

SOCIAL MOVEMENTS, IDENTITY STEREOTYPES AND GENDER: HOW DID #MeToo AFFECT CONSUMPTION? *

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Abstract

Although we know that social movements affect beliefs and public policies, it is not clear how they impact consumption. To address this question, we examine whether and how #MeToo—a preeminent global social movement raising awareness of sexual abuse and harassment against women—affected the consumption of products displaying traditional markers of femininity in the footwear market. To do so, we analyzed unique and comprehensive high-frequency product-level stockout data from a leading global fashion retailer spanning 5.2 million observations from January 2017 to December 2018 in 32 OECD countries (covering 89% of the population of OECD members). Using a triple-difference strategy over time, across countries, and between product attributes, we document a change in product-level stockouts consistent with dissociation from gender stereotypes along two major design dimensions: colors (pink or red vs. black or blue shoes) and form (slim vs. bulky shapes; heel height emphasizing silhouette and gait). Consistent with a demand-side effect, we find no evidence of short-term changes in product assortments in reaction to #MeToo. Local heightened sensitivity of product stockouts to online searches around sexual harassment is consistent with the documented effect. We discuss the results’ implications for firms’ communication strategies as they relate to customer identity, as well as for our understanding of the role of social movements in shaping consumer market dynamics.

Keywords: Social Movements, Gender Identity, Natural Experiments, Online Retail, Fashion Markets, Footwear

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1 Introduction

Social movements—sustained collective action challenging existing norms and identities to drive societal change (Kranton, 2016; Polletta and Jasper, 2001)—have recently garnered increased visibility through social media. They typically challenge well-defined, specific norms and stereotypes perceived as stigmatizing widely recognized identities, such as women for #MeToo or black people for #BlackLivesMatter. Despite their well-established record in changing social beliefs and influencing public policies (e.g., new laws expanding workplace protections for discriminated groups), little is known about whether and how they affect consumers’ behaviors in markets.¹ Novel to this paper, we ask: can a social movement (#MeToo) raising awareness on a negative consequence of stereotypes about a specific identity (sexual harassment against women) impact the market for products displaying markers traditionally associated with this identity (hereafter “products with markers of traditional femininity”), and how?

#MeToo or “Me Too”—a term first used by Tarana Burke in 2006 to raise awareness about, and fight, sexual abuse and harassment against women—has become one of the most noticeable and defining social movements of the early 21st century. After becoming the most widely searched term globally in October 2017, it progressively gave rise to many spinoffs around the world, yielding important attitudinal, behavioral, and policy changes.² Notably, the movement led to a major rise in reporting sexual crimes to the police (Levy and Mattsson, 2021), greater rewards for more gender-equal companies in the form of greater excess returns (Lins et al., 2020), women writers being hired more frequently in Hollywood (Luo and Zhang, 2021b) and fewer stereotypical female-oriented ideas in movies (Luo and Zhang, 2021a)³—all of which highlight #MeToo’s role as a transformative social movement challenging views and stereotypes attached to the identity of women.

The pervasiveness of gender stereotypes, that is generalized beliefs about attributes or characteristics that ought to be possessed for example by women and men (Bertrand, 2020; Bordalo et al., 2016), explains the prevalence of gender inequalities within organizations (Coffman et al., 2021; Fernandez-Mateo and Kaplan, 2018). Within consumer markets, gender-based positioning strategies (Grohmann, 2009) also target certain products to consumers of a certain ascribed gender (e.g. men or women) often based on stereotypical aspects of gender identity (e.g. blue toys for boys, pink toys for girls). However, individuals’ self-views about those stereotypes are far from being static (Eagly et al., 2020; Garg et al., 2018). Instead, they depend on the degree to which consumers choose to conform with or distinguish themselves from the group’s prescribed behavior, in accordance to prevailing social norms (Akerlof and Kranton, 2000; Berger and Heath, 2007).

¹The lack of causal evidence contrasts with anecdotal evidence on the topic. For instance, #Movember—a movement exhorting men to grow facial hair to raise awareness of male-specific cancers—was reported to trigger a fall in sales of P&G’s Gillette products even in the absence of specific calls to boycott them (Oldstone-Moore, 2015, p.1).

²See Appendix Figure A1 for a detailed chronology.

³While Luo and Zhang (2021a) focuses on the “production” of gender stereotypes (produced movie scripts), this paper rather looks at the demand side of the market, by focusing on the purchase of stereotypical products given a fixed set of products.

In particular, when reminded of threats (or stigma) attached to identity stereotypes (e.g. sexual harassment against women), consumers may lower identification to the traditional meaning or values associated to the threatened identity (Ethier and Deaux, 1994; Spencer et al., 2016; Steele et al., 2002). Building on social identity theory, we ask whether #MeToo led to a drop in consumption for products with markers of traditional femininity by raising awareness on a negative consequence of gender stereotypes: sexual abuse and harassment against women.

While the managerial literature recently incorporated insights from social identity theory (Coffman et al., 2021; Del Carpio and Guadalupe, 2021), there is a general lack of empirical evidence on how identity-based social movements impact consumer markets for products used to express particular aspects of an identity. One reason for this is that such effects are difficult to assess in practice. First, social movements are large-scale and unpredictable events that—realistically—cannot be unpacked in laboratory settings or manipulated in field contexts. Second, any correlational evidence runs the risk of being biased, as social movements are generally endogenous to social change. Third, social movements can affect both sides of the market: not only consumer demand but also the types of products available to customers. Finally, field data (e.g. consumer surveys) generally lack sufficient time, space, and product granularity (e.g. a product description). Importantly, “women” products (e.g. women’s wear) are not necessarily “feminine” (and “men” products not necessarily “masculine”), so comparing the consumption of both is not an appropriate strategy to investigate identity expression in markets.

To address these empirical challenges, we focus on a major expenditure category strongly tied to women’s identity expression (Belk, 2003; Dilley et al., 2015): the women’s footwear market. In footwear, the salience of gender stereotypes can be measured by two major markers of traditional femininity: color (in particular pink or red, versus black or blue) and form (e.g., slimmer shapes, high heels emphasizing silhouette and gait, versus bulkier shoes like sneakers or flat boots). The reliance on those two traditional markers of femininity in product design is also called the “*shrink it and pink it*” strategy (Van Tilburg et al., 2015). Those markers are reflective of more general gender stereotypes related to physical attractiveness (Tartaglia and Rollero, 2015), and the sexual objectification of women (Labrecque and Milne, 2012; Morris et al., 2013; Wright, 2017).⁴ Importantly, once stripped of its markers of traditional femininity, aside from its smaller size on average, a woman’s shoe becomes nearly indistinguishable from a man’s shoe.

We construct a unique high-frequency panel for the number of out-of-stock shoe sizes at the product-level, using data from one of the leading global fashion retailer. The data capture out-of-stock sizes for nearly 1,800 shoe models available to customers in 32 OECD countries (representing 89% of the population of OECD members) between January 2017 and December 2018 (5.2 million observations). Our main identification strategy relies on a triple-difference estima-

⁴Coding how men and women were portrayed in advertisements in the three largest newspapers of Italy and the Netherlands, Tartaglia and Rollero (2015) finds that women are more frequently sexually objectified and presented as decorative. A related literature found that women exposed to critiques against female objectification report greater intention to engage in collective action and support protests against traditional gender norms (Guizzo et al., 2017) and show reduced internalization of appearance concerns (Halliwell et al., 2011).

tor, where we compare the number of out-of-stock sizes for products with feminine (vs. neutral) markers in countries with strong (vs. weak) media exposure to #MeToo in the six weeks after (vs. before) #MeToo began. We find that #MeToo led to a relatively sudden 25.8% rise in the number of out-of-stock sizes for shoes with no clear markers of traditional femininity (i.e. flat, bulkier and gender-neutral styles of shoes which are neither pink nor red) in the six weeks after 15 October 2017. Relative to those neutral models, pink and red shoes experienced a 28.6% drop in stockouts, and shoes belonging to the “heels and pumps” category an 18.3% drop, with every additional inch of heel height leading to an additional 3.3% drop. The positive substitution effect with more neutral models of shoes is strongest for blue and black flat shoes belonging to the sneakers and boots categories. We also show #MeToo had no significant impact on the stockouts for more or less expensive shoes, an attribute not clearly associated with femininity.

Complementary analyses confirm the robustness of this effect. Using daily search data on sexual harassment within countries, we confirm that countries with strong media exposure to #MeToo also exhibited a significant rise in public awareness for sexual harassment cases, with no pre-trends. We then rule out the possibility that other factors tied to consumption preceding #MeToo would underlie the change in product stockouts. To do so, we show that weakly and strongly exposed countries also had similar pre-trends in the relative stockouts for feminine (vs. other) markers in products prior to #MeToo. In addition, further de-trending the data using 2018 as a placebo year (quadruple difference) leads to similar estimates.

In the last section of the paper, we discuss potential mechanisms. First, while the estimated impact of #MeToo on product stockouts is consistent with both demand-side effects (e.g. a shift in consumer preferences) and supply-side effects (e.g. retailers’ change in product assortments or advertising), we provide additional evidence pointing towards a demand-side effect. In particular, we find no evidence that the retailer swiftly reacted to #MeToo by either removing products with traditional femininity markers or by adding neutral shoes to its assortments. Moreover, inventory allocation decisions generally closely follow fashion seasons and take time to process. Instead, the documented drop in product stockouts is sharp—especially for high heels—and manifests itself in significant differences within the first week of #MeToo (15–21 October 2017). Further analysis using daily data provides further support to a demand channel. We test whether the #MeToo effect can be related to daily reminders of threats attached to gender identity stereotypes. Here, we regress daily stockouts on daily search volumes on sexual harassment within countries over the entire 2017-2018 period, along with day and country fixed effects. More daily searches on sexual harassment within a country are associated with fewer (more) daily stockouts for products with (without) feminine markers within that same country.⁵ Importantly, this effect is concentrated in the post-#Metoo period, which suggests #MeToo did not simply raise awareness on sexual harassment cases, but may have “activated” the link between this extreme form of identity threat and gender-based consumption stereotypes more generally. Third, we provide corroborative evi-

⁵Granger causality tests, where we exploit lags in daily searches within countries, confirm the robustness of the effect.

dence of a #MeToo effect from an online survey experiment, also consistent with #MeToo raising awareness of gender stereotypes as a source of identity threat. Finally, we replicate the analysis using additional product-level stockout data from the same retailer on privately consumed products (lingerie). We find no significant effects, which suggests social image considerations are more likely to drive our results than a fully internalized shift in gender norms (Bertrand, 2020; Bursztyn et al., 2018).

Our work makes three primary contributions. First, we complement a growing body of empirical work on the social determinants of consumption, from habit formation (Bronnenberg et al., 2012) to culture (Atkin, 2016) and social identity (Atkin et al., 2021; Benjamin et al., 2010). Notably, related work on consumer market dynamics or fashion trends primarily focused on predictive modeling (Bertrand and Kamenica, 2018), or on endogenous and internal market forces (e.g., when explaining dynamics such as fashion cycles), from adoption speed (Berger and Le Mens, 2009) to information asymmetry (Corneo et al., 1994) or the role of cultural capital formation (Yoganarasimhan, 2017). Novel to the current work, we examine how unpredicted, exogenous and external shocks (such as a global identity-based social movement) can shape consumer preferences in fashion.

Second, we contribute to the literature on consumer identity-signaling (Berger and Heath, 2008; Gneezy et al., 2012) and gender stereotypes (Bertrand, 2020; Coffman et al., 2021). Consistent with the economics view on identity (Akerlof and Kranton, 2000), signaling models of consumption (Corneo and Jeanne, 1997; Heffetz, 2011; Pesendorfer, 1995; Yoganarasimhan, 2012) assume consumers receive utility from signaling their identities to others (e.g. traditional femininity) through the purchase of visible products or attributes (e.g. high heels or pink color). By offering large-scale causal field evidence that reminders of sexual harassment can significantly reduce the consumption of products with markers of traditional femininity, our results suggest external factors like social movements reshaping societal views about a particular identity can directly affect the market for stereotypical products. They complement prior laboratory evidence showing consumers dissociate from stereotypical aspects of an identity when reminded of threats attached to identity stereotypes (Steele et al., 2002; Trudel et al., 2016; White and Argo, 2009).

Finally, we contribute to the literature connecting social movements and markets for consumer goods. While the causal impact of #MeToo on strategic decision making at work (Luo and Zhang, 2021b) or firms' value (Lins et al., 2020) has been recently documented, there is a general lack of causal field evidence on consumer markets. Prior evidence on the topic mostly focused on social movements' politics (how they emerge and organize, what kind of collective actions they use, and the direct outcomes of these actions; Garcia-Jimeno et al. 2021) and their specific consequences on business practices (e.g., "golden parachutes" for CEOs; Fiss et al. 2012), regulations (e.g., the production of foie gras; DeSoucey 2016), and clear calls for actions such as boycotts (e.g., Sun et al. 2021). In management, the bulk of efforts on consumer markets have focused on civilian boycotts directly targeting consumption patterns (Sun et al., 2021), or brands' response to boycotts (McDonnell and King, 2013). Adding to these efforts, we offer the first causal estimates of

how a digitally native social movement can alter the consumption of specific products in online marketplaces even in the absence of clear calls for boycotts.

Our results have important implications for firm communication strategies and practices. Firms should pay particular attention to social movements and adapt their product assortment decisions or communication strategies accordingly. Indeed, companies that make way for products with markers of traditional femininity in their assortments (e.g., a high share of high heels, stereotypical markers of femininity) may have suffered more from #MeToo than companies with lower exposure to such attributes.⁶ Social movements may ultimately force those companies to remove (or “cloak”) product attributes visibly associated with stigmatized aspects of an identity (Yoganarasimhan, 2012), and invest in less stereotypical consumption norms (Corneo and Jeanne, 1997). The shrinkage of the market for products with markers of traditional femininity evidenced in this paper may also explain why more gender-equal companies saw their firm value rise after #MeToo (Lins et al., 2020). Finally, those results suggest traditional gender-based product segmentation and targeting strategies may not be as effective in the post-#MeToo era.

The remainder of this paper is organized as follows. Section 2 provides a theoretical background and overview of the literature. Section 3 describes the data. Next, Section 4 discusses the empirical setting and estimation procedure. The main results are presented in section 5. Section 6 discusses potential mechanisms. Finally, Section 6 concludes and discusses limitations, and directions for future research.

2 Theoretical Framework

2.1 Social Movements, Identity and Consumption

Social movements are a form of collective action devised to influence social outcomes such as regulations, beliefs or behaviors. Long-held structural features of the socio-political life, social movements act as economic, historical, and social-change agents (Tilly and Wood, 2020) and have recently gained more resonance with the rise of digital communications. This is because contemporary digitally connected markets facilitate expressions of personal opinions as well as access to and sharing of information almost in real time.

Recent years have witnessed the rise of digitally native movements (e.g., #MeToo, #BlackLives-Matter) that challenge systemic discrimination against specific identities. These movements combine traditional modes of action (such as mass gatherings) with social-network approaches (e.g., the use of hashtags) and online communication as a way to raise awareness on the negative consequences of identity stereotypes (e.g. sexual harassment, racial profiling and police violence). Their focus on identities (e.g., women, ethnic minorities) is encouraged, in part, by new digital means of interactions that help to challenge existing power structures and naturally give rise to identity claims (Castells, 2011).

⁶Anecdotal evidence suggests that Victoria’s Secret, a brand strongly associated with traditional femininity, was hurt by the #MeToo movement (Thau, 2018) and later attempted to update its image to mitigate adverse public perception.

To challenge the status quo, certain social movements directly target consumption patterns (e.g., through boycotts or calls to change consumer behavior; [Friedman 1999](#); [Kozinets and Handelman 2004](#)). For instance, recent ethical fashion movements directly asked consumers to purchase more sustainable products ([Reinecke and Donaghey, 2015](#)), while a nationwide civilian boycott of Japanese products in China led to a drop in sales of Japanese cars ([Sun et al., 2021](#)). To date, the bulk of efforts in management have focused on consumer motivations for boycott participation ([John and Klein, 2003](#)) and how brands respond to social movements (i.e., engage in brand advocacy [Hydock et al., 2020](#)). However, and despite the interplay between social movements and consumption, there is little empirical evidence on whether and how social movements tackling a specific consumer identity spill over to identity-based consumption even in the absence of specific calls for boycotts.

2.2 Consumer Identity Expression and Gender

Consumer identities are “facets of the self [...] that consumers use to categorize themselves and express who they are” ([Bhattacharjee et al., 2014](#)). These category labels include, but are not limited to, one’s gender, age, ethnicity, and social roles (e.g., CEO vs. factory worker), as well as experience-based (e.g., alumni) and value-based (e.g., political ideology, religion) community membership. Consumers invest in products (or brands) that signal their identities (e.g. social class, gender, ethnicity) or the groups they wish to be part of ([Akerlof and Kranton, 2000](#); [Atkin et al., 2021](#)).

When it comes to consumption, the literature on identity-signaling insists on the visibility (or conspicuousness) of consumption ([Amaldoss and Jain, 2005](#); [Bellet, 2019](#); [Bursztyn et al., 2018](#)), with clothing and footwear ranking particularly high in social visibility ([Heffetz, 2011](#)). Footwear in particular has long constituted a key marker of gender identity,⁷ notably because of its visibility: shoes are an unambiguously visible piece of clothing. They cannot be hidden from sight. Indeed, fashion has long been understood as a way for individuals to signal various aspects of their identities to others ([Aspers and Godart, 2013](#); [Yoganarasimhan, 2012](#)), including gender: despite recent and increasingly salient attempts to blur gendered stylistic distinctions ([Reis et al., 2018](#)), gender remains a key organizing principle of the fashion industry (and of the consumer goods industry more generally). Confirming the link between gender identity and consumption, [Bertrand and Kamenica \(2018\)](#) nearly perfectly inferred people’s gender, by analyzing individual consumption patterns, due to the presence of highly gender-specific products (e.g., makeup), brands (e.g., Victoria’s Secret), and media consumption (e.g., *People* magazine).

Beyond ascribed gender however, prior research in sociology and psychology has also showed how certain forms (proportion, shape, and lines) and colors (tones, contrast) within specific product categories are traditionally perceived as feminine or masculine ([Alexander, 2003](#); [Dilley et al., 2015](#)). In marketing, the use of gender-based market segmentation and targeting is widespread,

⁷For example, shoes can affect beliefs about women’s perceived status ([Galak et al., 2016](#)) or power ([Dubois and Anik, 2020](#)).

with brands aiming at fitting consumers' sex role identity (Grohmann, 2009) by relying on prevailing social beliefs about femininity or masculinity (e.g. “*shrink it and pink it*”; Van Tilburg et al. 2015). Among those traditional markers, colors are often gender-stereotyped (Karniol, 2011). The use of color pink (or red) for women (versus blue or black for men) is probably the most common way to segment markets based on gender (Labrecque and Milne, 2012; Moss et al., 2006). In a recent study investigating the “pink tax”, Bhatia et al. (2021) found that color was the most commonly cited attribute as means of identifying the gender target from product images.⁸ Besides color, form is another major dimension of product design reflective of gender stereotypes. Here, the literature distinguishes between curvy lines or slim and round shapes—traditionally sold to women—and bulkier more angular shapes—traditionally sold to men (Lieven et al., 2015; Moss et al., 2006). Within global contemporary footwear, heels—footwear that raise the heel significantly higher than the toes, emphasizing silhouette or gait—have also emerged as a distinctive “feminine” style at least since the 19th century (Morris et al., 2013; Van Tilburg et al., 2015), that is, a durable, recognizable pattern of aesthetic choices (Godart, 2018), with high popularity and cultural impact (Semmelhack, 2008).⁹

In sum, women's wear, and in particular the footwear category, includes a large variation of identifiable design attributes, enabling us to probe the effect of #MeToo on the market for product markers conveying traditional femininity in fashion.

2.3 Dissociation from Identity Stereotypes

The extent to which one's identity influence the purchases of products with traditional identity markers rests on how narratives in the environment (e.g., common stereotypes or news coverage) make consumers feel about their identity (Trudel et al., 2016). When faced with an identity threat, that is, contextual information that devalues aspects of an identity central to a consumer's self-view, such as negative stereotypes (Spencer et al., 2016) or cues reminiscent of one's stigma (Chaney et al., 2019), individuals tend to turn away from stereotypical behaviors attached to the threatened identity in order to minimize or avoid the threat (Ethier and Deaux, 1994; White and Argo, 2009). Notably, consumers' propensity to dissociate from identity stereotypes in reaction to identity threats is particularly pronounced for deeply ingrained identities such as gender or ethnicity (for a review, see Mandel et al. 2017).

The tendency to disengage from an identity stereotype also emerges when reminded of a threat that questions one's sense of security. For instance, increased gender identity salience lowers women's perceived vulnerability to breast cancer (Puntoni et al., 2011) because it triggers a defensive mechanism that increases the difficulty to process the message. Moreover, the physical

⁸Bhatia et al. (2021) mention that in 75% of cases (out of a total of 2886 labeling tasks where research assistants were asked to determine whether a product was targeted at men or women), the RAs indicated that the product or package color helped them to determine the gender target.

⁹In 2011 alone, women spent \$38.5 billion on shoes in the United States alone, of which more than half went to heels (NPD Report 2011). In the UK alone in 2016, 37% of British female consumers bought at least one pair of heels (BBC 2016), making them the third most popular type of shoes after flat shoes (51%) and trainers (37%).

presence of ambient cues of a company’s culture reinforcing the social stereotypes of math, science, and engineering fields (i.e., nerdy), such as science-fiction posters, comic books, and stacked soda cans, results in women being less likely to apply for a job at the company, compared with a context with non-stereotypical ambient cues (e.g., nature posters, neutral books, plants, and water bottles; Chaney et al., 2019). Closer to this endeavor, White and Argo (2009) demonstrated that when women are confronted with a threatened aspect of their own identity, those who score low on collective self-esteem are more likely to choose a gender-neutral magazine (*Us Weekly* magazine) over a traditionally feminine one (*Cosmopolitan*).

Building on these ideas, we predict that by raising awareness on a negative consequence of identity stereotypes (sexual harassment against women; a major identity threat), #MeToo decreased consumption for products associated with traditional markers of femininity.

3 Data

We primarily collected and combined three types of data for 32 OECD countries (full country list in Figure 1). First, we collected daily product-level stockout data for an exhaustive collection of 1,779 women’s shoe models from one of the largest global fashion retailers between 1 January 2017 and 31 December 2018. Second, to capture the intensity of media exposure to #MeToo, we collected the number of #MeToo news headlines published within the six weeks after 15 October 2017 in each country. Consistent with other papers studying this movement (Levy and Mattsson, 2021; Lins et al., 2020), we use 15 October 2017 as the pivotal date throughout.¹⁰ Third, we collected daily country-level online search volumes from Google for two topics: sexual harassment (the identity threat made salient with #MeToo) and gender equality (a topic also relevant to women’s identity serving as a baseline topic).

3.1 Daily Product-Level Stockout Data

We obtained web-scraped online retailer data from analytics company StyleSage, consisting of 5.2 million data points capturing daily information on footwear product listings from one of the largest global fashion retailers with annual revenues above 20 billion euros. The data capture daily product-level information between January 2017 and December 2018 for 32 OECD countries¹¹ and cover 1,779 shoe models sold at one point on the retailer’s platform over the two-year period.¹² The retailer sells products under its own brand label, both online and in local stores.

The data include product-level information such as color (black, blue, pink, red, etc.), price (in US dollars), shoe style (e.g., heels and pumps, wedges and platforms, clogs, sneakers, sandals, boots or lace-up shoes), and heel height measured in inches (Table 1). Building on section 2, we

¹⁰On that date, actress Alyssa Milano started using the hashtag #MeToo, which was tweeted over half a million times overnight (see Appendix Figure A1 for a detailed timeline of events).

¹¹Data were not available for four OECD countries: Australia, Chile, Luxembourg, and New Zealand, due to the retailer’s absence or marginal market penetration in these countries.

¹²For robustness, we also obtained data on an additional product category (lingerie), which we discuss in Section 6.

operationalize product markers of traditional femininity using product attributes tied to specific forms or colors. We identify three clear markers of femininity in our data, namely i) heels and pumps, which are slimmer (and exclusively feminine) shoes, ii) heel height (measured in inches)—both linked to forms—and iii) red and pink colors. Within our 1,779 women shoe models, 30% belong to the “heels and pumps” category, 22% have heel height higher than three inches, and 9% are pink or red (Table 1).

Table 1: Summary Statistics (Full Sample: 2017-2018)

Variable	Obs	Mean	Std. Dev.	Min	Max
Daily stockouts	5238582	2.18	2.77	0	8
<i>Shoe styles:</i>					
Heels and pumps	1779	.3	.46	0	1
Boots	1779	.29	.46	0	1
Lace-up shoes	1779	.01	.1	0	1
Platforms and wedges	1779	.06	.24	0	1
Sandals	1779	.12	.32	0	1
Sneakers, clogs and loafers	1779	.22	.41	0	1
<i>Shoe colors:</i>					
Pink	1779	.06	.23	0	1
Red	1779	.03	.18	0	1
Black	1779	.44	.5	0	1
Blue	1779	.07	.26	0	1
Brown	1779	.07	.26	0	1
Green	1779	.04	.19	0	1
Neutral	1779	.24	.42	0	1
Yellow	1779	.05	.22	0	1
<i>Other shoe characteristics:</i>					
Shoe price (U.S. \$)	1779	54.48	24.57	11.24	169.59
Heel height (inches)	1779	1.84	1.31	0	5.2
Heel height \geq 3 inches	1779	.22	.42	0	1

The data track online product purchases by capturing daily stockout information for each possible product size in each country. Hence, the data reflect national demand and supply through variations in product availability on the retailer’s website.¹³ While daily stockout size information is binary (0 = product size unavailable; 1 = product size available), our product-level stockout measure ranges between 0 and 8 because each product offers 8 possible sizes. Nearly 400 shoe models can be purchased each month and remain available on the website for about four months. From the full [product \times size \times day] matrices, we construct a high-frequency measure of product-level stockout within each country, which reflects the daily number of out-of-stock shoe sizes per product. This measure ranges between 0 and 8 (Mean = 2.18; SD = 2.77) and varies considerably within product-country over time (Appendix Figure S1; SD = 1.22).

¹³Past work comparing sales with product stockouts to estimate demand have found that predicted sales strongly correlates with products’ stockout frequencies (Conlon and Mortimer, 2013).

Two robustness checks confirm that the stockout measure effectively captures (unexpected) country-level sales shocks (Online Appendix B). First, product-level stockouts exhibit regular variations consistent with industry seasonality (Figure S2). Notably, these peak at the start of winter sales (January) and summer sales (July) as well as during Black Fridays. Second, the data reliably capture product-level stockout variations specific to each country. In particular, daily country-level online searches for “Black Friday” (24 November 2017) coincide with a spike in the stockout measure in countries that have a Black Friday, but no such variations in either online searches or stockout occur in countries that do not have a Black Friday (Figure S3).

3.2 Media Coverage

To create a measure of country-level exposure to #MeToo, we collected the number of news headlines about #MeToo released in major national news outlets in the 6 weeks that followed 15 October 2017 in each of the 32 countries. Using news platform Factiva with access to approximately 25,000 international sources from 159 countries and in 22 languages, we recovered the number of articles published in print media that mentioned the term “#MeToo.” To capture the local news, we translated—or looked for the equivalent term for—#MeToo in each of the languages spoken in the 32 OECD countries, and included news headlines mentioning #MeToo or its local equivalent in the target country’s language.

A total of 22,932 articles were released about #MeToo in the 32 countries focal to our analysis between 15 October 2017 and December 2017 (i.e., 6 weeks following the event). On average, there were 18 headlines per million residents (SD = 29) with significant variations between countries (Figure 1). Unexposed (or weakly exposed) countries to #MeToo include diverse countries such as Estonia, Turkey, Japan, and Mexico. They represent about a third of the countries in our sample. The most exposed countries in our sample had more than 30 headlines per million residents and include the United States, Sweden, or Switzerland.

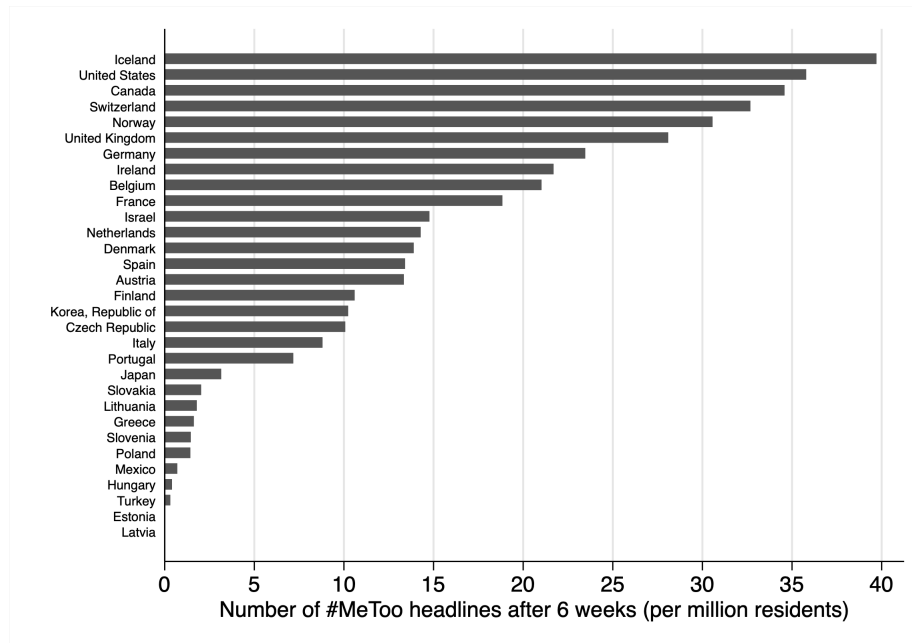
3.3 Online Searches

To capture variations in local awareness to sexual harassment cases against women, we collected daily country-level normalized web search volumes between 1 January 2017 and 31 December 2018 on Google Trends (<http://www.google.com/trends>) for the topic “sexual harassment.” As a benchmark, we also collected normalized web search volumes for the topic “gender equality”—a topic tied to women’s rights more generally, but not necessarily to the prevalence of negative stereotypes against women (Bertrand, 2020).¹⁴

Instead of merely focusing on keyword-level searches (queries using the exact terms “sexual harassment”), we collected searches at the topic level. Doing so enables us to recover a broader set of search terms associated with sexual harassment within a specific country (by taking into account searches in a country’s local languages, or searches about names or cases associated with

¹⁴Bertrand (2020) insists on two opposite historical patterns: declining gender gaps in education and labor force participation while at the same time sticky stereotypes about gender-specific skills and gender-specific roles.

Figure 1: Number of #MeToo Headlines for Major OECD Countries (Per Million Residents)



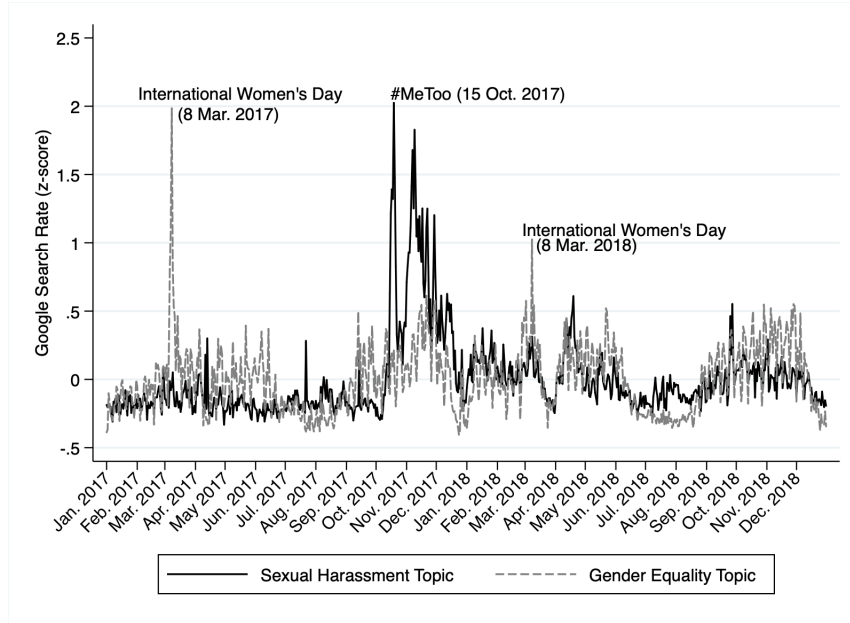
Notes: For each country in the dataset, the figure plots the number of #MeToo headlines per million residents. Data are included from all major national news outlets in the six weeks after 15 October 2017. To ease readability, we exclude Sweden from the figure, which tops the ranking (162 headlines per million residents) due to the particular case of television presenter Martin Timell, accused of sexual abuse as early as 20 October 2017, following #MeToo.

sexual harassment).¹⁵ For instance, keywords within the topic “sexual harassment” in 2017 include “*balance ton porc*” (the French equivalent of #MeToo) in France, while in Sweden, they include “Martin Timell” (a famous Swedish television presenter publicly accused in October 2017 of having sexually assaulted women). Conversely, keywords within “gender equality” include searches about gender parity, equal pay, and women’s rights more generally (e.g., queries about International Women’s Day, equal pay measures, and women of power such as Supreme Court Justice Ruth Bader Ginsburg in the United States).

On average in the 32 countries, sexual-harassment-related searches were more than one SD higher six weeks after #MeToo relative to six weeks before its start (Figure 2), although the average effect hides important differences between countries. During the last quarter of 2018, the average volume of sexual-harassment-related searches within the OECD countries remained much higher than before the start of the movement. In contrast, searches related to “gender equality” did not dramatically change after #MeToo, while they increased around the 2017 International Women’s Day. This is consistent with the idea that #MeToo triggered a long-lasting movement specifically focused on a negative consequence of gender stereotypes (sexual harassment against women), while both the 2017 and 2018 International Women’s Days are short-lived events which did not lead to long-lasting changes in Google searches on this topic. This is important as we focus in

¹⁵See <https://support.google.com/trends/answer/4365533?hl=en> for further details.

Figure 2: Daily Web Searches, “Sexual Harassment” and “Gender Equality” Topics (Average Across 32 OECD Countries, 2017–2018)



Notes: The figure shows daily search rates about sexual harassment and gender equality topics for the average OECD country in the dataset. Each time series is normalized using z-scores. Data are collected from Google Trends for each of the 32 countries between 1 January 2017 and 31 December 2018.

this paper on within-country *changes* in behaviors. While sexual harassment queries may be more frequent in countries where gender equality issues are also more discussed, there is no evidence that #MeToo increased consumers’ overall search interest in gender equality.¹⁶

4 Empirical Setting

4.1 A Triple-Difference Estimator

Assuming that exposure to #MeToo is perfectly randomized across buyers, we could estimate an average treatment effect (ATE) of #MeToo on the market for shoes. However, #MeToo exposure is only quasi-random within countries. For instance, some consumers may be more or less exposed to #MeToo depending on their access to or consumption of media online or offline. Rather than the ATE, our goal is therefore to estimate an average treatment effect on the treated (ATT). We can define the ATT as

$$E(S_{i1} - S_{i0} | T = 1) = \beta$$

where S_{i1} is the number of sales of product i in the treatment condition, S_{i0} is the number of sales of product i from the control condition, and $T = 1$ indicates that consumers of product i

¹⁶More generally within country, we find no evidence of any systematic correlation between both measures over time (Appendix Table S1).

were among those who were exposed to #MeToo. The identification challenge arises from our lack of knowledge of counterfactual sales S_{i0} , namely, how many units of product i would have been purchased by the treated consumers in the absence of a #MeToo shock. To recover the #MeToo shock β , we rely on the fact that the exact same products are sold in different countries at the exact same time. We also exploit the panel structure of the data and differences in the level of media exposure across countries. Formally, we can assume that in countries affected by #MeToo, the market for product i includes the effect of #MeToo, along with a group and time effect:

$$E(S_{i1}|c, t) = E(S_{i0}|c, t) + \beta = \theta_c + \delta_t + \beta$$

where θ_c is the country-specific effect for countries strongly exposed to #MeToo (c_1) versus unexposed (or weakly exposed) countries (c_0), and δ_t is a time effect for the pre-trend (t_0) and post-trend (t_1). Assuming the time trend δ_t is not country-specific, simple difference in differences (DD) will identify the effect of #MeToo on the treated countries:

$$\begin{aligned} DD &= [E(S_i|c_1, t_1) - E(S_i|c_1, t_0)] - [E(S_i|c_0, t_1) - E(S_i|c_0, t_0)] \\ &= \beta \end{aligned}$$

However, in the presence of country-specific time trends $\delta_{c,t}$ (i.e., sales being on average higher in strongly exposed countries after #MeToo relative to before #MeToo for reasons other than the movement itself), DD leads to

$$DD = \beta + (\delta_{c_1, t_1} - \delta_{c_1, t_0}) - (\delta_{c_0, t_1} - \delta_{c_0, t_0})$$

This means that the DD estimator will be biased whenever $(\delta_{c_1, t_1} - \delta_{c_1, t_0}) \neq (\delta_{c_0, t_1} - \delta_{c_0, t_0})$. This formalizes the usual common trend assumption, that is, the idea that the sales of shoes in control and treated countries should exhibit similar patterns in the absence of the shock, on average. This condition is unlikely to hold when examining average footwear sales within countries, but is much more likely to hold when comparing trends for different styles of shoes related to women identity expression. Our main identification strategy hence relies on a three-way interaction between (i) differential exposure to #MeToo across countries (as captured by media exposure) (ii) the timing of the #MeToo shock (pre vs. post-15 October 2017) and (iii) the presence (vs. absence) of traditional markers of femininity on a given product (high heels, slim shapes, pink or red colors).

This specification allows for country-specific time effects $\delta_{c,t}$, as the identification of the #MeToo effect on shoes with markers of traditional femininity now relies on a *triple-difference*—or difference-in-difference-in-differences (DDD)—estimator (Blundell and Dias, 2009; Olden and Moen, 2022) where we compare the number of product stockouts in countries with a strong (c_1) versus weak (c_0) #MeToo movement in the six weeks after (t_1) versus before (t_0) #MeToo began #MeToo began for products with (i_1) versus without (i_0) markers of traditional femininity. For-

mally, it can be written as the difference between two difference-in-differences estimators:

$$\begin{aligned}
DDD &= [E(S_i|c_1, t_1, i_1) - E(S_i|c_1, t_0, i_1)] - [E(S_i|c_0, t_1, i_1) - E(S_i|c_0, t_0, i_1)] \\
&\quad - [E(S_i|c_1, t_1, i_0) - E(S_i|c_1, t_0, i_0)] - [E(S_i|c_0, t_1, i_0) - E(S_i|c_0, t_0, i_0)] \\
&= \beta
\end{aligned}$$

While the strength of the MeToo movement is not random (e.g. related to media access), and while some countries may be more or less sensitive to the #MeToo shock (e.g. via customers' sensitivity to gender equality issues), β remains an unbiased estimate of the #MeToo effect as long as #MeToo itself remains uncorrelated with an omitted variable affecting the market for products with feminine markers differently from other products *in the post-period*. This is a strong condition which would require a non-linear change in the weeks immediately following 15 October 2017 that would affect product stockouts for feminine markers differently in exposed countries relative to unexposed countries.

4.2 Estimation Procedure

We test whether #MeToo causally impacted the market for products with or without key markers of traditional femininity linked to form and color: heel height (in inches), shape (i.e. slim models belonging to the “heels and pumps” category, relative to bulkier or more gender-neutral categories) and pink or red colors (relative to black shoes and other colors like blue). The main analysis focuses on a three-month window: six weeks before and six weeks after #MeToo in 2017. The three-month period is longer than the typical turnaround time in fashion (which can be as short as two weeks), so interpreting any effect as causal beyond six weeks is arduous, given that retailers may react to drops in product demand by readjusting their assortments. A total of 410 models of shoes were put on sale over the three-month period. Most products were available for online purchase during the full 12-week period, with an average online presence of about 10 weeks per product and an average number of 1.6 out-of-stock sizes per product (SD = 2.24) on a typical day. Our main specification exploits product-country variation in the average daily number of out-of-stock sizes week to week.

To capture a country's exposure to #MeToo, we use the inverse hyperbolic sine (IHS) transformation of the number of media headlines that included #MeToo (or its country-specific equivalent) within the six weeks following the start of the movement.¹⁷ Our preferred specification uses the number of media headlines as a continuous measure of treatment intensity. To ease interpretability and discuss effect sizes, we also display results by splitting the continuous variable of media exposure between a group of unexposed (or weakly exposed) countries (i.e., from zero to three headlines per million residents, 11 countries; bottom tercile)¹⁸ and a group of more strongly

¹⁷We use the IHS transformation instead of the log transformation because the number of headlines per million residents is zero in two countries. See [Levy and Mattsson \(2021\)](#) for a similar approach.

¹⁸This group includes Latvia, Estonia, Turkey, Hungary, Mexico, Poland, Slovenia, Greece, Lithuania, Slovakia, and Japan. This threshold seems appropriate given the important discontinuity separating Japan from Portugal (Figure 1).

exposed countries (the remaining 21 countries).

We estimate the DDD parameters β_j from the following within country-product Poisson regression model:

$$E[S_{ijct}|j, c, t] = \exp\left\{\sum_j \left[\beta_j(j \times c \times t)_{jct} + \alpha_j(j \times c)_{jc} + \gamma_j(j \times t)_{jt} + \theta_j \times j\right] + \beta(c \times t)_{ct} + \gamma t_t + \alpha c_c + \nu_{i,c} + \xi_{c,t}\right\} \quad (1)$$

where S_{ijct} reflects the average number of out-of-stock sizes for shoe i with attribute j (e.g., price, color, shoe style, ...) in country c during week t . We rely on a triple-difference (DDD) identification strategy, so that $(j \times c \times t)$ corresponds to the three-way interaction between product attribute j (e.g., heel height), the degree of country-level exposure to #MeToo (as measured from the number of #MeToo headlines), and whether purchases are made in the six weeks after #MeToo (vs. six weeks before). The consumption of attribute j in more exposed countries is captured by coefficient α_j , while γ_j captures the demand for attribute j after #MeToo in the least exposed countries (i.e., no #MeToo headlines). Hence, coefficient β_j captures the net effect of #MeToo on the demand for attribute j (relative to a baseline product without attribute j) in exposed countries.

To account for the possibility that specific markers of femininity may co-emerge within particular shoe models (e.g., more high heels with specific colors), equation (1) is estimated over the sum of all j markers of traditional femininity, namely heel height (measured in inches), shape (shoes belonging to “heels and pumps” category) and shoe colors (pink or red). Coefficient β on the two-way interaction hence captures the effect of #MeToo on products stripped of any marks of traditional femininity (i.e. flat bulkier or more gender-neutral shoe models that are neither pink nor red). We expect β to be positive and significant if consumers substitute shoes without markers for shoes with such markers. The total #MeToo effect on attribute j can be recovered adding the two-way interaction coefficient to the three-way interaction ($\beta + \beta_j$).

Because different countries face different customer needs, the retailer is likely to make different product supply and distribution decisions in each country. Our main specification is therefore within product-country. Equation (1) includes product-country fixed effects $\nu_{i,c}$, so we are focusing on changes in product-country stockouts over time.¹⁹ In our most conservative specification, we also add country-week fixed effects $\xi_{c,t}$ to capture country-specific seasonality. Note that this specification does not allow us to separately identify the two-way parameter β as it is then absorbed by the country-week fixed effects. However, the three-way interaction coefficient from the DDD estimation can still be identified.

Given that we are dealing with count data and that our stockout measure contains zero values, we estimate Equation (1) with a Poisson quasi-maximum likelihood model. The Poisson model also makes β and β_j easy to interpret as percentage changes in the number of weekly stockouts. Put simply, if j stands for heel height, a negative and significant β_j implies that, relative to shoes without markers of traditional femininity, an additional inch of heel height reduces the weekly

¹⁹Note that we cannot separately identify α and α_j in this case, as both parameters are absorbed by the product-country fixed effects.

number of out-of-stock sizes for that particular shoe by β_j percent shortly after #MeToo. Because our product stockout data results from daily samples collected separately within each country in which the retailer is active, residuals are likely to be correlated within countries, as well as within days (or weeks). For sampling design reasons, we hence adjust the standard errors for two-way clustering on country as well as on week (Abadie et al., 2017).²⁰

5 Main Results

5.1 Triple Difference Estimation

In Table 2, we estimate the main effect of #MeToo on the weekly stockouts of products with markers of traditional femininity using the DDD Poisson model presented in Equation (1). We use the continuous measure for the strength of the movement (the IHS transformation of the number of #MeToo headlines).

Results on the three-way interaction (column (1)) reveal a negative and highly significant DDD coefficient β_j for all three markers: heel height (versus flat shoes), pink or red colors (versus black shoes and other colors) and slim shapes (versus bulkier or more gender-neutral shapes). This means that a stronger media exposure to #MeToo is associated with a significant fall in stockouts for products with stereotypical markers of femininity (relative to shoes without any of those markers) in the six weeks after 15 October 2017 (relative to six weeks before). While product stockouts fell for shoes with clear markers of traditional femininity, product stockouts increased for products without any of those markers, as evidenced by the positive and significant β coefficient on the two-way interaction. This is consistent with an expansion in the market for products less clearly associated with a feminine stereotype, relative to products clearly associated with traditional femininity.

The addition of product-country fixed effects (column (2)), which captures country-level heterogeneity in retailer’s decisions related to specific products over 12-weeks period (e.g. online product display) or country-week fixed effects (column (3)), which capture any country-specific shock affecting all products regardless of their specific markers (e.g. weekly changes in local advertising expenditures) do not affect our results.²¹

5.2 Magnitude of Effects

To provide an intuition for the magnitude of the effect, Appendix Table A1 replaces the continuous measure of exposure to #MeToo used in Table 2 with the indicator dummy for whether country c had a strong or weak #MeToo movement. Relative to prior to the shock, shoes with no markers of traditional femininity (i.e. flat, bulkier and gender-neutral styles of shoes which are neither pink nor red) experienced a nearly 25.8% rise in the number of out-of-stock sizes in countries

²⁰Results remain robust when performing alternative clustering of standard errors (Appendix Table S2).

²¹We also re-run the estimation without Sweden, due to its particular status as a potential outlier (large number of #MeToo headlines), and find similar results (online appendix Table S3).

Table 2: Impact of #MeToo on Product Stockouts (Triple Difference Estimator)

	# Stockouts					
	(1)		(2)		(3)	
Post-#MeToo	-0.069	(0.084)	0.057	(0.087)	—	
#MeToo Exposure	-0.058***	(0.009)	—		—	
Post-#MeToo × #MeToo Exposure	0.066***	(0.020)	0.072***	(0.021)	—	
Attribute: Heel Height (Inches)						
Attribute × Post-#MeToo × #MeToo Exposure	-0.011***	(0.004)	-0.009***	(0.003)	-0.009***	(0.003)
Attribute × #MeToo Exposure	0.006	(0.004)	—		—	
Attribute × Post-#MeToo	0.029***	(0.010)	0.031***	(0.011)	0.030***	(0.011)
Attribute	-0.040***	(0.012)	—		—	
Attribute: Pink/Red Colors						
Attribute × Post-#MeToo × #MeToo Exposure	-0.065***	(0.019)	-0.070***	(0.019)	-0.065***	(0.019)
Attribute × #MeToo Exposure	0.030***	(0.011)	—		—	
Attribute × Post-#MeToo	-0.002	(0.064)	-0.049	(0.065)	-0.062	(0.066)
Attribute	0.286***	(0.041)	—		—	
Attribute: Slim Shapes						
Attribute × Post-#MeToo × #MeToo Exposure	-0.039***	(0.009)	-0.059***	(0.016)	-0.060***	(0.017)
Attribute × #MeToo Exposure	0.064***	(0.020)	—		—	
Attribute × Post-#MeToo	0.110**	(0.055)	0.111	(0.069)	0.102	(0.071)
Attribute	-0.091	(0.070)	—		—	
Observations	120,149		107,912		107,912	
Product × Country FEs	No		Yes		Yes	
Country × Week FEs	No		No		Yes	

Notes: Within-product DDD estimator, estimated using Poisson quasi-maximum likelihood on weekly product-level stockouts for 410 products sold in 32 OECD countries 6 weeks before and 6 weeks after 15 October 2017. Column (2) includes product-country fixed effects. Column (3) adds country-week fixed effects. Robust standard errors are in parentheses, adjusted for two-way clustering on country and weeks. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

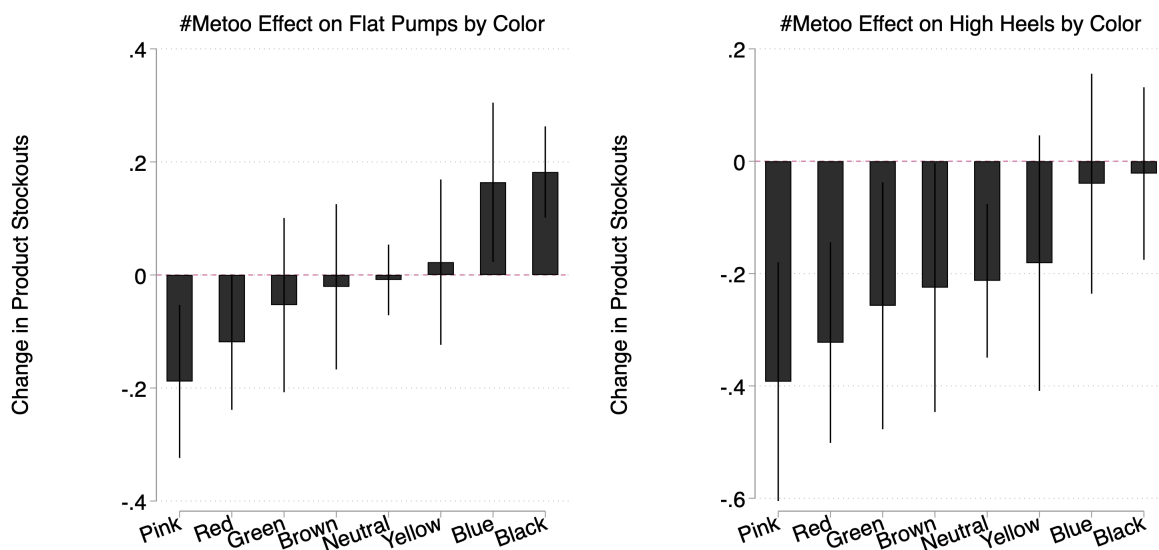
that were strongly exposed to the #MeToo movement in the six weeks after the shock. Relative to those models of shoes, pink and red shoes experienced a 28.6% drop in stockouts, and shoes belonging to the “heels and pumps” category an 18.3% drop, with every additional inch of heel height leading to an additional 3.3% drop (Appendix Table A1).

We then estimate the impact of a strong #MeToo movement (vs. weak) on the full set of product attributes, namely a vector of five dummies for heel height, eight dummies for shoe colors, six dummies for shoe shapes and four dummies for shoe price segments (Appendix Table A2 only reports the main coefficients of interest). Relative to shoes with neutral tones, the coefficient on red and especially pink shoes is negative and significant, while it is positive and significant for blue and black shoes. Hence, #MeToo led to a drop in stockouts for shoe colors strongly associated with female stereotypes and an increased number of stockouts for black (the most common shoe color) or blue shoes. Relative to heels and pumps, boots but also sneakers, clogs and loafers experienced a rise in stockouts. The negative effect of heel height is confirmed, but the effect is strongest and most significant for heels above three inches (or “high heels”). Finally, #MeToo did not affect product stockouts for more or less expensive shoes (Appendix Table A2).

The total causal effect of a strong #MeToo movement on the stockouts of specific shoe models can be recovered combining the two-way and three-way interaction coefficients attached to a model’s specific attribute. To illustrate, Figure 3 plots the estimated change in stockouts for flat pumps shoes and high heels by shoe color. While flat pink or red pumps saw a 15% to 20%

drop in the number of out-of-stock sizes, stockouts for black or blue pumps increased by a similar amount. Stockouts fell for all high heels regardless of shoe color, but the estimated drop is the strongest for pink high heels (-40%) and not significant for blue or black high heels.

Figure 3: Impact of #MeToo on Product Stockouts of Pumps and High Heels by Shoe Color



Notes: Predicted change in product stockouts using the β and β_j coefficients (with 99% confidence intervals) from Appendix Table A2, estimated using the fixed-effect Poisson model (1).

5.3 Robustness

Exposure to #MeToo Movement Looking at the evolution of sexual harassment search rates six weeks before 15 October 2017 (vs. six weeks after) within strongly exposed countries (vs. weakly exposed countries), we confirm the validity of our country-level measure of media exposure to #MeToo. We find i) a significant jump in search rates for sexual harassment cases after 15 October 2017 and that ii) the jump is largely concentrated within strongly exposed countries, with very little change within unexposed (or weakly exposed) countries (Appendix Figure A2). Looking at 2018 instead does not reveal any significant change in sexual harassment search rates around 15 October. Finally we find no significant change in gender equality related searches in neither strongly exposed nor weakly exposed countries.

Common Trend Assumption As discussed in Section 4, the identification of β relies on the common trend assumption. To test for the absence of diverging pre-trends between treatment and control groups, we show that weakly and strongly exposed countries exhibit statistically similar stockout frequencies for products with (vs. without) feminine markers prior to #MeToo. We run

the following variant of Equation (1):

$$E[S_{ijct}|j, c, \tau] = \exp\left\{ \sum_j \left[\sum_{\tau=-5}^6 \beta_{j,\tau}(j * c * \tau)_{j,c,\tau} + \sum_{\tau=-5}^6 \gamma_{j,\tau}(j * \tau)_{j,\tau} + \alpha_j(j * c)_{j,c} \right] + \sum_{\tau=-5}^6 \beta_{\tau}(c * \tau)_{c,\tau} + \sum_{\tau=-5}^6 \gamma_{\tau}\tau_{\tau} + \alpha c_c + \nu_{i,c} + \xi_{c,t} \right\} \quad (2)$$

where coefficient $\beta_{j,\tau}$ captures the three-way interaction DDD parameter on attribute j (e.g., heel height) for week τ in comparison to the reference week, in this case the week preceding 15 October 2017 ($\tau = 0$). Coefficients β_{τ} captures the estimated effect on products with no markers in week τ . The common trend assumption implies that coefficients $\beta_{j,\tau}$ do not significantly differ from zero in the five weeks prior to #MeToo (relative to the reference week). We use our indicator variable for whether country c had a strong or weak #MeToo movement, which is interacted with weekly dummies.

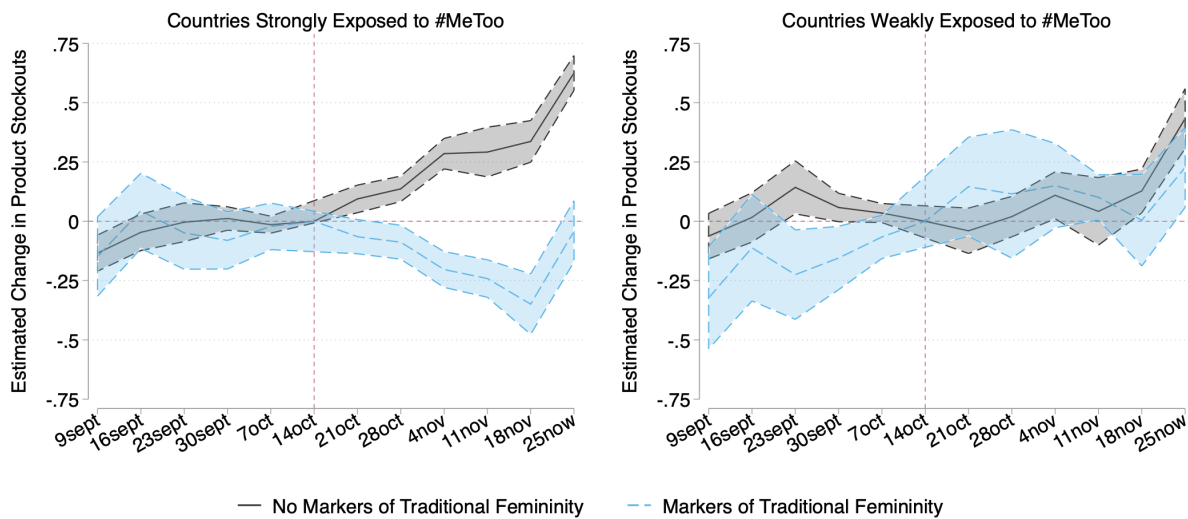
Figure 4 provides an intuitive representation of the DDD estimator (and common trend assumption) by plotting the weekly estimated change in stockouts separately for products with clear markers (versus without markers) in countries with a strong #MeToo movement (left-side panel) and in countries with a weak #MeToo movement (right-side panel).²² In the period preceding 15 October 2017, there is no significant difference in the demand for both types of products in neither weakly nor strongly exposed countries. However, in strongly exposed countries, the first week after 15 October 2017 already exhibits a significant gap in the average number of out-of-stock sizes between products with and without markers of traditional femininity. On the contrary, no such change can be observed within weakly exposed countries.

Appendix Figure A3 provides the estimates for each marker separately by plotting the β_{τ} and $\beta_{j,\tau}$ over time. It confirms that i) the number of out-of-stock sizes for products with markers of traditional femininity (relative to products without such markers) does not significantly differ between strongly and weakly exposed countries before 15 October 2017 and ii) that the reduction in the number of out-of-stock sizes for products with traditional markers of femininity is already significant a week after #MeToo (15–21 October) and relatively sudden, especially for heels.

Quadruple Difference Estimator Because there could still be diverging post-trends on the demand for products with or without markers of traditional femininity in the absence of a shock (so that $\delta_{c_0,t_1,i_1} \neq \delta_{c_1,t_1,i_1}$ or $\delta_{c_0,t_1,i_0} \neq \delta_{c_1,t_1,i_0}$), we can further de-trend both the pre- and post-trend for each product group within each country by using the number of stockouts for similar products sold during a “placebo” year (or quadruple-difference estimator). The latter accounts for any unobserved seasonal changes affecting the demand for similar products in countries exposed to #MeToo in the immediate weeks after 15 October 2017. We use 2018 as a placebo year and the

²²Products with clear markers correspond to pink or red high-heels (5-inches). We use the estimated coefficients resulting from specification (2).

Figure 4: Estimated Change in Stockouts for Products With (vs. Without) Markers of Traditional Femininity Before (vs. After) 15 October 2017 in Countries Exposed (vs. Unexposed) to #MeToo



Notes: The weekly β_τ and $\beta_{j,\tau}$ coefficients used to construct the Figure are estimated from Poisson model (2), reported with 99% confidence intervals. Robust standard errors are in parentheses, adjusted for two-way clustering on country and weeks. The model is estimated over the 12-weeks period around 15 October 2017, with the week before 15 October 2017 ($\tau = 0$) used as the reference week.

427 products sold six weeks before and after 15 October 2018.²³ Both methods give β and β_j coefficients of equivalent magnitude and significance (Table A3), which confirms the robustness of the DDD estimate.

6 Potential Mechanisms

6.1 Demand vs. Supply Side Effects?

While #MeToo had a significant effect on the market for products with traditional markers of femininity, this could either come from a change in consumer preferences (e.g. customers' disassociation from gender stereotypes), or from a change in the supply of those products (e.g. if the retailer internalizes customers' expected reaction and chooses to modify its strategy).

In particular, the retailer may anticipate the lower demand for pink or red high heels in certain countries and choose to change its product assortment accordingly. For example, if the retailer identifies a lower demand for pink/red products in a certain area, they could remove these products from sale in that area, or add more of the “neutral” shoes. We show this is not the case. First, the dependent variable captures *within* country-product changes in out-of-stock sizes for products available on the platform during nearly the entire 12-week window (average of 11.1 weeks

²³The absence of a “rebound” effect around the first anniversary of the #MeToo movement confirms the validity of our quadruple-difference approach (Appendix Figure A2).

Table 3: Weekly Changes in Product Assortments

	Existing Product Removed = 1		New Product Added = 1	
	(1)	(2)	(3)	(4)
Post-#MeToo × #MeToo Exposure	0.002 (0.002)	0.000 (0.000)	-0.002 (0.002)	0.000 (0.000)
Attribute: Heel Height (Inches)				
Attribute × Post-#MeToo × #MeToo Exposure	-0.000 (0.001)	-0.000 (0.001)	-0.001 (0.001)	-0.001 (0.001)
Attribute × #MeToo Exposure	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Attribute × Post-#MeToo	0.003 (0.002)	0.003 (0.002)	0.006** (0.002)	0.005** (0.002)
Attribute: Pink/Red Colors				
Attribute × Post-#MeToo × #MeToo Exposure	-0.001 (0.001)	-0.001 (0.001)	0.005 (0.004)	0.005 (0.004)
Attribute × #MeToo Exposure	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Attribute × Post-#MeToo	0.009** (0.004)	0.009** (0.004)	-0.046*** (0.014)	-0.046*** (0.014)
Attribute: Slim Shapes				
Attribute × Post-#MeToo × #MeToo Exposure	-0.005 (0.004)	-0.005 (0.004)	0.006 (0.004)	0.006 (0.003)
Attribute × #MeToo Exposure	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Attribute × Post-#MeToo	0.038** (0.013)	0.038** (0.013)	-0.089*** (0.013)	-0.089*** (0.012)
Observations	144,612	144,612	144,612	144,612
Product × Country FEs	Yes	Yes	Yes	Yes
Country × Week FEs	No	Yes	No	Yes

Notes: Within-product DDD estimator, estimated using OLS on a weekly dummy for whether a product is added or removed for 410 products sold in 32 OECD countries 6 weeks before and 6 weeks after the #MeToo shock of 15 October 2017. Columns (1) and (3) include product-country fixed effects. Columns (2) and (4) adds country-week fixed effects. Robust standard errors are in parentheses, adjusted for two-way clustering on country and weeks. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

per product). Changes in assortments are rare within this relatively short time window, and unlikely to drive the effect. We provide a direct test by examining products removed or added over time. For each product in the dataset, we create a dummy for whether a given product is added or removed in the first six weeks after the #MeToo shock of 15 October 2017. We then replicate our triple-difference analysis and probe whether products with markers of traditional femininity (vs. without) were more or less likely to be removed (or added) after #MeToo in the countries most strongly affected by the movement. The results from a linear probability model estimated within product-country reveal no significant effect of #MeToo on the probability that a product with or without markers of traditional femininity be removed or added in the six weeks following 15 October 2017 (Table 3).

Even without changing its product assortment, the retailer could still shift quantities between geographies (or from local central warehouses) across available products. For instance, the retailer could decide to ship fewer sizes of pink/red shoes rather than change its product assortments. The retailer could also make high heels and pink or red shoes less visible on its website after #MeToo, or reduce marketing activities on “feminine” products (a form of “cloaking” strategy;

Yoganarasimhan, 2012). Although we cannot entirely rule out this possibility, we believe that those effects alone are unlikely to explain our results. Indeed, the impact on out-of-stock sizes is quite sudden—especially for heels—and already significant during the first week after 15 October 2017 (Appendix Figure A3). Decisions pertaining to product shipments (or changes in advertising budgets) take time to process, typically not less than two weeks, and generally closely follow fashion seasons. Though underlying shifts in gender attitudes over the previous years or decades may have led to the #MeToo movement, the movement itself could not have been anticipated a week or two weeks before, which makes a supply-side explanation unlikely, at least in the short-term.²⁴ Evidence provided in the next section using day-to-day variation in product stockouts provides further support to the importance of the demand channel.

6.2 Daily Web Searches on Sexual Harassment Cases

As argued in section 2, customers reminded of threats attached to gender stereotypes (e.g. sexual harassment against women) may disengage from stereotypical aspects of an identity. Here, we exploit our daily panel data over the entire 2017–2018 period and estimate the impact of daily country-level variations in sexual-harassment-related searches on daily stockouts for traditionally feminine (vs. neutral) products.

We proceed in two steps. First, we classify products within three groups: a “neutral” group for shoes with no markers of traditional femininity, a group of shoes with at least one marker of traditional femininity (i.e. pink or red color, slim shapes, or high heels)²⁵ and a group of shoes with all three markers (e.g. red stilettos). Second, we collapse the data at the product group \times country \times daily level and estimate a fixed-effect Poisson model on the resulting country-level (balanced) panel datasets. For a given product group j in day t , the predicted total number of product stockouts in country c ($S_{c,t}^j$) is captured by the following Poisson quasi-maximum likelihood model:

$$E[S_{c,t}^j | \lambda_t, \gamma_c, W_{c,t}^{threat}, T_j, X_{c,t}^j] = \exp\left\{ \beta_j (W_{c,t}^{threat} \times G_j) + \beta W_{c,t}^{threat} + \delta_j (X_{c,t}^j \times G_j) + \delta X_{c,t}^j + G_j + CountrySeason_{c,w} + ProdSeason_{j,w} + \gamma t_t + \nu_{j,c} \right\} \quad (3)$$

where $W_{c,t}^{threat}$ captures the volumes of daily sexual-harassment-related web searches in country c (normalized using z-scores) and G_j is our product group dummy. To capture supply-side effects, we control for the total daily number of available products within each group, $X_{c,t}^j$ (and its interaction with G_j). We also include a full set of time dummies λ_t for date fixed effects and country-group dummies $\nu_{j,c}$, so that any effect on product group stockouts exclusively arises from within country-group changes in daily web searches. Finally, we control for (weekly) seasonal effects within country ($CountrySeason_{c,w}$) and product groups ($ProdSeason_{j,w}$). Robust standard

²⁴This does not preclude the possibility that the retailer internalizes the initial demand-driven effect by making those products less visible on the platform in subsequent weeks, which would be consistent with the stronger effect we get in later weeks (Figure 4).

²⁵For “high heels”, we use the definition applied by the retailer in their online product tagging, namely, shoes with heel height of more than three inches.

errors are further adjusted for two-way clustering on both country-group and date.

Like before, β captures the effect of sexual harassment searches on the number of out-of-stock sizes for neutral products, while β_j is the effect found on products with weak or strong markers of traditional femininity (relative to neutral products). Column (1) of Table 4 first estimates the Poisson model on the full daily panel from January 1st 2017 to December 31st 2018. As expected, the semi-elasticity parameter β is positive, while β_j is negative for goods with strong feminine markers (weakly significant). In days where sexual harassment searches are high, product stockouts are higher for neutral products and significantly lower for products with strong markers of traditional femininity. Given that #MeToo led to significantly higher daily search volumes on sexual harassment cases (Figure 2), this result is consistent with the #MeToo effect documented earlier. However, as shown in column (2), it is concentrated in the post-#MeToo period, which suggests #MeToo did not simply raised awareness on sexual harassment cases, but may have “activated” customers’ associative link between this extreme form of identity threat and gender stereotypes more generally. The fact that daily changes in sexual harassment searches are still negatively related to daily stockouts for strongly feminine products even 6 weeks after #MeToo (Column (3)) suggests some persistence.

Table 4: Daily Country-Level Panel, 2017–2018

	# Stockouts			
	(1) Full Panel	(2) Pre-#MeToo	(3) Post-#MeToo	(4) +6w Post-#MeToo
Sexual harassment	0.02* (0.01)	-0.02 (0.01)	0.02** (0.01)	0.02*** (0.01)
Sexual harassment × Weak Markers	-0.01 (0.01)	0.01 (0.01)	-0.01* (0.01)	-0.00 (0.00)
Sexual harassment × Strong Markers	-0.04* (0.02)	0.06 (0.04)	-0.07*** (0.02)	-0.05*** (0.02)
Observations	66,360	24,251	42,109	38,077
Date FEs	Yes	Yes	Yes	Yes
Country × Prod. Group FEs	Yes	Yes	Yes	Yes
Country Seasonality	Yes	Yes	Yes	Yes
Product Group Seasonality	Yes	Yes	Yes	Yes
Supply-Side Controls	Yes	Yes	Yes	Yes

*Notes: Panel regressions estimated using Poisson-FE model. The unit of observation is at the country × product group × daily level. Column (1) is estimated on the full daily panel (2017–2018). Columns (2) and (3) estimate the same model on the pre-#MeToo and post-#MeToo period, respectively. Column (4) excludes the first 6 weeks after #MeToo from the post-#MeToo regression. All regressions include date fixed effects, country-group fixed effects, the log of total daily number of available products within each product group (interacted with product group dummies), and controls for country and product group seasonal effects. Robust standard errors are in parentheses, adjusted for two-way clustering on country-group and date *p < 0.10, **p < 0.05, ***p < 0.01*

The identification assumption for a causal interpretation of β and β_j are stronger in this case, however. We would need to assume that conditional on our full set of fixed effects, residual variation in the volume of sexual-harassment-related searches is as good as randomly assigned. Unfortunately, higher residual search rate may correlate to product stockouts through unmeasured third factors. One may also expect reverse causation, for instance if an expansion in the market for products with strong markers of traditional femininity itself leads to an increase in sexual ha-

rassment cases, which would bias the estimated coefficient upward.²⁶ We provide an additional robustness test for the above relationship in the online appendix. We run Granger causality tests, looking at whether sexual harassment searches the day before leads to lower stockouts for products with strong markers the day after, and find positive effects (Appendix Table S4). Importantly, higher stockouts on products with strong markers the day before do not lead to any significant change in sexual harassment related searches the day after, lowering concerns about reverse causation. As discussed before, given the very short time dimension considered in this section (daily changes), the effect documented appears more consistent with a demand channel.

6.3 Stereotype Threat Versus Empowerment?

So far, we have theorized and offered evidence consistent with the idea that #MeToo led to an (unexpected) shrinkage of the market for traditional markers of femininity, consistent with #MeToo raising awareness on a major threat attached to prevailing gender stereotypes: sexual harassment against women. However, by focusing on gender equality at work, women’s empowerment, and pushing de-stigmatizing narratives, #MeToo also empowered women’s identity. If power and feminine goods are substitutes (Dubois and Anik, 2020), #MeToo may have also reduced the attractiveness of feminine products in the eyes of the public through its empowerment effect.²⁷

To discuss both potential mechanisms and provide corroborative evidence of a #MeToo effect, we ran an online survey experiment on 989 women representative of the U.S. population assigned to one of four conditions: #MeToo, an identity threat condition, an identity empowerment condition, and a baseline condition.²⁸

The survey included three tasks, ostensibly framed as separate studies. In the first task (“Event memory”), participants were asked to recall a particular event and describe the experience as it happened to them. Participants in the threat and empowerment conditions had to recall a particular incident in which they felt, respectively, threatened or empowered as women. Participants in the #MeToo condition were asked to describe how these events made them feel. In the baseline condition, participants recalled a particular incident in which they went to the grocery store (e.g. Dubois et al., 2012). In the second task, framed as a study about consumer preferences, participants indicated their preferences for different shoe products. A first choice-based question asked them to imagine that they were browsing different pairs of shoes online and planning to buy a new pair of heeled shoes. They were invited to select the pair they would prefer buying from a set of five options with increasing heel height (from 2 to 6 inches). A follow-up question asked how

²⁶It could happen if, for instance, these purchases occur around social events, when sexual misconduct is also more likely to occur.

²⁷In fact, social activist Tarana Burke initially used the term “Me Too” in 2006 to promote women’s “empowerment through empathy.” We note that while women’s empowerment is likely a longer-term consequence of #MeToo, we focus on the immediate sharing of sexual harassment stories in the first few weeks after #MeToo when identifying the main effect.

²⁸The experiment was conducted online via Qualtrics. It targeted adult women and included age and location quotas (regions). Each participant was paid 4.15 euros to complete the online survey. The average completion time was 16 minutes. See Online Appendix D for the detailed online survey experiment and exact manipulations across conditions.

likely they would be to buy a pair of shoes from a set of 8 colors. Lastly, we probed how much they liked to wear heels in general. The final task, framed as a personality study, comprised more general questions, including a set of questions aimed to test the role of factors potentially underlying the #MeToo effect, namely, sensitivity to threat and sense of power, using well-established scales composed of 8 to 10 questions each.

Appendix Tables S5 and S6 summarize the main results of the experiment. In Appendix Table S5, a linear regression of heel preferences on our treatment dummies shows that participants reported liking heels significantly less in the #MeToo condition ($M_{MeToo} = 2.86$, $SD = 1.71$) than in the baseline condition ($M_{Baseline} = 3.15$, $SD = 2.0$). The second dependent variable assessing the preference for higher heels was directionally consistent ($M_{MeToo} = 2.74$, $SD = 0.98$ vs. $M_{Baseline} = 2.81$, $SD = 1.04$), although not significant. Similarly, participants reported significantly weaker purchase intentions for pink shoes relative to other shoe colors in the #MeToo condition ($M_{MeToo} = -1.51$, $SD = 1.48$) than in the baseline condition ($M_{Baseline} = -1.17$, $SD = 1.69$). The two other treatment conditions (identity threat and empowerment) did not lead to any significant change in our three dependent variables, which may be due to respondents' heterogeneity in their latent sensitivity to threat (or sense of power). Appendix Table S6 looks at this heterogeneity across all three conditions using high sensitivity to threat and high sense of power (above median scores on the respective scales) as moderators. Results are consistent with an identity threat account: treatment effects are significantly more negative in the #MeToo and threat conditions for consumers with high (vs. low) sensitivity to threat. We find no significant differences in treatment effects between consumers with high (vs. low) sense of power.

6.4 Self-Image Versus Social Image.

Our analysis was performed within a highly visible category, footwear, whose products are typically worn in public. The identity signaling literature highlights the importance of product or brand's social visibility to signal one's identity to others (Heffetz, 2011; Yoganarasimhan, 2012). However, this literature also suggests both self-image motives (i.e. how we perceive ourselves) and social image motives (i.e. how others perceive ourselves) can drive behavior (Bursztyn et al., 2018). Similarly, gender stereotypes may not necessarily arise from fully internalized gender norms but rather be the result of social image concerns and reputation costs (Bertrand, 2020). In other words, if the #MeToo effect is mostly driven by a change in social attitudes towards gender stereotypes rather than an internalized change in how women perceive their own identity, we may expect a weaker effect of #MeToo (or no effect at all) on the demand for the most privately worn fashion products (e.g. underwear, less socially visible) relative to publicly worn products (e.g. footwear, more socially visible). We leverage stockout data about a second category of products provided by StyleSage for the same retailer—lingerie—and test whether product stockouts for pink and red lingerie drop after #MeToo in countries most strongly affected by the movement. The data on lingerie include 52 products on sale within each of the 32 OECD countries in the six weeks before and after #MeToo, from pantyhose and bras to sleepwear, night robes, and socks. Results show

that although the point estimate on the DDD coefficient β is also negative, it is weakly significant and becomes non significant with the addition of country-week fixed effects (Appendix Table A4). Although those results are more consistent with a social image account, we see them as more suggestive, however, given the smaller number of products used.

7 Conclusion

In an age where consumers increasingly express their identity through consumption and are swayed by the ideas and values of others around them, we provide causal field evidence of how a large-scale global social movement critical of gender stereotypes (#MeToo) spills over to women's consumption across major countries. In particular, we offer new insights suggesting that identity-based social movements can lower the consumption of goods associated with identity stereotypes (even momentarily) by highlighting the link between identity stereotypes in society and identity threats, thus confirming in the field prior laboratory evidence that consumers react to threats tied to gender identity stereotypes through dissociation (Spencer et al., 2016; White and Argo, 2009). In one sense, our empirical approach also suggests the significance of monitoring search volumes (Du and Kamakura, 2012) for brands to anticipate the manner with which the marketplace may react to nascent social movements. Lastly, we contribute to the literature on fashion cycles (Yoganarasimhan, 2017) by showing how global social movements associated with specific consumer identities may contribute to the rise and fall of iconic "fashion" trends like heels.

The current work is not without limitations, however, which simultaneously represent promising avenues for future research. First, we focus on a social movement which triggers dissociation dynamics, whereby individuals disengage from visible markers attached to identity stereotypes. An unknown is whether, when, and how social movements may encourage identity-signaling (either because of a desire to associate with an identity or because of a desire to defend oneself through symbolic consumption) and benefit the brands and products that carry the focal identities. Future work may further examine why dissociation takes place and the presence of cultural moderators. For instance, the #KuToo movement in Japan, which fights against Japanese workplace policies compelling women to wear high heels, has compared the practice of wearing heels to female foot binding, suggesting a strong normative role of activists. In other countries, dissociation may rest on different foundations.

Second, we focused on the woman footwear market, as it provides us with a clear empirical setting to separately measure the impact of #MeToo on clear identifiable markers of femininity (vs. neutral products) across countries. Further research may therefore focus on other consumer markets, from groceries to toiletries and care, where identity-based attributes can also be clearly identified and where gender consumption gaps are likely to persist. A very promising avenue in this direction is recent work by Bhatia et al. (2021) investigating the "pink tax" in the deodorant category using scanner data.

Finally, although the evidence points toward a demand channel, we cannot fully rule out the

possibility that the retailer (or its store merchants) internalized some of the #MeToo effect through changes in product visibility (or advertising) in the long-run. In the spirit of [Yoganarasimhan \(2012\)](#), future research may assess the extent to which organizations absorb identity-based dynamics and, further, how they respond to societal changes altering their market share in the long run. Indeed, gender-based positioning strategies (and targeting) only work insofar as the identities on which those strategies are built are perceived as relevant by customers. Further research may investigate the extent from which identity targeting in advertising may lose effectiveness when relying on old clichés ([Bertrand, 2020](#)). A more general follow-up of our findings therefore is whether they could explain the loss of advertising effectiveness documented in recent studies ([Johnson et al., 2017](#); [Shapiro et al., 2021](#)).

More generally, the ability to detect early how the market reacts to shifts in identity narratives is becoming increasingly salient for firms. From this perspective, our findings document the consequences of assortment choices made by retailers, which position them accordingly in the eyes of consumers, competitors, and various audiences evaluating them (such as critics, e.g. [Cattani et al., 2020](#)). These choices can be a double-edged sword—triggering greater market size when consumers’ appetite for expressing an identity is high, but reducing market size when the identity is threatened or less likely to be expressed. In that sense, brand-led aesthetic and stylistic choices permeating the positioning and offering of brands increase their exposure not only to changing tastes (e.g., fashions) but also to broader shifts associated with consumer identities.

Appendix

Figure A1: #MeToo Movement: Timeline of Events

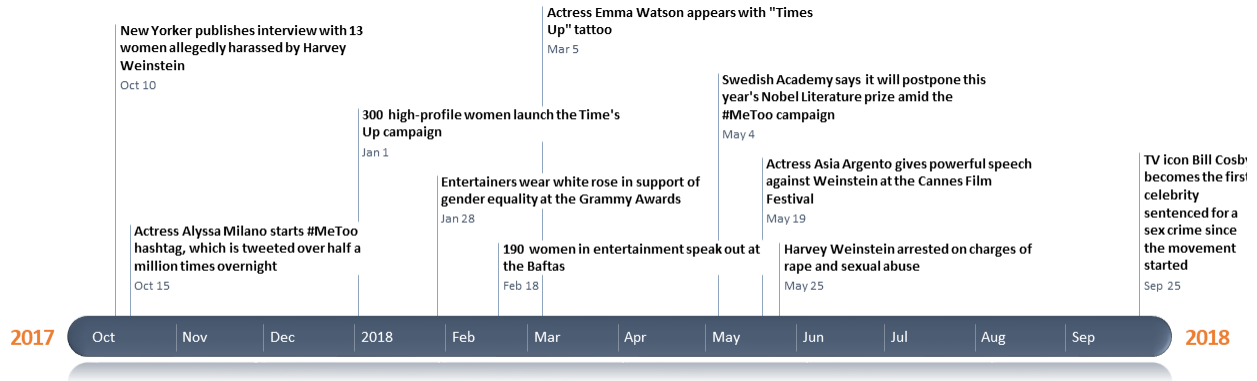
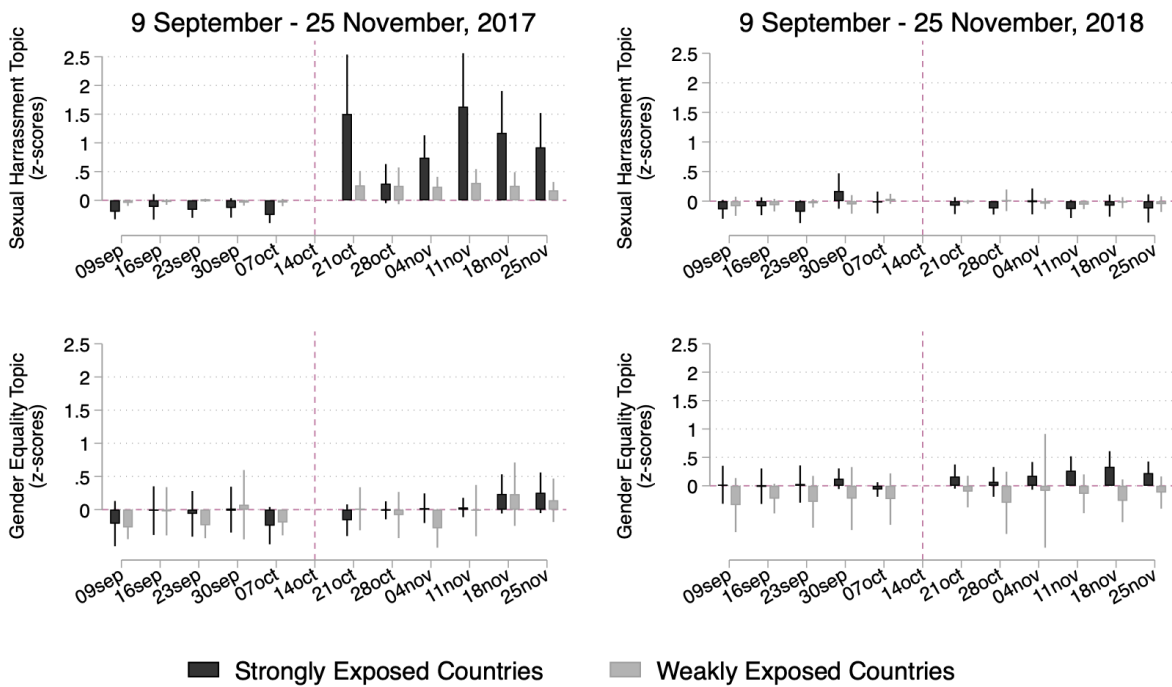
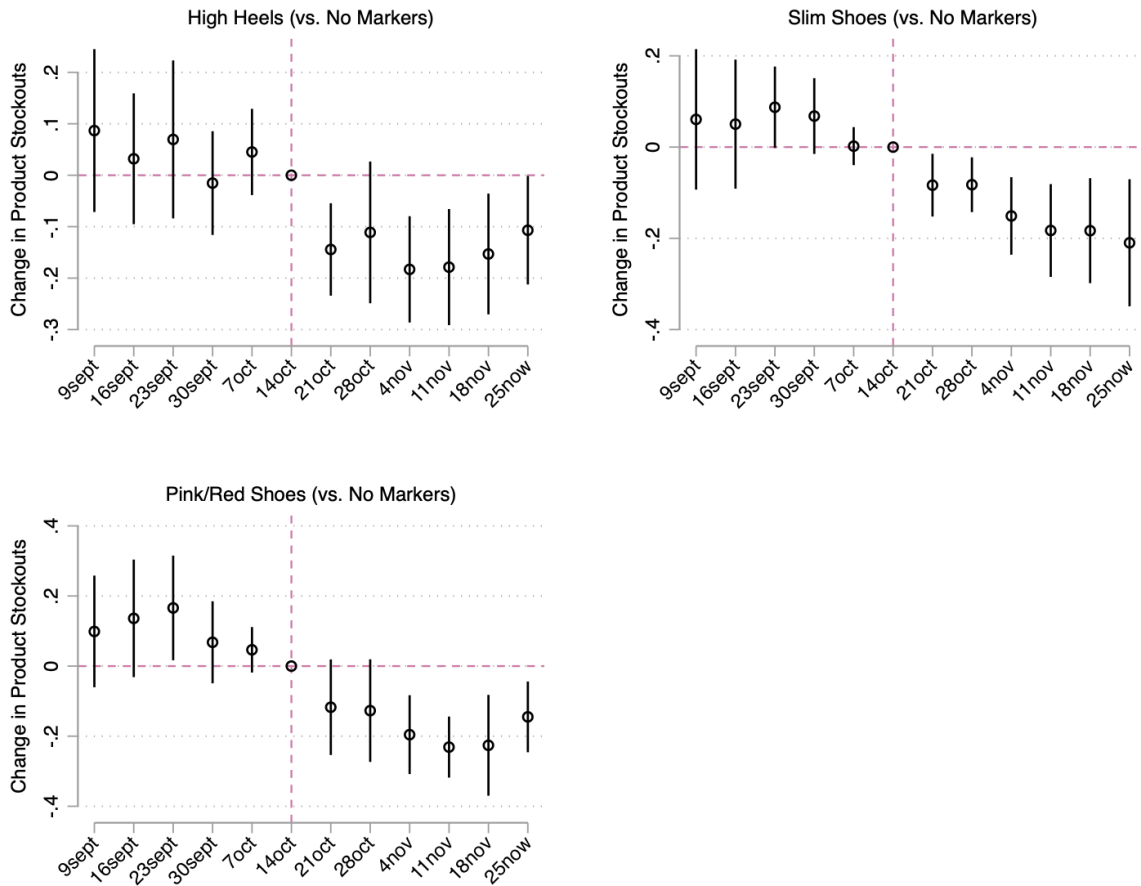


Figure A2: Sexual Harassment and Gender Equality Searches Around Oct. 15th (2017 vs. 2018)



Notes: Upper panel: Search volumes on sexual harassment topic (normalize using z-scores) six weeks before and six weeks after #MeToo in countries with weak #MeToo exposure (0-3 headlines per million residents, 11 countries; bottom tercile) versus strong #MeToo exposure (the remaining 21 countries). Lower panel replicates analysis using 2018 as a placebo year.

Figure A3: Impact of Strong #MeToo Exposure on Weekly Stockouts of Products With Markers of Traditional Femininity



Notes: Estimated β_τ coefficients from the fixed-effect Poisson model (2) reported with 99% confidence intervals. Robust standard errors are in parentheses, adjusted for two-way clustering on country and weeks. The model is estimated over the 12-week period around 15 October 2017, with the week before 15 October 2017 ($\tau = 0$) used as the reference week. Weakly exposed countries (0-3 headlines per million residents, 11 countries; bottom tercile) are used as control group.

Table A1: Impact of #MeToo on Product Stockouts (Strong vs. Weak Exposure)

	# Stockouts					
	(1)	(2)	(3)	(4)	(5)	(6)
Post-#MeToo	-0.044	(0.079)	0.091	(0.084)	—	
Strong #MeToo	-0.165***	(0.036)	—		—	
Post-#MeToo × Strong #MeToo	0.233***	(0.054)	0.243***	(0.064)	—	
Attribute: Heel Height (Inches)						
Attribute × Post-#MeToo × Strong #MeToo	-0.046***	(0.011)	-0.036***	(0.009)	-0.033***	(0.009)
Attribute × Strong #MeToo	0.018	(0.013)	—		—	
Attribute × Post-#MeToo	0.028**	(0.008)	0.030***	(0.009)	0.028***	(0.009)
Attribute	-0.036***	(0.010)	—		—	
Attribute: Pink/Red Colors						
Attribute × Post-#MeToo × Strong #MeToo	-0.259***	(0.042)	-0.261***	(0.041)	-0.246***	(0.038)
Attribute × Strong #MeToo	0.112***	(0.035)	—		—	
Attribute × Post-#MeToo	-0.007	(0.052)	-0.065	(0.051)	-0.078	(0.052)
Attribute	0.294***	(0.037)	—		—	
Attribute: Slim Shapes						
Attribute × Post-#MeToo × Strong #MeToo	-0.120***	(0.036)	-0.192***	(0.056)	-0.195***	(0.060)
Attribute × Strong #MeToo	0.226***	(0.065)	—		—	
Attribute × Post-#MeToo	0.083	(0.057)	0.080	(0.067)	0.070	(0.069)
Attribute	-0.067	(0.065)	—		—	
Observations	120,149		107,912		107,912	
Product × Country FEs	No		Yes		Yes	
Country × Week FEs	No		No		Yes	

Notes: Within-product DDD estimator, estimated using Poisson quasi-maximum likelihood on weekly product-level stockouts for 410 products sold in 32 OECD countries 6 weeks before and 6 weeks after 15 October 2017. Weakly exposed countries (0-3 headlines per million residents, 11 countries; bottom tercile) are used as control group. Robust standard errors are in parentheses, adjusted for two-way clustering on country and weeks. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A2: Impact of #MeToo on Product Stockouts: All Attribute Levels (Selected Coefficients)

	# Stockouts			
	(1)	(2)	(3)	(4)
Post-#MeToo × Strong #MeToo	-0.009	(0.029)	—	
Attribute: Heel Height (vs. < 1 inch)				
1 to 2 inches × Post-#MeToo × Strong #MeToo	-0.013	(0.039)	-0.016	(0.039)
2 to 3 inches × Post-#MeToo × Strong #MeToo	-0.068	(0.043)	-0.061	(0.043)
3 to 4 inches × Post-#MeToo × Strong #MeToo	-0.169***	(0.047)	-0.154***	(0.049)
4 to 5 inches × Post-#MeToo × Strong #MeToo	-0.204***	(0.056)	-0.184***	(0.055)
Attribute: Colors (vs. Neutral)				
Black × Post-#MeToo × Strong #MeToo	0.191***	(0.047)	0.181***	(0.047)
Blue × Post-#MeToo × Strong #MeToo	0.173**	(0.072)	0.157**	(0.070)
Brown × Post-#MeToo × Strong #MeToo	-0.012	(0.060)	-0.020	(0.063)
Green × Post-#MeToo × Strong #MeToo	-0.044	(0.071)	-0.043	(0.069)
Pink × Post-#MeToo × Strong #MeToo	-0.180***	(0.063)	-0.166**	(0.067)
Red × Post-#MeToo × Strong #MeToo	-0.110**	(0.054)	-0.104*	(0.054)
Yellow × Post-#MeToo × Strong #MeToo	0.031	(0.067)	0.020	(0.074)
Attribute: Styles (vs. Heels and Pumps)				
Boots × Post-#MeToo × Strong #MeToo	0.249***	(0.058)	0.238***	(0.055)
Lace-up shoes × Post-#MeToo × Strong #MeToo	0.307	(0.240)	0.361	(0.234)
Platforms and wedges × Post-#MeToo × Strong #MeToo	0.102	(0.095)	0.134	(0.098)
Sandals × Post-#MeToo × Strong #MeToo	-0.080	(0.115)	-0.070	(0.119)
Sneakers, clogs and loafers × Post-#MeToo × Strong #MeToo	0.122*	(0.062)	0.133**	(0.066)
Attribute: Price Segments (vs. 1st Quartile)				
2d quartile × Post-#MeToo × Strong #MeToo	-0.021	(0.071)	-0.002	(0.067)
3rd quartile × Post-#MeToo × Strong #MeToo	0.040	(0.068)	0.031	(0.082)
4th quartile × Post-#MeToo × Strong #MeToo	-0.073	(0.120)	-0.054	(0.088)
Observations	107,912		107,912	
Product × Country	Yes		Yes	
Country × Week	No		Yes	

Notes: Within-product DDD estimator, estimated using Poisson quasi-maximum likelihood on weekly product-level stockouts for 410 products sold in 32 OECD countries 6 weeks before and 6 weeks after 15 October 2017. Weakly exposed countries (0-3 headlines per million residents, 11 countries; bottom tercile) are used as control group. Only the two-way and three-way interaction coefficients are shown. Robust standard errors are in parentheses, adjusted for two-way clustering on country and weeks. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A3: Impact of #MeToo on Product Stockouts (Quadruple Difference Estimator)

	# Stockouts					
	(1)	(2)	(3)	(4)	(5)	(6)
Post-#MeToo	0.113	(0.120)	0.199*	(0.111)	—	—
#MeToo Exposure	0.027	(0.018)	—	—	—	—
Post-#MeToo × #MeToo Exposure	-0.016	(0.025)	-0.009	(0.032)	—	—
2017	0.439***	(0.103)	—	—	—	—
2017 × Post-#MeToo	-0.182	(0.126)	-0.142	(0.117)	—	—
2017 × #MeToo Exposure	-0.085***	(0.021)	—	—	—	—
2017 × Post-#MeToo × #MeToo Exposure	0.082***	(0.016)	0.082***	(0.025)	—	—
Attribute: Heel Height (Inches)						
2017 × Attribute × Post-#MeToo × #MeToo Exposure	-0.013**	(0.005)	-0.012**	(0.005)	-0.011***	(0.004)
2017 × Attribute × #MeToo Exposure	0.017***	(0.005)	—	—	—	—
2017 × Attribute × Post-#MeToo	0.013	(0.031)	-0.008	(0.028)	-0.012	(0.027)
2017 × Attribute	-0.081**	(0.033)	—	—	—	—
Attribute × Post-#MeToo × #MeToo Exposure	0.002	(0.004)	0.002	(0.004)	0.002	(0.003)
Attribute × #MeToo Exposure	-0.011***	(0.004)	—	—	—	—
Attribute × Post-#MeToo	0.016	(0.029)	0.040	(0.025)	0.043*	(0.025)
Attribute	0.041	(0.029)	—	—	—	—
Attribute: Pink/Red Colors						
2017 × Attribute × Post-#MeToo × #MeToo Exposure	-0.055**	(0.021)	-0.068***	(0.022)	-0.064***	(0.021)
2017 × Attribute × #MeToo Exposure	0.024	(0.016)	—	—	—	—
2017 × Attribute × Post-#MeToo	0.030	(0.087)	-0.095	(0.078)	-0.112	(0.079)
2017 × Attribute	0.150***	(0.047)	—	—	—	—
Attribute × Post-#MeToo × #MeToo Exposure	-0.010	(0.014)	-0.002	(0.015)	-0.001	(0.013)
Attribute × #MeToo Exposure	0.006	(0.018)	—	—	—	—
Attribute × Post-#MeToo	-0.032	(0.048)	0.046	(0.040)	0.049	(0.040)
Attribute	0.137**	(0.058)	—	—	—	—
Attribute: Slim Shapes						
2017 × Attribute × Post-#MeToo × #MeToo Exposure	-0.051***	(0.011)	-0.061***	(0.012)	-0.059***	(0.012)
2017 × Attribute × #MeToo Exposure	0.054**	(0.024)	—	—	—	—
2017 × Attribute × Post-#MeToo	0.067	(0.060)	0.164**	(0.065)	0.126*	(0.070)
2017 × Attribute	-0.284***	(0.096)	—	—	—	—
Attribute × Post-#MeToo × #MeToo Exposure	0.012	(0.015)	0.002	(0.013)	-0.001	(0.012)
Attribute × #MeToo Exposure	0.010	(0.016)	—	—	—	—
Attribute × Post-#MeToo	0.043	(0.054)	-0.053	(0.043)	-0.023	(0.048)
Attribute	0.193***	(0.059)	—	—	—	—
Observations	208,287		185,822		185,822	
Product × Country	No		Yes		Yes	
Country × Week	No		No		Yes	

Notes: Within-product quadruple-difference estimator estimated using Poisson quasi-maximum likelihood on weekly product-level stockouts for 837 products sold in 32 OECD countries 6 weeks before and 6 weeks after 15 October 2017 (vs. 6 weeks before and 6 weeks after 15 October 2018). Robust standard errors are in parentheses, adjusted for two-way clustering on country and weeks. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4: Private Consumption (Lingerie Products)

	# Stockouts					
	(1)		(2)		(3)	
Post-#MeToo	0.074	(0.093)	0.299**	(0.126)	—	
#MeToo Exposure	0.060	(0.043)	—		—	
Post-#MeToo × #MeToo Exposure	0.015	(0.016)	-0.006	(0.014)	—	
Attribute: Pink/Red Colors						
Attribute × Post-#MeToo × #MeToo Exposure	-0.102*	(0.060)	-0.139*	(0.082)	-0.115	(0.082)
Attribute × #MeToo Exposure	0.186**	(0.083)	—		—	
Attribute × Post-#MeToo	-0.572***	(0.199)	-0.235	(0.250)	-0.305	(0.240)
Attribute	0.177	(0.297)	—		—	
Observations	12,654		5,235		5,235	
Product × Country FEs	No		Yes		Yes	
Country × Week FEs	No		No		Yes	

Notes: Within-product DDD estimator, estimated using Poisson quasi-maximum likelihood on weekly product-level stockouts for 52 lingerie products sold in 32 OECD countries 6 weeks before and 6 weeks after 15 October 2017. Column (2) includes product-country fixed effects. Column (3) adds country-week fixed effects. Robust standard errors are in parentheses, adjusted for two-way clustering on country and weeks. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

References

- Abadie, A., S. Athey, G. W. Imbens, and J. Wooldridge (2017). When should you adjust standard errors for clustering? Technical report, National Bureau of Economic Research.
- Akerlof, G. A. and R. E. Kranton (2000). Economics and identity. *The quarterly journal of economics* 115(3), 715–753.
- Alexander, G. M. (2003). An evolutionary perspective of sex-typed toy preferences: Pink, blue, and the brain. *Archives of sexual behavior* 32(1), 7–14.
- Amaldoss, W. and S. Jain (2005). Pricing of conspicuous goods: A competitive analysis of social effects. *Journal of Marketing Research* 42(1), 30–42.
- Aspers, P. and F. Godart (2013). Sociology of fashion: Order and change. *Annual Review of Sociology* 39, 171–192.
- Atkin, D. (2016). The caloric costs of culture: Evidence from indian migrants. *American Economic Review* 106(4), 1144–81.
- Atkin, D., E. Colson-Sihra, and M. Shayo (2021). How do we choose our identity? a revealed preference approach using food consumption. *Journal of Political Economy* 129(4), 1193–1251.
- Belk, R. W. (2003). Shoes and self. *ACR North American Advances*.
- Bellet, C. (2019). The mcmansion effect: Top house size and positional externalities in us suburbs. Available at SSRN 3378131.
- Benjamin, D. J., J. J. Choi, and A. J. Strickland (2010). Social identity and preferences. *American Economic Review* 100(4), 1913–28.
- Berger, J. and C. Heath (2007). Where consumers diverge from others: Identity signaling and product domains. *Journal of Consumer Research* 34(2), 121–134.
- Berger, J. and C. Heath (2008). Who drives divergence? identity signaling, outgroup dissimilarity, and the abandonment of cultural tastes. *Journal of personality and social psychology* 95(3), 593.
- Berger, J. and G. Le Mens (2009). How adoption speed affects the abandonment of cultural tastes. *Proceedings of the National Academy of Sciences* 106(20), 8146–8150.
- Bertrand, M. (2020). Gender in the twenty-first century. In *AEA Papers and Proceedings*, Volume 110, pp. 1–24.
- Bertrand, M. and E. Kamenica (2018). Coming apart? cultural distances in the united states over time. Technical report, National Bureau of Economic Research.
- Bhatia, N., S. Moshary, and A. Tuchman (2021). Investigating the pink tax: Evidence against a systematic price premium for women in cpg. Available at SSRN 3882214.
- Bhattacharjee, A., J. Berger, and G. Menon (2014). When identity marketing backfires: Consumer agency in identity expression. *Journal of Consumer Research* 41(2), 294–309.
- Blundell, R. and M. C. Dias (2009). Alternative approaches to evaluation in empirical microeconomics. *Journal of Human Resources* 44(3), 565–640.

- Bordalo, P., K. Coffman, N. Gennaioli, and A. Shleifer (2016). Stereotypes. *The Quarterly Journal of Economics* 131(4), 1753–1794.
- Bronnenberg, B. J., J.-P. H. Dubé, and M. Gentzkow (2012). The evolution of brand preferences: Evidence from consumer migration. *American Economic Review* 102(6), 2472–2508.
- Bursztyn, L., B. Ferman, S. Fiorin, M. Kanz, and G. Rao (2018). Status goods: experimental evidence from platinum credit cards. *The Quarterly Journal of Economics* 133(3), 1561–1595.
- Castells, M. (2011). *The power of identity*, Volume 14. John Wiley & Sons.
- Cattani, G., S. Ferriani, F. Godart, and S. V. Sgourev (2020). The aesthetic turn in strategy: Creating value with style. In *Aesthetics and Style in Strategy*. Emerald Publishing Limited.
- Chaney, K. E., D. T. Sanchez, and M. R. Maimon (2019). Stigmatized-identity cues in consumer spaces. *Journal of Consumer Psychology* 29(1), 130–141.
- Coffman, K. B., C. L. Exley, and M. Niederle (2021). The role of beliefs in driving gender discrimination. *Management Science* 67(6), 3551–3569.
- Conlon, C. T. and J. H. Mortimer (2013). Demand estimation under incomplete product availability. *American Economic Journal: Microeconomics* 5(4), 1–30.
- Corneo, G. and O. Jeanne (1997). Snobs, bandwagons, and the origin of social customs in consumer behavior. *Journal of Economic Behavior & Organization* 32(3), 333–347.
- Corneo, G., O. Jeanne, et al. (1994). A theory of fashion based on segmented communication. *Bonn: University of Bonn, December*, 1–21.
- Del Carpio, L. and M. Guadalupe (2021). More women in tech? evidence from a field experiment addressing social identity. *Management Science*.
- DeSoucey, M. (2016). *Contested Tastes: Foie Gras and the Politics of Food*, Volume 70. Princeton University Press.
- Dilley, R., J. Hockey, V. Robinson, and A. Sherlock (2015). Occasions and non-occasions: identity, femininity and high-heeled shoes. *European Journal of Women's Studies* 22(2), 143–158.
- Du, R. Y. and W. A. Kamakura (2012). Quantitative trendspotting. *Journal of Marketing Research* 49(4), 514–536.
- Dubois, D. and L. Anik (2020). From style to status and to power: When and why do stylistic choices in footwear make women feel and act powerful? In *Aesthetics and Style in Strategy*. Emerald Publishing Limited.
- Dubois, D., D. D. Rucker, and A. D. Galinsky (2012). Super size me: Product size as a signal of status. *Journal of Consumer Research* 38(6), 1047–1062.
- Eagly, A. H., C. Nater, D. I. Miller, M. Kaufmann, and S. Sczesny (2020). Gender stereotypes have changed: A cross-temporal meta-analysis of us public opinion polls from 1946 to 2018. *American psychologist* 75(3), 301.
- Ethier, K. A. and K. Deaux (1994). Negotiating social identity when contexts change: Maintaining identification and responding to threat. *Journal of personality and social psychology* 67(2), 243.

- Fernandez-Mateo, I. and S. Kaplan (2018). Gender and organization science: Introduction to a virtual special issue. *Organization Science* 29(6), 1229–1236.
- Fiss, P. C., M. T. Kennedy, and G. F. Davis (2012). How golden parachutes unfolded: Diffusion and variation of a controversial practice. *Organization Science* 23(4), 1077–1099.
- Friedman, M. (1999). *Consumer boycotts: Effecting change through the marketplace and the media*. Psychology Press.
- Galak, J., K. Gray, I. Elbert, and N. Strohmingner (2016). Trickle-down preferences: Preferential conformity to high status peers in fashion choices. *PloS one* 11(5), e0153448.
- Garcia-Jimeno, C., A. Diaz, and P. Yildirim (2021). Information networks and collective action: Evidence from the women’s temperance crusade. *Available at SSRN 3904936*.
- Garg, N., L. Schiebinger, D. Jurafsky, and J. Zou (2018). Word embeddings quantify 100 years of gender and ethnic stereotypes. *Proceedings of the National Academy of Sciences* 115(16), E3635–E3644.
- Gneezy, A., U. Gneezy, G. Riener, and L. D. Nelson (2012). Pay-what-you-want, identity, and self-signaling in markets. *Proceedings of the National Academy of Sciences* 109(19), 7236–7240.
- Godart, F. C. (2018). Why is style not in fashion? using the concept of “style” to understand the creative industries. In *Frontiers of creative industries: Exploring structural and categorical dynamics*. Emerald Publishing Limited.
- Grohmann, B. (2009). Gender dimensions of brand personality. *Journal of marketing research* 46(1), 105–119.
- Guizzo, F., M. Cadinu, S. Galdi, A. Maass, and M. Latrofa (2017). Objecting to objectification: Women’s collective action against sexual objectification on television. *Sex Roles* 77(5), 352–365.
- Halliwell, E., A. Easun, and D. Harcourt (2011). Body dissatisfaction: Can a short media literacy message reduce negative media exposure effects amongst adolescent girls? *British journal of health psychology* 16(2), 396–403.
- Heffetz, O. (2011). A test of conspicuous consumption: Visibility and income elasticities. *Review of Economics and Statistics* 93(4), 1101–1117.
- Hydock, C., N. Paharia, and S. Blair (2020). Should your brand pick a side? how market share determines the impact of corporate political advocacy. *Journal of Marketing Research* 57(6), 1135–1151.
- John, A. and J. Klein (2003). The boycott puzzle: Consumer motivations for purchase sacrifice. *Management Science* 49(9), 1196–1209.
- Johnson, G., R. A. Lewis, and E. Nubbemeyer (2017). The online display ad effectiveness funnel & carryover: Lessons from 432 field experiments. *Available at SSRN 2701578*.
- Karniol, R. (2011). The color of children’s gender stereotypes. *Sex roles* 65(1), 119–132.
- Kozinets, R. V. and J. M. Handelman (2004). Adversaries of consumption: Consumer movements, activism, and ideology. *Journal of consumer research* 31(3), 691–704.

- Kranton, R. E. (2016). Identity economics 2016: Where do social distinctions and norms come from? *American Economic Review* 106(5), 405–09.
- Labrecque, L. I. and G. R. Milne (2012). Exciting red and competent blue: the importance of color in marketing. *Journal of the Academy of Marketing Science* 40(5), 711–727.
- Levy, R. and M. Mattsson (2021). The effects of social movements: Evidence from# metoo. *Available at SSRN* 3496903.
- Lieven, T., B. Grohmann, A. Herrmann, J. R. Landwehr, and M. Van Tilburg (2015). The effect of brand design on brand gender perceptions and brand preference. *European Journal of Marketing*.
- Lins, K. V., L. Roth, H. Servaes, and A. Tamayo (2020). Gender, culture, and firm value: Evidence from the harvey weinstein scandal and the# metoo movement. *University of Alberta School of Business Research Paper* (2019-509).
- Luo, H. and L. Zhang (2021a). Gender orientation and segregation of ideas:# metoo's impact in hollywood. *Available at SSRN* 3817029.
- Luo, H. and L. Zhang (2021b). Scandal, social movement, and change: Evidence from# metoo in hollywood. *Management Science*, 1–19.
- Mandel, N., D. D. Rucker, J. Levav, and A. D. Galinsky (2017). The compensatory consumer behavior model: How self-discrepancies drive consumer behavior. *Journal of Consumer Psychology* 27(1), 133–146.
- McDonnell, M.-H. and B. King (2013). Keeping up appearances: Reputational threat and impression management after social movement boycotts. *Administrative Science Quarterly* 58(3), 387–419.
- Morris, P. H., J. White, E. R. Morrison, and K. Fisher (2013). High heels as supernormal stimuli: How wearing high heels affects judgements of female attractiveness. *Evolution and Human Behavior* 34(3), 176–181.
- Moss, G., R. Gunn, and J. Heller (2006). Some men like it black, some women like it pink: consumer implications of differences in male and female website design. *Journal of Consumer behaviour* 5(4), 328–341.
- Olden, A. and J. Moen (2022, 03). The triple difference estimator. *The Econometrics Journal*. utac010.
- Oldstone-Moore, C. (2015). *Of beards and men: the revealing history of facial hair*. University of Chicago Press.
- Pesendorfer, W. (1995). Design innovation and fashion cycles. *The american economic review*, 771–792.
- Polletta, F. and J. M. Jasper (2001). Collective identity and social movements. *Annual review of Sociology* 27(1), 283–305.
- Puntoni, S., S. Sweldens, and N. T. Tavassoli (2011). Gender identity salience and perceived vulnerability to breast cancer. *Journal of Marketing Research* 48(3), 413–424.

- Reinecke, J. and J. Donaghey (2015). After rana plaza: Building coalitional power for labour rights between unions and (consumption-based) social movement organisations. *Organization* 22(5), 720–740.
- Reis, B., M. Pereira, S. Azevedo, N. Jeronimo, and R. Miguel (2018). Genderless clothing issues in fashion. In *Textiles, Identity and Innovation: Design the Future*, pp. 255–260. CRC Press.
- Semmelhack, E. (2008). *Heights of fashion: a history of the elevated shoe*. Bata Shoe Museum.
- Shapiro, B. T., G. J. Hitsch, and A. E. Tuchman (2021). Tv advertising effectiveness and profitability: Generalizable results from 288 brands. *Econometrica* 89(4), 1855–1879.
- Spencer, S. J., C. Logel, and P. G. Davies (2016). Stereotype threat. *Annual review of psychology* 67(1), 415–437.
- Steele, C. M., S. J. Spencer, and J. Aronson (2002). Contending with group image: The psychology of stereotype and social identity threat. In *Advances in experimental social psychology*, Volume 34, pp. 379–440. Elsevier.
- Sun, Q., F. Wu, S. Li, and R. Grewal (2021). Consumer boycotts, country of origin, and product competition: Evidence from china’s automobile market. *Management Science* 67(9), 5857–5877.
- Tartaglia, S. and C. Rollero (2015). Gender stereotyping in newspaper advertisements: A cross-cultural study. *Journal of cross-cultural psychology* 46(8), 1103–1109.
- Thau, B. (2018, Apr). Is the metoo era hurting victoria’s secret? two branding experts hold differing opinions. *Forbes*.
- Tilly, C. and L. J. Wood (2020). *Social Movements, 1768-2008*. Routledge.
- Trudel, R., J. J. Argo, and M. D. Meng (2016). The recycled self: consumers’ disposal decisions of identity-linked products. *Journal of Consumer Research* 43(2), 246–264.
- Van Tilburg, M., T. Lieven, A. Herrmann, and C. Townsend (2015). Beyond “pink it and shrink it” perceived product gender, aesthetics, and product evaluation. *Psychology & Marketing* 32(4), 422–437.
- White, K. and J. J. Argo (2009). Social identity threat and consumer preferences. *Journal of Consumer Psychology* 19(3), 313–325.
- Wright, L. (2017). Objectifying gender: the stiletto heel. In *Fashion Theory*, pp. 197–207. Routledge.
- Yoganarasimhan, H. (2012). Cloak or flaunt? the fashion dilemma. *Marketing Science* 31(1), 74–95.
- Yoganarasimhan, H. (2017). Identifying the presence and cause of fashion cycles in data. *Journal of Marketing Research* 54(1), 5–26.

Online Supplementary Materials

Social Movements, Identity Stereotypes and Gender:
How Did #MeToo Affect Footwear Consumption?

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For Online Publication Only

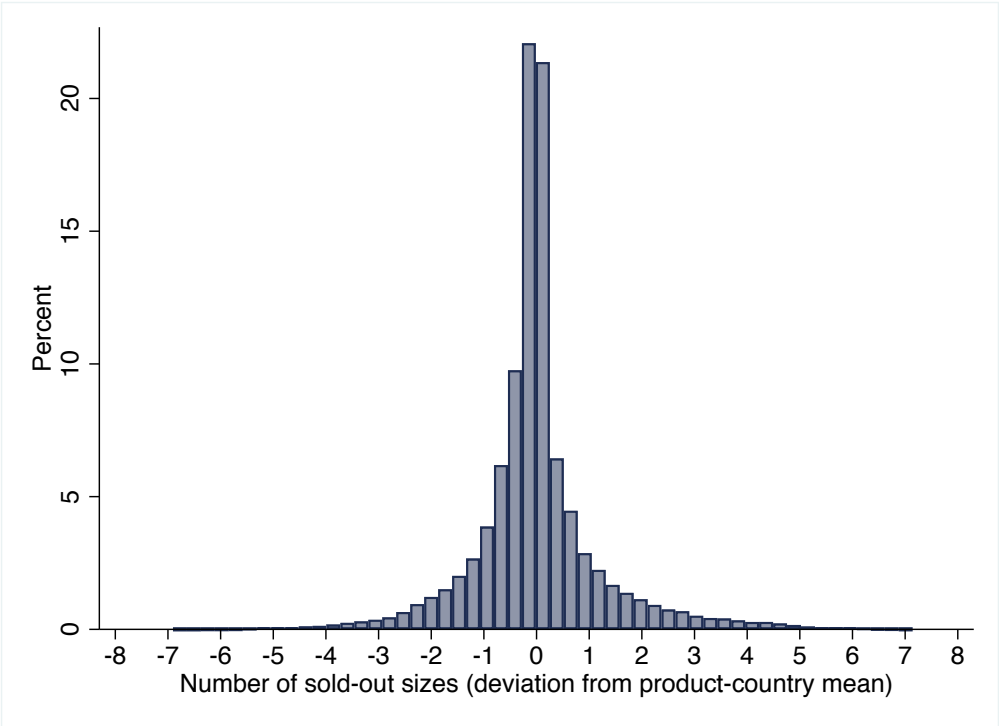
A Search Data

Table S1: Within Country Correlation Between Daily Searches for Sexual Harassment and Gender Equality Topics (2017-2018, 730 days)

Country	Correlation Coefficient
Austria	-.015
Belgium	.053
Canada	-.074
Czech Republic	-.005
Denmark	.066
Estonia	-.042
Finland	-.012
France	-.069
Germany	-.044
Greece	.033
Hungary	.055
Iceland	-.032
Ireland	.144
Israel	.001
Italy	-.058
Japan	.088
Korea, Republic of	.011
Latvia	-.012
Lithuania	-.019
Mexico	.625
Netherlands	-.036
Norway	.086
Poland	.112
Portugal	.324
Slovakia	.001
Slovenia	-.02
Spain	.283
Sweden	-.073
Switzerland	.077
Turkey	.102
United Kingdom	.046
United States	.14

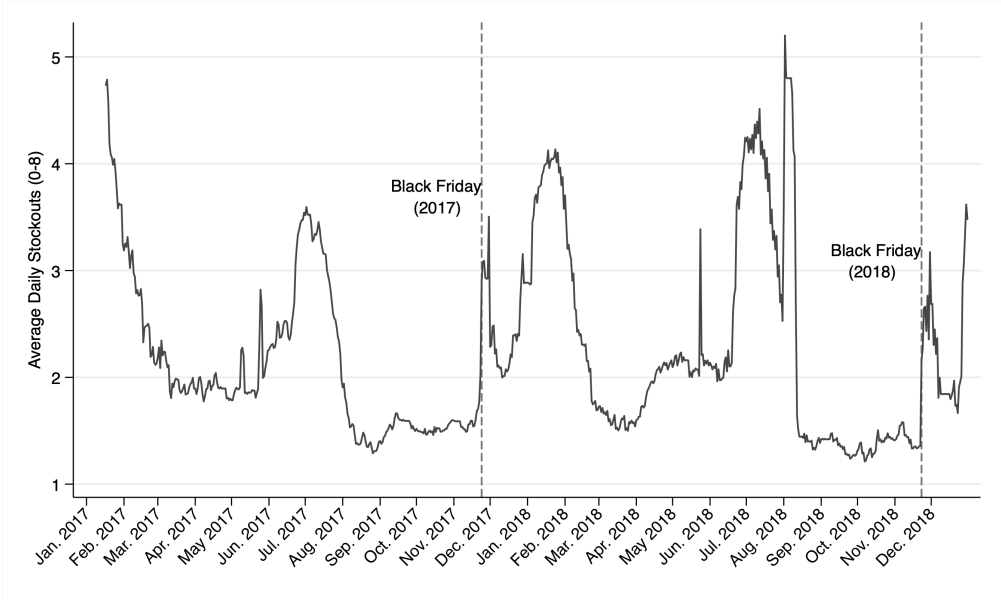
B Retailer Data

Figure S1: Average Weekly Number of Stock-Out Sizes (Within Product-Country)



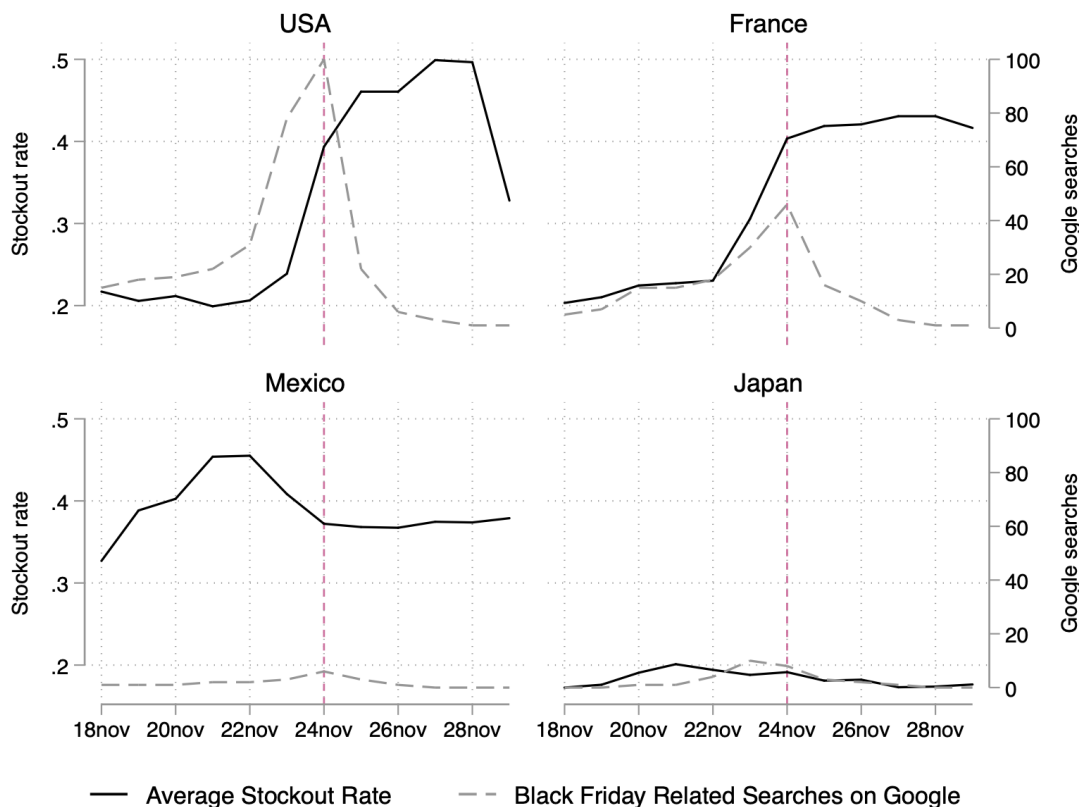
Notes: The figure shows the extent to which the average weekly number of stock-out sizes varies within product-country cells over time. Each product has 8 possible sizes. The graph shows the residuals from an OLS regression of stock-out sizes on product-country fixed effects. An observation is a product-country-week residual from each regression.

Figure S2: Average Daily Number of Stockout Sizes per Shoe (2017–2018)



Notes: The figure plots the daily trend in the average number of stockout sizes per shoe between 2017 and 2018. Each pair of shoes has 8 possible sizes, so the stockout measure fluctuates between 0 and 8.

Figure S3: Average Country-Level Daily Stock-Out Rate vs. “Black Friday” Daily Searches: Illustrative Example Within Four OEC Countries (18-29 November 2017)



Notes: The solid dark line plots daily stockout rates for women shoes across four countries over the 18th-29th of November 2017. The dashed grey line plots the corresponding country-level daily search rates on the “Black Friday” topic from Google Trends over the same period. The data is normalized by Google with 100 (USA, 24th of November) corresponding to the highest search volume measured over the period considered and for the four countries considered. The volume of “Black Friday” searches in the United States and in France around November 24th 2017 translates into rise in the shoe stock-out rate. In Mexico, the stockout rate peaked earlier, as “El Buen Fin” (its “Black Friday” equivalent) also occurs a week before “Black Friday.” In Japan, which does not have a “Black Friday” for fashion goods, the stock-out rate remained flat around that entire period.

C Additional Robustness

Table S2: Impact of #MeToo on Product Stockouts (Alternative Clustering of Standard Errors)

	# Stockouts					
	(1)	(2)	(3)	(4)	(5)	(6)
Post-#MeToo × #MeToo Exposure	0.072*** (0.021)	—	0.072*** (0.013)	—	0.072*** (0.015)	—
Attribute: Heel Height (Inches)						
Attribute × Post-#MeToo × #MeToo Exposure	-0.009*** (0.003)	-0.009*** (0.003)	-0.009** (0.004)	-0.009** (0.004)	-0.009* (0.005)	-0.009* (0.005)
Attribute: Pink/Red Colors						
Attribute × Post-#MeToo × #MeToo Exposure	-0.070*** (0.019)	-0.065*** (0.019)	-0.070*** (0.017)	-0.065*** (0.017)	-0.070*** (0.016)	-0.065*** (0.016)
Attribute: Slim Shapes						
Attribute × Post-#MeToo × #MeToo Exposure	-0.059*** (0.016)	-0.060*** (0.017)	-0.059*** (0.012)	-0.060*** (0.013)	-0.059*** (0.014)	-0.060*** (0.014)
Observations	107,912	107,912	107,912	107,912	107,912	107,912
<i>Fixed Effects:</i>						
Product × Country	Yes	Yes	Yes	Yes	Yes	Yes
Country × Week	No	Yes	No	Yes	No	Yes
<i>Clustering of Standard Errors:</i>						
Country	✓	✓				
Product			✓	✓		
Country-Product					✓	✓
Week	✓	✓	✓	✓	✓	✓

Notes: Within-product DDD estimator, estimated using Poisson quasi-maximum likelihood on weekly product-level stockouts for 410 products sold in 32 OECD countries 6 weeks before and 6 weeks after 15 October 2017. Columns (1), (3) and (5) include product-country fixed effects. Columns (2), (4) and (6) add country-week fixed effects. Only two-way and three-way coefficients reported. Robust standard errors are in parentheses, adjusted for two-way clustering on country and weeks (columns 1-2), product and week (columns 3-4) or country-product and week (columns 5-6). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table S3: Impact of #MeToo on Product Stockouts (Without Sweden)

	# Stockouts					
	(1)		(2)		(3)	
Post-#MeToo	-0.110	(0.080)	0.018	(0.082)	—	
#MeToo Exposure	-0.065***	(0.009)	—		—	
Post-#MeToo × #MeToo Exposure	0.087***	(0.014)	0.092***	(0.016)	—	
Attribute: Heel Height (Inches)						
Attribute × Post-#MeToo × #MeToo Exposure	-0.014***	(0.004)	-0.011***	(0.003)	-0.011***	(0.003)
Attribute × #MeToo Exposure	0.008*	(0.004)	—		—	
Attribute × Post-#MeToo	0.034***	(0.010)	0.036***	(0.011)	0.035***	(0.011)
Attribute	-0.043***	(0.012)	—		—	
Attribute: Pink/Red Colors						
Attribute × Post-#MeToo × #MeToo Exposure	-0.083***	(0.014)	-0.086***	(0.015)	-0.083***	(0.015)
Attribute × #MeToo Exposure	0.035***	(0.012)	—		—	
Attribute × Post-#MeToo	0.036	(0.061)	-0.015	(0.060)	-0.028	(0.061)
Attribute	0.276**	(0.041)	—		—	
Attribute: Slim Shapes						
Attribute × Post-#MeToo × #MeToo Exposure	-0.045***	(0.010)	-0.070***	(0.016)	-0.070***	(0.017)
Attribute × #MeToo Exposure	0.081***	(0.017)	—		—	
Attribute × Post-#MeToo	0.121**	(0.057)	0.133*	(0.068)	0.124*	(0.071)
Attribute	-0.125*	(0.067)	—		—	
Observations	116,223		104,307		104,307	
Product × Country	No		Yes		Yes	
Country × Week	No		No		Yes	

Notes: Within-product DDD estimator, estimated using Poisson quasi-maximum likelihood on weekly product-level stockouts for 410 products sold in 31 OECD countries 6 weeks before and 6 weeks after 15 October 2017. Column (2) includes product-country fixed effects. Column (3) adds country-week fixed effects. Robust standard errors are in parentheses, adjusted for two-way clustering on country and weeks. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table S4: Granger Causality Tests (Daily Country-Level Panel), 2017–2018

	# Stockouts	Sexual harassment
	(1)	(2)
Sexual harassment (t-1)	0.003*	0.410***
	(0.002)	(0.080)
Sexual harassment (t-1) × Weak Markers	-0.001	0.000
	(0.001)	(0.082)
Sexual harassment (t-1) × Strong Markers	-0.013**	0.001
	(0.006)	(0.084)
Ln Stockout (t-1)	0.948***	0.005
	(0.031)	(0.035)
Ln Stockout (t-1) × Weak Markers	-0.011	-0.001
	(0.013)	(0.030)
Ln Stockout (t-1) × Strong Markers	0.269***	0.010
	(0.036)	(0.033)
Observations	66,238	66,236
Date FEs	Yes	Yes
Country x Prod. Group FEs	Yes	Yes
Country Seasonality	Yes	Yes
Product Group Seasonality	Yes	Yes
Supply-Side Controls	Yes	Yes

*Notes: Panel regressions estimated using Poisson-FE model estimated on the full daily panel (2017-2018). The unit of observation is at the country × product group × daily level. All regressions include date fixed effects, country-group fixed effects, the log of total daily number of available products within each product group (interacted with product group dummies), and controls for country and product group seasonal effects. Robust standard errors are in parentheses, adjusted for two-way clustering on country-group and date *p < 0.10, **p < 0.05, ***p < 0.01*

D Online Survey Experiment

D.1 Study 1: Event Memory

In this first study, we are interested in the everyday language that people use to recount their experiences. Specifically, we would like you to remember a particular event and describe the experience as it happened to you, using language you would normally use. On the next screen, you will be asked to recall an event in your life. Please recall the event using words and language you would normally use.

MeToo condition. In 2017, MeToo emerged as a major social movement on social media. The MeToo movement was triggered by revelations about the sexual abuse of film producer Harvey Weinstein and quickly became a global phenomenon in which women shared their stories of sexual harassment. Please describe how these events made you feel, what you thought about them, to what extent you got involved in the movement, etc...

Threat condition. Please recall a particular episode in which you felt threatened as a woman. By threatened we mean a situation you went through where you were unsafe or in which you felt scared or stigmatised. Please describe this situation in which you felt threatened as a woman: what happened, how you felt, etc...

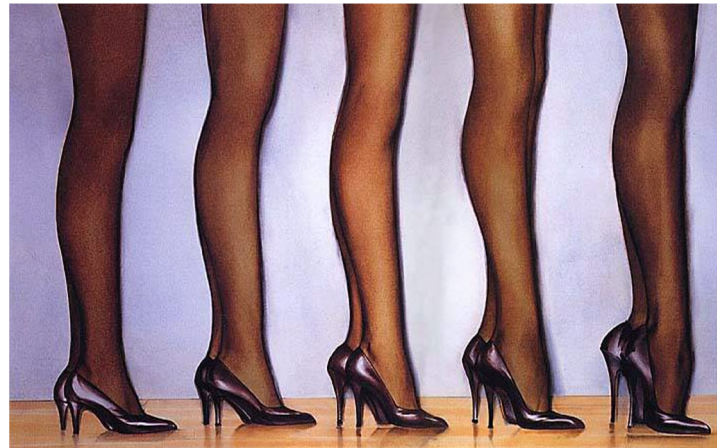
Empowerment condition. Please recall a particular episode in which you felt powerful as a woman. By powerful we mean a situation in which you felt you had the authority, the freedom, and the power to control the situation. Please describe this situation in which you felt powerful as a woman: what happened, how you felt, etc...

Baseline condition. Please remember a particular episode in which you went to the supermarket. Please describe this situation: what happened, how you felt, etc...

D.2 Study 2: Consumer Study

Welcome and thank you for participating in this consumer study. In this questionnaire, we would like to ask you about your preferences regarding different products. The product category on which we would like to collect your opinion is the category: "shoes". There are no right or wrong answers, we are interested in your opinions and experiences with these products.

Heel height choice. Imagine that you are browsing different pairs of shoes online. You are planning to buy a new pair of heeled shoes. Which pair of heeled shoes would you prefer from the options described below?



2 inches **3 inches** **4 inches** **5 inches** **6 inches**
 Pair A Pair B Pair C Pair D Pair E

Shoe color preferences. Imagine that you are planning to buy a new pair of shoes with a specific color in mind. How likely would you select a pair of shoes from the colors below?

	Very Unlikely	Unlikely	Somewhat unlikely	Undecided	Somewhat likely	Likely	Very likely
Black shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pink shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Red shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neutral color shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yellow shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Green shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blue shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brown shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Heel height preference. How much do you like to wear heeled shoes?

Not at all ○ ○ ○ ○ ○ ○ A lot

D.3 Study 3: Personality Study

Now, could you please answer the following statements using the proposed scale? Affirmations are about how you feel in general.

Sensitivity to threat scale. Please answer the following questions as precisely as possible using the following scale.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I tend to focus on the bad things that could happen to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to be particularly sensitive to dangers and threats in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am the type of person who is very worried about a threatening situation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes I feel like I am overwhelmed when I try to protect myself from all possible dangers in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Sometimes I think I'm more at risk than I really am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No matter what I do to feel more secure, I often worry about my safety.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Select "Somewhat agree"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the feeling that despite everything I do to avoid the dangers, it is not enough.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
It's in my nature to feel like I'm more vulnerable to certain dangers, to try to overcome them, and not yet feel safe after taking certain precautions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People used to describe me as an eternal worrier when it came to engaging in risky behavior.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When a threat to my personal safety arises, I am usually very concerned and worried beyond the level of the threat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Sense of power scale. Please answer the following questions as precisely as possible using the following scale.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I can get people to listen to what I'm saying.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My wishes don't matter much.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can get others to do whatever I want.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even when I express my opinions, they have little influence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I have a lot of power.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My ideas and opinions are often ignored.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Select "Agree"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even when I try, I can't get what I want.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I want to, I can decide for others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D.4 Results

Table S5: Average Treatment Effects

	(1) Like to wear heels (1-7)	(2) Heel height choice (inches)	(3) Prefer pink (vs. other) (-6,6)
Treatment conditions (vs. baseline)			
MeToo	-0.283* (0.166)	-0.070 (0.090)	-0.346** (0.142)
Threat	-0.019 (0.179)	0.048 (0.096)	0.012 (0.153)
Empowerment	-0.011 (0.184)	0.019 (0.094)	-0.177 (0.151)
Baseline Mean	3.15	2.81	-1.17
Observations	989	989	989
R2	0.004	0.002	0.008

Notes: Average Treatment Effect (ATE) of each treatment condition (vs. baseline condition) on respondents' (1) preference for heels (1-7), (2) choice of heel height (in inches), (3) likeliness to buy pink shoes relative to other shoe colors (-6,6). Robust standard errors in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table S6: Potential Mechanisms (Heterogeneity of Treatment Effects)

	Like heels (1-7)		Heel height (inches)		Prefer pink (-6,6)	
	(1)	(2)	(3)	(4)	(5)	(6)
High sensitivity to threat	0.463*	0.132	0.544***	0.213*	0.428**	0.178
	(0.246)	(0.236)	(0.128)	(0.114)	(0.214)	(0.211)
High sense of power	0.687***	0.392	0.171	0.021	0.164	0.080
	(0.246)	(0.238)	(0.126)	(0.108)	(0.213)	(0.207)
Treatment conditions (vs. baseline)						
MeToo	0.184	0.100	0.123	0.055	-0.316	-0.352
	(0.271)	(0.256)	(0.147)	(0.125)	(0.230)	(0.226)
Threat	0.095	-0.011	0.320**	0.216	0.369	0.305
	(0.296)	(0.290)	(0.156)	(0.137)	(0.260)	(0.252)
Empowerment	-0.399	-0.278	0.026	0.074	-0.026	-0.010
	(0.307)	(0.292)	(0.172)	(0.147)	(0.257)	(0.250)
Treatment × High sensitivity to threat						
MeToo	-0.610*	-0.538*	-0.408**	-0.326**	-0.101	-0.024
	(0.332)	(0.313)	(0.180)	(0.157)	(0.288)	(0.282)
Threat	-0.129	-0.098	-0.484**	-0.461***	-0.583*	-0.597**
	(0.357)	(0.346)	(0.192)	(0.168)	(0.310)	(0.303)
Empowerment	0.330	0.314	-0.150	-0.133	-0.395	-0.344
	(0.366)	(0.348)	(0.191)	(0.165)	(0.310)	(0.299)
Treatment × High sense of power						
MeToo	-0.265	0.001	0.031	0.149	0.062	0.188
	(0.340)	(0.324)	(0.183)	(0.160)	(0.297)	(0.291)
Threat	-0.085	0.132	-0.095	0.061	-0.176	-0.074
	(0.360)	(0.353)	(0.191)	(0.166)	(0.308)	(0.304)
Empowerment	0.264	0.292	0.063	0.115	0.031	0.054
	(0.361)	(0.343)	(0.190)	(0.162)	(0.303)	(0.293)
Controls	No	Yes	No	Yes	No	Yes
Observations	989	988	989	988	989	988
R2	0.040	0.145	0.031	0.279	0.017	0.081

Notes: Heterogeneous effects of #MeToo treatment (vs. baseline condition) on respondents' (1) preference for heels (1-7), (2) choice of heel height (in inches), (3) likeliness to buy pink shoes relative to other shoe colors (-6,6). The treatment dummies are interacted with a dummy for above median sensitivity to threat and above median sense of power. Columns 2, 4, and 6 control for the age, occupation, and income of the respondent, along with a set of location dummies (US regions). Robust standard errors in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$