differences in perceptions of institutions). Building on their framework, we explore how AI cues in advertising may function as a social persuasive strategy to bridge the ideological divide.

Rising healthcare demand has accelerated AI integration into clinical decision-making, chronic disease management, and medical device innovation (Ortiz-Catalan et al., 2013). In health marketing, AI tools like chatbots often match or outperform human agents, particularly for embarrassing products (Holthöwer & Van Doorn, 2022; Tsai et al., 2021). Nonetheless, concerns persist: AI's opaque algorithms can perpetuate bias and undermine accountability (Dolata et al., 2022; Morley et al., 2021), and consumers, especially in marginalized groups, often perceive healthcare AI as less fair and trustworthy than human doctors (Lee & Rich, 2021).

We propose that AI cues in advertising influence consumer responses to stigmatized products based on political ideology, specifically through their effect on the individualizing moral foundation. Liberals, given their heightened sensitivity to fairness and harm (Graham et al., 2011), may be especially attuned to algorithmic bias and systemic injustice.

Conservatives, who place less emphasis on these concerns, may evaluate AI-featured advertising more favorably. At the same time, fairness and care remain core moral concerns across ideologies (Wright & Baril, 2011), and they become more salient in distant contexts (Eyal et al., 2008; Napier & Luguri, 2013). Since AI agents are often perceived as more socially distant than human agents (Ahn et al., 2021), AI cues may heighten attention to fairness and care, prompting conservatives to recognize the protective benefits of sexual and reproductive health products. Consequently, AI cues may worsen liberals' responses while improving conservatives', thus narrowing the ideological divide. Hence:

H3: The negative relationship between consumers' conservative ideology and their responses to stigmatized products is weakened when advertising features AI (vs. human) cues.

Persuasion Across the Ideological Divide: Government versus Corporate Advertising Cues

Based on Cakanlar and White's (2023) framework, we explore how government cues in advertising function as a system-level persuasive strategy. Low adoption of sexual and reproductive health products often prompts government intervention. For example, the CDC partners with organizations in conservative states to promote contraceptive guidelines and HPV vaccination programs. Yet such efforts can trigger backlash, as illustrated in 2007 when Texas Governor Rick Perry's HPV vaccine mandate was overturned following conservative opposition, highlighting broader discomfort with government-led health initiatives. Many conservatives view health decisions as matters of personal choice and see government

intervention as intrusive, interpreting health regulations as threats to their freedom and identity (Campbell & Kay, 2014). Although fairness and care are core moral values shared across ideologies (Wright & Baril, 2011), conservatives are less likely to view the government as a legitimate agent of these values. As a result, government-backed advertising may lack persuasive force and trigger ambivalence. Conservatives' sensitivity to threats and uncertainty further reduces compliance (Irmak et al., 2020), and far-right consumers often perceive government campaigns as propaganda aligned with liberal agendas (Ulver & Laurell, 2020). Thus, conservatives may not interpret government involvement as protective or caring. In contrast, liberals typically view the government as a legitimate agent of public welfare, equality, and well-being (Irmak et al., 2020; Jung & Mittal, 2020) and respond more favorably to government-backed messages, adjusting behaviors accordingly (Chu et al., 2021). Therefore, government involvement may activate fairness and care primarily among liberals, while failing to persuade, or even alienating, conservatives, thus widening the ideological divide. Hence:

H4: The negative relationship between consumers' conservative ideology and their responses to stigmatized products is strengthened when advertising features government (vs. corporate) cues.

Alternative Account of the Main Effect

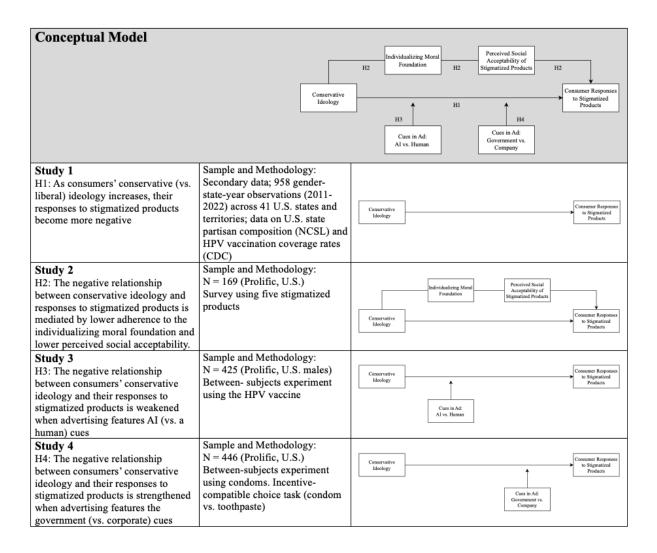
We argued that conservatives' and liberals' responses to stigmatized products are shaped primarily by differences in adherence to the individualizing moral foundation, though alternative explanations warrant consideration. First, conservatives' stronger endorsement of the binding foundation may appear relevant, yet its influence is likely mixed. Purity concerns may discourage acceptance, whereas ingroup loyalty may encourage it by emphasizing protection of family or community. Thus, binding values alone do not account for

conservatives' negative responses. Second, psychological reactance (Brehm & Brehm, 1981) may play a role, as evidenced by resistance to consumption regulations (Irmak et al., 2020) and pandemic mask mandates (Rains et al., 2022). Third, conservatives' heightened disgust sensitivity (Inbar et al., 2012) may increase aversion to sex-related products. Fourth, conservatives' lower trust in government, linked to reduced vaccine uptake (Baumgaertner et al., 2018), may also undermine compliance with public health campaigns. We empirically rule out these alternatives later.

Empirical Overview

In Study 1, we analyze secondary data on HPV vaccine uptake in the U.S. to examine the relationship between conservative ideology and consumer responses to stigmatized products (H1). Correlational Study 2 replicates this relationship at the individual level in a more controlled setting and tests the serial mediation mechanism (H2). Experimental Studies 3 and 4 test the moderating roles of AI versus human (H3) and government versus corporate (H4) advertising cues. Figure 1 presents the conceptual model and studies overview.

Figure 1. Conceptual Model and Studies Overview



Study 1: Main Effect: Secondary Data Study

In Study 1, we used secondary data to test H1: conservative (vs. liberal) consumers respond more negatively to stigmatized products. We combined data on U.S. state partisan composition and HPV vaccination coverage rates. The HPV vaccine is often stigmatized due to its association with a sexually transmitted disease (Tsai et al., 2021), despite strong public health benefits. A post-hoc test on 101 participants (Appendix B) confirmed that the HPV vaccine is perceived as stigmatized.

Data and Measures

Consumer Responses to Stigmatized Products

The CDC provides annual HPV vaccination data, the percentage of adolescents aged 13–17 who received at least one dose of the vaccine, for 54 U.S. states and territories from 2011 to 2022. We extracted state-level coverage rates by gender, which serve as proxies for consumer responses.

Political Ideology

To measure state-level political ideology, we used data from the NCSL, which provides information on the partisan control of legislative chambers and governorships for each state, providing counts of Republican and Democrat seats in the Senate and House. We operationalized state-level conservative ideology as the proportion of Republican seats across both chambers.

Control Variables

Prior research shows that consumer responses to stigmatized products are influenced by gender (Barnes & Dotson, 1990), education, income, race (Fahy et al., 1995), religious belief intensity (Fam et al., 2004), and familiarity (Dahl et al., 2001). Further, foreign-born and rural consumers in the U.S. have lower awareness and uptake of the HPV vaccine (Guo et al., 2023; Sun & Monnat, 2022). Accordingly, we controlled for all these predictors.

After merging the data, the final dataset consists of 958 gender-state-year observations spanning 2011–2022 across 41 states. A summary of measures and sources is provided in Table B1 in Appendix B.

Empirical Modelling and Results

HPV Vaccine Uptake

We estimated the following random-effects linear panel model to test H1:

HPV Vaccine Uptakeit

$$\begin{split} &=\beta_0\,+\,\beta_1 Conservative\,ideology_{it}\,+\,\beta_2 Female_i+\beta_3 Education_i\\ &+\beta_4 Income_i\,+\,\beta_5 Familiarity_i\,+\,\beta_6 Religious\,intensity_i\\ &+\beta_7 Foreign-born_i\,+\,\beta_8 Urbanization_i\,+\,\beta_9 Asian\,Population_i\\ &+\beta_{10} Black\,Population_i+\beta_{11} Hispanic\,Population_i\,+\,\beta_{12} White\,Population_i\\ &+\sum_{n=13}^{23}\beta_n Year_t\,+\,\varepsilon_{it} \end{split}$$

where β s are the parameters to be estimated, subscripts i represent gender-states, subscripts t represent years, and ε_{it} is the error term.

As shown in Column 1 in Table 1, conservative ideology reduces the uptake of the HPV vaccine (b = -21.51, p < .001), in support of H1.

Table 1. Political Ideology and State-level HPV Vaccine Uptake

	1	2	3	4	5
	main analysis	binary political ideology	presidential elections	females only	no controls
Conservative ideology	-21.51*** (5.56)	-3.00** (0.93)	-54.91** (19.74)	-14.57* (6.59)	-18.00*** (3.66)
Female	12.73*** (0.75)	12.75*** (0.88)	12.73***(0.85)		
Education	9.69 (19.65)	27.37 (22.01)	-0.40 (24.08)	-4.39 (29.34)	
Income	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	
Familiarity	-0.34 (0.92)	-1.59 (0.95)	-1.41 (0.97)	0.18 (1.33)	
Religious belief intensity	-18.15* (8.50)	-31.28*** (7.06)	-6.26 (14.42)	-22.18* (10.05)	
Foreign-born	-17.85 (14.62)	-23.80 (19.38)	-5.90 (21.87)	-27.73 (21.52)	
Urbanization	9.86 (7.87)	18.15* (8.87)	11.02 (8.88)	13.30 (10.28)	
Asian population	-56.44 (30.36)	-28.23 (33.91)	-54.13 (39.30)	-35.01 (41.98)	
Black population	-28.50 (15.46)	-14.71 (16.54)	-39.61 (22.76)	-17.76 (20.93)	
Hispanic population	-31.97 (16.60)	-27.90 (21.20)	-39.87 (22.17)	-22.05 (23.28)	
White population	-23.05 (11.76)	-25.07 (14.92)	-23.05 (13.50)	-15.99 (16.06)	
Year indicators	YES	YES	YES	YES	YES
N	958	982	982	492	1,143
R-squared	.78	.77	.77	.76	.62

^{*}p < .05; **p < .01; ***p < .001; the models include a constant and gender-state cluster-robust standard errors.

Robustness Checks

We conducted four robustness checks (1) using a binary indicator for state control as the measure of state-level political ideology, in lieu of partisan composition (Column 2, more details in Appendix B); (2) using presidential election data from the MIT Election Data + Science Lab, measuring conservative ideology as the average proportion of Republican voters in the 2016 and 2020 elections (Column 3; Fernandes et al., 2022); (3) restricting the sample to female cohorts (Column 4); (4) not controlling for covariates (Column 5). The results are robust, as shown in Table 1¹.

Discussion

Study 1 results reveal a robust negative relationship between conservative ideology and responses to stigmatized products, providing real-world support for H1 using HPV vaccine uptake as an objective behavioral measure. However, observational Study 1 does not allow to claim causality. Hence, we next test the relationship in a more controlled setting in Study 2.

Study 2: Main Effect and Mediation: Survey

In Study 2, we conducted a survey to replicate Study 1's findings at the individual level. This study also tests the proposed psychological mechanism underlying the negative relationship between conservative ideology and responses to stigmatized products, specifically through individualizing moral foundation and perceived social acceptability (H2).

Method

201 U.S. adults were recruited on Prolific in exchange for a small compensation. Following Hydock et al. (2020), we used quota-sampling on political ideology to maintain balance within the sample. 169 participants passed the attention check and completed the

¹ In analyses not reported here in the interest of brevity, the results are robust to the inclusion of lagged HPV vaccine uptake as an additional predictor.

survey (56.8% female; 11.8% aged 18–25, 29% 26–35, 19.5% 36–45, 17.2% 46–55, and 22.5% 56 and older).

We showed participants five stigmatized products (condoms, STI self-test kits, HPV vaccines, contraceptive pills, and menstrual cups) in randomized order. For each product, participants indicated their attitude using a 4-item, 7-point semantic differential scale (α_{CD} = .93, α_{ST} = .97, α_{HP} = .99, α_{CT} = .98, α_{MC} = .97; adapted from Batra & Stayman, 1990), purchase intention using a single item, 7-point Likert scale (adapted from Goenka & Thomas, 2022), and perceived social acceptability using a 2-item, 7-point semantic differential scale (α_{CD} = .83, α_{ST} = .95, α_{HP} = .95, α_{CT} = .85, α_{MC} = .98; adapted from Wang & Yu, 2023). Participants also indicated their familiarity with each product with a single item, 7-point Likert scale (adapted from Milberg et al., 1997).

Participants then completed a 20-item short version of the Moral Foundation Questionnaire (Graham et al., 2011), assessing individualizing (α = .86) and binding (α = .91) foundations, and reported their political ideology on a 7-point scale (1 = *extremely liberal*, 7 = *extremely conservative*; Jost, 2006). Finally, participants were debriefed and provided demographic information. Consistent with Study 1, we controlled for age, gender, education, income, race, religious belief intensity, and familiarity. All stimuli and measurements are detailed in Appendix C.

Results

Consumer Responses to Stigmatized Products

To test H1, following precedents (e.g., Goenka & Thomas, 2022), we conducted two regression analyses using mixed-effect models to account for any within-participant variance (Brauer & Curtin, 2018), since products were nested within participants. We treated consumers' attitude toward and purchase intention for the five products (five repeated

measures per participant) as dependent variables and included the participants' measured conservative ideology, dummy variables for product type, as well as the control variables mentioned above. Individual participants were treated as random effects to control for unobserved heterogeneity across responses from the same individual. As hypothesized, conservatives have a more negative attitude toward (b = -0.21, SE = 0.04, p < .001) and lower purchase intention for (b = -0.11, SE = 0.05, p = .042) stigmatized products (see Column 1 in Tables C1 and C2, Appendix C). Robustness checks are provided in Appendix C.

Mediation Analysis

Next, we examined whether conservatives' lower individualizing moral foundation and perceived social acceptability of stigmatized products (H2) mediate the effect. We conducted two serial mediation analyses (PROCESS Model 6; Hayes, 2013; 5,000 bootstraps) with conservative ideology as independent variable, individualizing moral foundation and perceived social acceptability as mediators (in this order), and attitude and purchase intention as dependent variables, separately, while controlling for the covariates. The results indicate a significant serial indirect effect of conservative ideology on attitude through the two mediators (b = -0.02, SE = 0.01, 95% CI = [-.03, -.01]) and also through each mediator alone (individualizing moral foundation: 95% CI = [-.03, -.004]; perceived social acceptability: 95% CI = [-.10, -.03]). There is also a significant serial indirect effect of conservative ideology on purchase intention through the two mediators (b = -0.01, SE = 0.003, 95% CI = [-.02, -.004]) and also through each mediator alone (individualizing moral foundation: 95% CI = [-.05, -.01]; perceived social acceptability: 95% CI = [-.05, -.01]; Figure C1 in Appendix C).

In addition, we ran a mediation analysis (PROCESS Model 4; Hayes, 2013; 5,000 bootstraps) to test whether conservatives' higher binding moral foundation explains their

more negative responses. The results revealed that binding moral foundation is not a mediator (for attitude: b = 0.002, SE = 0.02, 95% CI = [-.04, .04]; for purchase intention: b = 0.05, SE = 0.03, 95% CI = [-.001, .11]).

In Appendix D, we report results of supplemental Study S1 conducted with a U.K. sample, which further supports H2 and rules out additional alternative mediators (disgust, reactance, and trust in the government).

Discussion

Study 2 supports H1: conservative (vs. liberal) consumers respond more negatively to stigmatized products. This effect is explained by the fact that conservatives exhibit a lower individualizing moral foundation and, as a result, perceive stigmatized products as less socially acceptable (H2).

Study 3: AI versus Human Advertising Cues

In experimental Study 3, we test H3: the negative relationship between consumers' conservative ideology and their responses to stigmatized products is weakened when advertising features AI (vs. human) cues.

Method

This study employed a political ideology (continuous) \times 3 (AI vs. human vs. control) between-subjects design. U.S. male participants aged 18–26 who had not received the HPV vaccine were recruited via Prolific. Following Study 2, we used quota-sampling on political ideology to maintain balance. 425 participants passed the attention check and completed the study ($M_{age} = 23.38$, SD = 2.24).

First, participants reported their political ideology with the same scale used in Study 2 (Jost, 2006). Each participant viewed two ads, one for the HPV vaccine and one for male contraceptives. They were randomly assigned to one of three conditions (AI vs. human vs.

control). In the AI condition, the ad featured a humanoid robot designed to resemble contemporary AI-driven healthcare interfaces (e.g., chatbots and virtual assistants) to enhance ecological validity. In the human condition, the ad depicted a human healthcare provider. The control condition included no doctor image, displaying only the product visuals.

Next, participants reported their attitudes and purchase intentions using the same scales used in Study 2, and indicated their interest on a 3-item, 7-point Likert scale (α = .94). After debriefing, we collected demographic information. Stimuli and measurements are detailed in Appendix E.

Results

Manipulation Check

We conducted a post-hoc manipulation check with an independent U.S. sample (N = 202; 47.5% females; $M_{age} = 36.06$; SD = 7.67; Appendix E). A cross-tabulation analysis revealed the success of our manipulation ($\chi^2 = 240.69$, p < .001).

Moderation Analysis

We averaged participants' attitude, interest, and purchase intention across HPV vaccines and male contraceptives and conducted moderation analyses using PROCESS Model 1 (Hayes & Montoya, 2017). Results revealed significant interactions between AI cues and political ideology on attitude, relative to both the human (b = 0.16, SE = 0.08, p = .034) and control (b = 0.22, SE = 0.08, p = .005) conditions. AI cues also interacted marginally significantly with political ideology on interest relative to the control (b = 0.18, SE = 0.10, p = .072), but not the human condition (b = 0.16, SE = 0.10, p = .100). Similarly, AI cues interacted with political ideology on purchase intention relative to the control (b = 0.25, SE = 0.25).

0.11, p = .017), but not the human condition (b = 0.15, SE = 0.11, p = .166). The results are summarized in Table 2.²

Table 2. Study 3: Interaction Effects with Political Ideology

Outcomes	Conditions	В	SE
Attitude	AI vs. human	0.16*	0.08
	AI vs. control	0.22**	0.08
Interest	AI vs. human	0.16	0.10
	AI vs. control	0.18	0.10
Purchase intention	AI vs. human	0.15	0.11
	AI vs. control	0.25*	0.11

p < 0.05; *p < 0.01; *p < 0.001

In the control condition, conservative ideology negatively predicted attitude (b = -0.35, SE = 0.05, p < .001), interest (b = -0.16, SE = 0.07, p = .021), and purchase intention (b = -0.23, SE = 0.08, p = .003). In the human condition, the effect remained negative for attitude (b = -0.30, SE = 0.06, p < .001) and interest (b = -0.15, SE = 0.07, p = .034), but not for purchase intention (b = -0.12, SE = 0.08, p = .110). In the AI condition, the relationship held only for attitude (b = -0.14, SE = 0.06, p = .019), but not for interest (b = 0.01, SE = 0.07, p = .860) nor purchase intention (b = 0.02, SE = 0.07, p = .755).

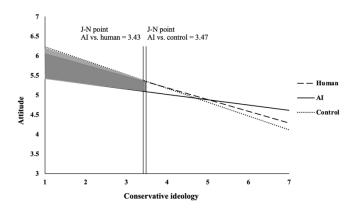
To further examine the significant interactions, we conducted Johnson-Neyman analyses (Johnson & Neyman, 1936). As shown in Figure 2, the effect of AI versus human on attitude was significant among liberals scoring 3.43 or lower on the 1–7 ideology scale (b = -0.27, SE = 0.14, p = .050). The effect of AI versus control on attitude was significant among liberals scoring 3.47 or lower (b = -0.27, SE = 0.14, p = .050). For purchase intention, AI versus control was significant among liberals scoring 2.66 or lower (b = -0.40, SE = 0.20, p = .050).

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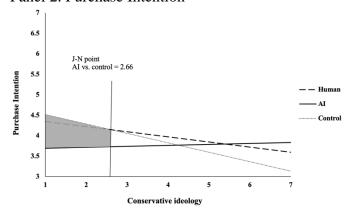
² In separate analyses, we found that the interaction between political ideology and human cues relative to the control condition is not significant for attitude (b = 0.05, SE = 0.08, p = .497), interest (b = 0.01, SE = .10, p = .856), nor purchase intention (b = 0.11, SE = 0.11, p = .333).

Figure 2. Study 3: Johnson-Neyman Analyses

Panel 1. Attitude



Panel 2. Purchase Intention



We further examined responses at -1 SD (liberals) and +1 SD (conservatives) from the mean of the ideology scale. Among liberals, attitudes were significantly lower in the AI condition than in the human (b = -0.56, SE = 0.19, p = .003). Again, among liberals, attitudes and purchase intentions were significantly lower in the AI condition than in the control condition (attitude: b = -0.66, SE = 0.19, p < .001; purchase intention: b = -0.65, SE = 0.27, p = .014). Among conservatives, no significant differences emerged across conditions.

Discussion

Study 3 generally supports H3: AI cues weaken the negative relationship between conservative ideology and responses to stigmatized products compared to human or control cues. AI cues narrow ideological differences by reducing liberal support rather than increasing

conservative support, consistent with an AI unfairness explanation rather than a psychological distance one.

Study 4: Government versus Corporate Advertising Cues

In experimental Study 4, we test H4: the negative relationship between consumers' conservative ideology and their responses to stigmatized products is strengthened when advertising features government (vs. corporate) cues.

Method

This study employed a conservative ideology (continuous) \times 3 (government vs. corporate vs. collaboration) between-subjects design. 446 U.S. participants recruited from Prolific passed the attention check and completed the study (60.3% female; $M_{age} = 42.54$, SD = 14.18). Quota-sampling on political ideology is adopted again to maintain balance.

Participants first reported their political ideology with the same scale used in Studies 2 and 3 (Jost, 2006). They were then informed about a raffle draw for a \$5 prize, with five winners choosing between a box of condoms and toothpaste. Participants were assigned to one of three sponsor conditions: governmental agency (CDC), company (Durex and Oral-B) or collaboration between both. In the government condition, the raffle was presented as sponsored by the CDC, introduced with a brief description and its logo beneath products. In the company condition, sponsorship was attributed to Durex (Reckitt) and Oral-B (Procter & Gamble), each briefly described, with logos beneath products. In the collaboration condition, the raffle was framed as a partnership between the CDC and both companies, with a short explanation and all logos displayed side by side.

After reading the scenario, participants indicated which product they preferred to win. Demographic information was collected following debriefing. Stimuli and measurements are detailed in Appendix F.

Results

Manipulation Check

We conducted a post-hoc manipulation check with an independent U.S. sample (N =200; 49.5% female; $M_{\text{age}} = 36.79$, SD = 7.63; Appendix F). A one-way ANOVA revealed that the manipulation was successful, F(2,197) = 79.70, p < .001.

Moderation Analysis

We conducted moderation analysis using PROCESS Model 1 (Hayes & Montoya, 2017) to examine whether sponsor condition (dummy coded) moderated the relationship between conservative ideology and consumer choice $(1 = \text{condoms}, 0 = \text{toothpaste})^3$. Results revealed a significant interaction between political ideology and the government versus corporate condition on choice (b = -0.42, SE = 0.17, p = .014), but not for government versus collaboration (b = 0.01, SE = 0.17, p = .976). In separate analyses, we also found that the interaction between political ideology and corporate cues relative to the collaboration condition is significant on choice (b = 0.42, SE = 0.19, p = .024).

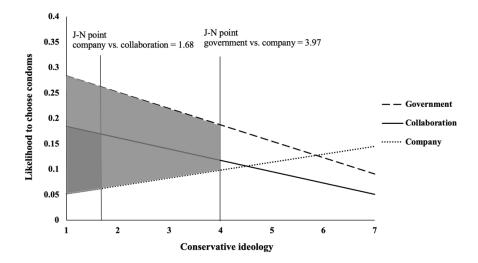
The relationship between conservative ideology and likelihood to choose condoms is significantly negative when government sponsorship is disclosed (b = -0.23, SE = 0.11, p = .028), but not when sponsorship is from a company (b = 0.19, SE = 0.13, p = .163) or a collaboration (b = -0.24, SE = 0.13, p = .072).

As shown in Figure 3, a Johnson–Neyman analysis revealed that the effect of government versus corporate sponsorship on choice was significant among liberals scoring 3.97 or lower on the 1-to-7 political ideology scale (b = 0.74, SE = 0.38, p = .050). The effect

³ PROCESS runs a logistic regression as the dependent variable is binary. Coefficients are expressed in a logodds metric.

of company versus collaboration sponsorship was significant among liberals scoring 1.68 or lower on the 1-to-7 political ideology scale (b = -1.14, SE = 0.58, p = .050).

Figure 3. Study 4: Johnson-Neyman Analysis



We next examined product choice at -1 SD (liberals) and +1 SD (conservatives) from the mean of the ideology scale. Among liberals, condoms were chosen significantly more often in the government than corporate condition (b = 1.69, SE = 0.56, p = .003), with a marginal effect for collaboration versus corporate (b = 1.13, SE = 0.58, p = .051). There was no difference between government and collaboration (b = 0.56, SE = 0.41, p = .176). Among conservatives, product choice did not differ significantly across conditions.

Discussion

Study 4 generally supports H4: government cues strengthen the negative relationship between conservative ideology and responses to stigmatized products. Liberals were more responsive when ads were framed as government-sponsored, whereas conservatives were largely unaffected by sponsor type. This asymmetry suggests that partnering with government agencies may increase liberal adoption without triggering conservative backlash.

General Discussion

Across four studies, we show that conservatives respond more negatively than liberals to stigmatized products, an effect driven by their weaker endorsement of the individualizing moral foundation and lower perceptions of social acceptability. We also rule out alternative explanations, including binding moral foundation, reactance, disgust, and trust in the government. Further, we show that advertising cues moderate this relationship. Specifically, AI (vs. human) cues attenuate the ideological gap by reducing liberals' receptivity, whereas government (vs. corporate) cues exacerbate it by increasing liberals' favorable responses and leaving conservatives largely unaffected.

A consistent pattern across our moderation studies is that changes in consumer responses occur primarily among liberals, with conservatives' responses remaining relatively stable across conditions. Recognizing this asymmetry is critical. While efforts to bridge ideological divides may "statistically" bridge gaps, they often do so by altering liberal responses rather than conservative ones. This insight underscores the importance of understanding not only whether persuasion efforts are effective but also for whom and why, particularly in sensitive health domains.

Theoretical Contributions

Our research offers several theoretical contributions that advance the literatures on stigma, political ideology, and AI-in-marketing. First, we contribute to the marketing literature on stigma by shifting the focus from consumers with stigmatized identities (Chaney et al., 2019; Homburg & Ukrainets, 2021) and stigma-related advertising strategies (Sabri, 2017; Srivastava et al., 2024) to stigmatized products, specifically, sexual and reproductive health products. Unlike prior studies that group stigmatized products together without considering their differences (Fam et al., 2004; Waller, 1999), or focus on single products

(Dahl et al., 2001), we adopt a broader approach. We examine products that are institutionally promoted for their prosocial value yet rejected by some consumers due to their sensitive nature. In doing so, we extend the literature by identifying political ideology as a key antecedent of consumer responses, one that is more visible than many psychological traits and more stable than situational influences (Jung et al., 2017).

Second, we contribute to the literature on political ideology and consumer behavior. Existing studies primarily examine ideology's effects on mainstream products (Ordabayeva & Fernandes, 2018), broadly rejected products (Goenka & Van Osselaer, 2023), or socially desirable behaviors such as green consumption (Kidwell et al., 2013) and charitable giving (Farmer et al., 2020). In contrast, we focus on socially beneficial yet stigmatized products, which offer public value but evoke discomfort, shame, or embarrassment (Bailey & Waronska, 2015). By examining how political ideology shapes consumer responses to these products, we address a notable gap in the literature.

We also extend research on political ideology and persuasion by building on Cakanlar and White (2023), who highlight persuasive strategies at the self, social, and system levels. At the social level, we address their question of whether "unbiased" entities such as AI can shift attitudes toward counter-attitudinal issues. Our findings show that AI cues narrow ideological divides in stigmatized product consumption primarily by dampening liberals' receptivity. Although AI shows promise in sensitive healthcare contexts (Holthöwer & Van Doorn, 2022; Tsai et al., 2021) and prior work links ideology to preferences for AI-enabled services in domains such as retail, tourism, and entertainment (Cui & van Esch, 2022; van Esch et al., 2022; Paul et al., 2025), little research has examined how ideology shapes responses to AI cues in healthcare advertising. Our results highlight the need to align AI-featured advertising strategies with consumers' ideological orientations. At the system level, we extend Cakanlar and White's (2023) framework by showing that institutional actors,

particularly government cues in ads, increase favorable responses among liberals while leaving conservatives unaffected (Irmak et al., 2020). This underscores the importance of message source in persuasive appeals to ideologically diverse audiences in sensitive domains.

Practical Implications

Given that consumers' political ideology can often be inferred from geography (Fernandes et al., 2022), media preferences, and online platform usage (Shewani & Chan, 2022), our findings offer important implications for managerial practice.

First, by tailoring messages to the mechanisms we identified in our mediation analysis, managers and policymakers can design more effective campaigns. Enhancing the perceived social acceptability of stigmatized products may be a key pathway to greater adoption among conservatives.

Second, our findings underscore the need to align AI use in advertising with audience ideology. While AI cues tend to reduce engagement among liberals, conservatives appear largely unaffected. To avoid backlash in liberal-leaning regions or media environments, marketers should prioritize human spokespersons over AI agents to preserve perceptions of fairness. In contrast, AI cues may be more acceptable in conservative markets, where concerns about algorithmic bias are less pronounced, allowing greater flexibility in the use of AI.

Third, this research strikes a cautionary note about using AI in health communication. Although AI cues may appear to narrow ideological gaps, they do so mainly by suppressing liberal engagement rather than persuading conservatives. This asymmetry highlights the risks of perceived bias in algorithmic communication, particularly among liberals. Marketers and policymakers should implement safeguards in both the design and communication of AI by

ensuring algorithms are inclusive and equitable, enhancing transparency, and framing AI as a supportive tool rather than a substitute for human decision-making.

Fourth, both marketers and policymakers can optimize advertising by considering the role of government sponsorship. Government endorsement increases engagement among liberals but has little to no effect on conservatives, who appear largely unaffected. In liberal-leaning markets, co-branding with public health institutions can enhance perceived legitimacy and signal social responsibility. In predominantly conservative markets, however, maintaining a corporate voice may be sufficient, as government involvement provides no additional benefit.

In sum, applying insights from this research can help increase adoption of socially beneficial yet stigmatized products. Greater acceptance of these products not only drives sales but also promotes public health by reducing unintended pregnancies, improving early STI detection, and preventing diseases.

Limitations and Future Research

First, we focus on a narrow set of stigmatized products, sexual and reproductive health products. Although socially important and often promoted by public institutions, this category does not capture the broader landscape of stigmatized goods such as IVF, weightloss treatments, and sustainable funerals (Fitzgerald et al., 2023; Ponnappan et al., 2025; Whitley et al., 2022). These products may be less routinely promoted by governments yet remain beneficial to specific populations. Future research should examine whether our theorizing extends to these categories.

Second, while we identify the individualizing moral foundation as a key mechanism and rule out alternatives, we measured rather than manipulated it. Because moral foundations are typically stable traits, experimental manipulation is challenging (Goenka & Thomas, 2024). Future research could strengthen causal evidence by developing stimuli that

temporarily heighten the salience of the individualizing moral foundation (Mooijman et al., 2018) to examine whether this shifts responses to stigmatized products.

Finally, our studies primarily rely on self-reports in hypothetical scenarios, which may be influenced by social desirability and hypothetical bias. To strengthen external validity, future research could incorporate more behavioral outcomes and field evidence from A/B tests or longitudinal tracking.

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