

Better or Different? How Political Ideology Shapes Preferences for Differentiation in the Social Hierarchy

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As consumers' political opinions become more divided and more central to their identities, it is important to understand how political ideology shapes consumers' attempts to differentiate from others in the marketplace. Seven studies demonstrate that political ideology systematically influences consumers' preferences for differentiation. Conservative ideology leads consumers to differentiate from others vertically in the social hierarchy through products that signal that they are better than others, and liberal ideology leads consumers to differentiate from others horizontally in the social hierarchy through products that signal that they are unique from others. This happens because conservatism endorses, and liberalism opposes, the belief that the dominance-based hierarchical social structure is a legitimate mechanism to distinguish individual qualities. The effect is robust across measured and manipulated ideology, hypothetical and real product choices, and online searches in conservative and liberal US states. Manipulating consumers' differentiation goals and perceptions of hierarchy legitimacy mitigates the effect. The findings advance existing research on political ideology, social hierarchy, and consumer divergence, and they contribute to marketing practice.

Keywords: political ideology, consumer differentiation, divergence, social hierarchy, inequality

As the divide between conservative and liberal opinions continues to grow (Abramowitz and Saunders

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2008), consumers find themselves on either end of the political debate, and very few remain on the sidelines (Jost 2006). The distinction between conservatism and liberalism is the most prevalent and parsimonious classification of political ideology in the West (Altemeyer 1998; Graham, Haidt, and Nosek 2009). Upward of 65% of adults self-identify as either conservative or liberal (Saad 2012), and political identification is a central part of individual identity in the increasingly partisan environment (Iyengar and Westwood 2015).

Noting the increasing significance of political ideology for individuals, researchers have begun to explore how political ideology may shape individuals' thoughts, feelings, and behaviors (Fraley et al. 2012; Jost et al. 2003). Recent studies suggest that ideology is important for marketers, as conservatives and liberals express distinct preferences in the contexts of supermarket purchases (Khan, Misra, and Singh 2013), entertainment (Roos and Shachar 2014), recycling (Kidwell, Farmer, and Hardesty 2013), donations (Winterich, Zhang, and Mittal 2012), and variety seeking

(Fernandes and Mandel 2014). Media pundits also stress the marketing implications of political ideology, noting its potential link to brand preferences. For example, conservatives reportedly drink Coke and shop at Hallmark stores, whereas liberals drink Pepsi and shop at Trader Joe's (Experian Simmons 2011). However, although political ideology is a key facet of consumers' identities, little is known about how it may affect consumers' attempts to differentiate their identities from others in the marketplace—a powerful driver of consumer behavior and market outcomes (Berger and Heath 2008; Snyder and Fromkin 1980; White and Argo 2009; White and Dahl 2006). The present research addresses this question.

We draw on a key difference between conservatism and liberalism's attitudes toward the social hierarchy (Jost et al. 2003). The social hierarchy refers to the differences that exist among individuals in society based on the amount of resources they own compared to others: those who own more resources than others hold dominant positions, and those who own few resources compared to others hold inferior positions (Pratto et al. 1994; Pratto and Cathey 2002). While both conservatives and liberals agree that a dominance-based hierarchical structure exists in society (Norton and Ariely 2011), conservatives and liberals hold opposing beliefs about the *legitimacy* of this hierarchical structure (Jost et al. 2003; Jost, Federico, and Napier 2009). Conservatives endorse the dominance-based hierarchical structure because they believe that it legitimately reflects individual differences in effort and ability (i.e., winners deserve their dominant positions because they work harder than losers) (Graham et al. 2009; Jost et al. 2003). In contrast, liberals oppose the dominance-based hierarchical structure and view it as illegitimate because they believe that everyone works hard, but some attain higher positions than others due to luck or social connections (Jost et al. 2009; Kluegel and Smith 1981).

Prior work shows that conservatives' and liberals' beliefs about hierarchy legitimacy translate to their distinct attitudes toward policies such as taxes and actions such as donations that redistribute resources in the hierarchy (Crawford, Mallinas, and Furman 2015; Graham et al. 2009; Ordabayeva and Fernandes 2017). Notably, prior studies rely on correlational data to explore the link between political ideology and hierarchy beliefs (Altemeyer 1998; Jost et al. 2009), and they shed little light on the boundary conditions of this link (Fraley et al. 2012). Past research thus leaves three key questions open: (1) how hierarchy beliefs affect conservatives' and liberals' preferences beyond redistribution; (2) whether there is a causal, not just a correlational, link between ideology and hierarchy beliefs, and (3) what boundary conditions can mitigate this link. Addressing these questions, we propose that conservative and liberal ideologies lead consumers to pursue distinct forms of differentiation in the marketplace.

Consumers have a ubiquitous desire to stand out from the crowd in order to signal who they are to others, and prior studies separately examine two forms of consumer differentiation (Bellezza, Gino, and Keinan 2014; Berger and Heath 2008; Dommer, Swaminathan, and Ahluwalia 2013; White and Argo 2009; White and Dahl 2006). On the one hand, several studies report that consumers may seek to differentiate themselves vertically in the social hierarchy to show their superior position, role, or success compared to others (Belk 1988; Ordabayeva and Chandon 2011; Vignoles, Chrysochoou, and Breakwell 2000). To achieve the goal to differentiate vertically in the hierarchy, consumers buy products that signal that they are better than others (Dommer et al. 2013). On the other hand, a separate group of studies reports that consumers may seek to differentiate themselves horizontally in the social hierarchy to express their unique traits, personality, and values compared to others (Bellezza et al. 2014; Chan, Berger, and Van Boven 2012). To achieve the goal to differentiate horizontally in the hierarchy, consumers buy products that signal that they are unique from others (Chan et al. 2012; Dommer et al. 2013; Tian, Bearden, and Hunter 2001). While prior studies examine when and why consumers diverge, and how divergence is perceived by others (Bellezza et al. 2014; Berger and Heath 2008; White and Dahl 2006), little is known about: (1) how consumers trade off between different forms of differentiation; (2) what drives consumers' distinct differentiation preferences; and (3) when such preferences emerge or disappear. Addressing these open questions on consumer divergence, we propose that conservative and liberal ideologies lead consumers to have distinct preferences for vertical and horizontal differentiation in the social hierarchy.

We propose that conservatism leads consumers to pursue vertical differentiation in the hierarchy through products that signal that they are better than others, and liberalism leads consumers to pursue horizontal differentiation in the hierarchy through products that signal that they are unique from others. The effect of ideology on differentiation preferences emerges because conservative and liberal ideologies endorse distinct beliefs about the legitimacy of the dominance-based hierarchy, but manipulating the goal to differentiate vertically or horizontally in the hierarchy, or changing perceptions of hierarchy legitimacy, mitigates this effect.

Our research contributes to the literature linking political ideology and hierarchy beliefs: (1) by showing that political ideology affects consumers' preferences for differentiation, not just their preferences for redistribution; (2) by showing that ideology has a causal effect, not just a correlational influence, on hierarchy beliefs and preferences; and (3) by identifying interventions that can bridge ideological differences in hierarchy beliefs and preferences. Furthermore, our work contributes to the literature on consumer divergence: (1) by establishing political ideology as

a new driver of consumers' preferences between different types of differentiation; (2) by identifying hierarchy beliefs as a novel process underlying these preferences; and (3) by showing how the divide in differentiation preferences can be bridged. Our work thereby integrates two streams of research that previously seemed unrelated—political ideology and consumer divergence—by establishing hierarchy beliefs as a key link between them. More broadly, our work supports an emerging view that political ideology presents a type of cultural lens that can be used to study consumer identity and behavior. Next, we outline the theory behind our hypotheses.

THEORETICAL FRAMEWORK

Political ideology is an important facet of individual identity for several reasons. First, political values are among the six core values that shape personality (Vernon and Allport 1931). Second, individuals' ideological inclinations are detected as early as childhood, and they shape individuals' self-concepts through early adulthood (Fraleley et al. 2012). In the result, the majority of adults identify themselves as conservative or liberal (Saad 2012). Finally, like other facets of social identity, individuals' political ideology defines a set of norms that shapes their thoughts, feelings, and actions (Jost et al. 2003; Nail et al. 2009). Accordingly, ideological differences have recently been reported in certain consumer behaviors including variety seeking (Fernandes and Mandel 2014), brand choices in supermarkets (Khan et al. 2013), recycling (Kidwell et al. 2013), donation (Winterich et al. 2012), and movie preferences (Roos and Shachar 2014).

Importantly for the present research, conservative and liberal ideologies endorse opposing beliefs about the legitimacy of the dominance-based social hierarchy. Next, we outline these beliefs and explain how they impact consumers' pursuit of differentiation in the marketplace.

Ideology and Hierarchy Legitimacy Beliefs

Conservative and liberal ideologies differ in their attitudes toward inequality: conservative ideology endorses inequality, whereas liberal ideology opposes inequality (Jost et al. 2003). These differences emerge because conservatism and liberalism hold opposing assumptions about the legitimacy of the dominance-based hierarchical structure that exists in society (Graham et al. 2009). Conservatism assumes that the hierarchical structure is legitimate because it reflects individual differences in hard work and ability (Crawford et al. 2015). Liberalism assumes that the hierarchical structure is illegitimate because everyone works hard, but some attain high ranks due to luck or social connections (Kluegel and Smith 1981). These differences are reflected in conservatives' (vs. liberals') higher social dominance orientation—defined as the perceived

legitimacy of the social hierarchy and of dominant individuals in it (Pratto et al. 1994).

Using correlational data, prior work has shown that, because of their stronger belief in the legitimacy of the dominance-based hierarchical structure, conservatives show weaker support than liberals for taxes and donations that redistribute wealth in society (Crawford et al. 2015; Ordabayeva and Fernandes 2017). Expanding beyond correlations and redistributive preferences, we propose that opposing hierarchy legitimacy beliefs lead conservative and liberal ideologies to value distinct forms of consumer differentiation. Furthermore, we propose that this happens because people adopt hierarchy beliefs that fit and validate their ideology. Hence, the causal effect extends *from political ideology to hierarchy beliefs* and then to differentiation preferences.

We propose this causal direction because political identification forms very early in life as a result of family socialization and, to some extent, heritability (Alford, Funk, and Hibbing 2005; Lyons 2017). Early exposure to parents' political opinions and family values (such as the emphasis placed by parents on authority and obedience) as well as genetic factors (such as inherent extraversion and certain gene variants) significantly shape individuals' political leanings from a young age, leading children's political identification to reflect that of their parents (Alford et al. 2005; Fraley et al. 2012; Lyons 2017). In adulthood, political ideology becomes a salient, internalized, and visible facet of social identity (Vernon and Allport 1931). Just like other key identity facets such as gender and race, political identity triggers, quickly and implicitly, the enactment of consistent beliefs in various domains including social norms, out-group members, and public policies (Iyengar and Westwood 2015; Nail et al. 2009). For example, when a conservative (vs. liberal) ideology is made salient, individuals become more averse to constraints on their freedom imposed by small product assortments (Fernandes and Mandel 2014). In contrast, beliefs about hierarchy legitimacy require some understanding of how society functions and what roles different groups play in it (Pratto et al. 1994). In adults, hierarchy beliefs are not particularly salient, visible, or constructive of social identity, and they are just one part of a complex framework of mental models that comprise political ideology (Jost et al. 2009). This makes the *reversed* causal direction from hierarchy legitimacy beliefs to political ideology less likely. Next, we describe how the hierarchy legitimacy beliefs endorsed by conservative and liberal ideologies translate to preferences for two distinct forms of consumer differentiation.

Two Forms of Consumer Differentiation

The desire to differentiate from others is a powerful driver of consumer behavior (Brewer 1991; Snyder and Fromkin 1980). While differentiation has a number of

intrinsic psychological benefits, such as boosting self-esteem and positive emotions (Rubin and Hewstone 1998), individuals often differentiate through consumption choices to signal their distinct identity to others (Brewer 1991; White and Dahl 2006).

Previous research separately examines two forms of consumer differentiation. On the one hand, consumers may differentiate vertically in the social hierarchy to distinguish themselves on the basis of their superior role, position, or success compared to others (Belk 1988; Vignoles et al. 2000). On the other hand, consumers may differentiate horizontally in the hierarchy to distinguish themselves on the basis of their unique traits and values (Brewer 1991; Vignoles et al. 2000). To achieve vertical differentiation in the hierarchy, consumers buy products that signal that they are better than others (Dommer et al. 2013; Han et al. 2010). For example, they may buy products from higher-status brands compared to what other people have (Berger and Heath 2008; Ordabayeva and Chandon 2011). To achieve horizontal differentiation in the hierarchy, consumers buy products that signal that they are unique from others (Tian et al. 2001). For example, they may buy products with unusual features such as a bold color (Bellezza et al. 2014; Chan et al. 2012).

Importantly, prior studies of consumer divergence each focus on *one type of differentiation* (vertical or horizontal) by prompting participants to choose between group assimilation and one type of differentiation. In an exception, Dommer and colleagues (2013) show that low-self-esteem individuals secure their group belonging by engaging in horizontal differentiation when socially excluded and in vertical differentiation when socially included. Furthermore, Chan and colleagues (2012) show that people balance their need to belong with their need to stand out by assimilating to their group vertically (brand) and by diverging from their group horizontally (color). Extending these findings, we propose that political ideology is a new driver of consumers' preferences between vertical and horizontal differentiation.

We predict that conservatism leads consumers to pursue vertical differentiation in the social hierarchy through products that signal that they are better than others. This is because conservatism views the dominance-based hierarchical structure as a legitimate method to distinguish individual qualities, which implies that vertical differentiation should enable individual distinction by showing one's *superiority* over others. We predict that liberalism leads consumers to pursue horizontal differentiation in the social hierarchy through products that signal that they are unique from others. This is because liberalism views the hierarchical structure as an illegitimate method to distinguish individual qualities, which implies that horizontal differentiation should enable distinction by showing one's *uniqueness* from others in other ways.

H1: As consumers' political conservatism (liberalism) increases, so does their preference for vertically (horizontally) differentiating products in the social hierarchy.

H2: The relationship between consumers' political ideology and differentiation preferences is mediated by their beliefs about the legitimacy of the dominance-based hierarchical structure.

Next, we discuss the boundary conditions that mitigate the effect of political ideology on differentiation preferences. We build on prior reports that the influence of political ideology on attitudes and behaviors depends on factors in the environment (Iyengar and Westwood 2015), suggesting that the effects of ideology may be susceptible to situational influences and overrides.

Moderating Effects of Manipulated Differentiation Goals and Manipulated Hierarchy Beliefs

We propose that the hypothesized pattern emerges because of conservatives' and liberals' *goal* to differentiate themselves vertically or horizontally *in the hierarchy*, rather than alternative motives such as a need for high product quality or uniqueness. Hence, to test our first boundary condition, we manipulate individuals' vertical or horizontal differentiation goals in the hierarchy.

Prior literature on goals establishes that externally manipulating individuals' goals brings their behaviors in line with these goals (Gollwitzer 1999). For example, prompting an assimilation goal leads individuals to exhibit behaviors that assimilate them to their social environment (Pickett, Silver, and Brewer 2002). Extending this logic to the effect of political ideology on consumers' differentiation goals in the hierarchy, we expect that the effect of ideology on consumers' distinct differentiation preferences will disappear when vertical or horizontal differentiation goals in the hierarchy are externally prompted. Specifically, prompting a goal to differentiate vertically in the hierarchy should motivate individuals to pursue vertical differentiation in the hierarchy (Han et al. 2010)—as we predict only conservatives do without the goal prompt. Furthermore, prompting a goal to differentiate horizontally in the hierarchy should motivate individuals to pursue horizontal differentiation in the hierarchy (Chan et al. 2012)—as we predict only liberals do without the goal prompt.

H3: Externally prompting a goal to differentiate vertically versus horizontally in the social hierarchy moderates the relationship between political ideology and differentiation preferences:

- a. Externally prompting a vertical differentiation goal increases consumers' general desire to differentiate vertically in the hierarchy, as only conservatives do without a goal prompt.

- b. Externally prompting a horizontal differentiation goal increases consumers' general desire to differentiate horizontally in the hierarchy, as only liberals do without a goal prompt.

Finally, since opposing beliefs about hierarchy legitimacy mediate the effect of ideology on differentiation preferences, manipulating hierarchy beliefs by externally framing the hierarchy as legitimate (that is, as resulting from hard work) or illegitimate (as resulting from luck) should moderate the effect of ideology and help us test the psychological process through moderation (Spencer, Zanna, and Fong 2005). Specifically, we expect external manipulation of hierarchy legitimacy to change the differentiation preferences of conservatives, but not those of liberals.

We expect this asymmetric effect because conservatives have a high need to justify the social system; that is, they have a strong desire to rationalize the existing social arrangement. In contrast, liberals have a low need to justify the system (Jost et al. 2003; Jung et al. 2017). These differences in system justification tendencies make conservatives and liberals asymmetrically susceptible to external manipulations of the social system: whereas conservatives respond to manipulations of the social system by shifting their views to accept the present system, liberals are not susceptible to manipulations of the social system (Carraro et al. 2011). For example, externally changing justifications of inequality by asking people to consider the reasons behind rich people's advantage changes the attitudes of conservatives, but not liberals, toward redistribution (Chow and Galak 2012). Similarly, externally framing luck as an individual quality rather than a random occurrence changes conservatives', not liberals', view of the role of luck in determining individuals' hierarchical positions (Gromet, Hartson, and Sherman 2015). This suggests that conservatives' views of the hierarchy can be changed by an external shift in the framing of the hierarchy, but liberals' views of the hierarchy are not changed by such prompts.

Building from these insights, we predict that experimentally framing the dominance-based hierarchical social structure as *legitimate* will lead conservatives to align their views with the hierarchical structure's legitimacy, resulting in their endorsement of the hierarchy and preference for *vertical* over horizontal differentiation. Framing the dominance-based hierarchical structure as *illegitimate* will lead conservatives to accept the hierarchical structure's *illegitimacy*, resulting in their opposition to the hierarchy and preference for *horizontal* over vertical differentiation. In contrast, we predict that liberals will be unsusceptible to external manipulations of hierarchy legitimacy: liberals will view the hierarchical structure as *illegitimate* and will prefer *horizontal* to vertical differentiation regardless of the external framing of the legitimacy

of the hierarchy. In effect, the divide in conservatives' and liberals' differentiation preferences will emerge in the legitimate hierarchy condition, but not in the illegitimate hierarchy condition.

H4: Externally framing the dominance-based hierarchical structure as legitimate versus illegitimate moderates the relationship between political ideology and differentiation preferences:

- a. The relationship between political ideology and differentiation preferences emerges when the hierarchy is externally framed as legitimate, in which case political conservatism (liberalism) results in preference for vertically (horizontally) differentiating products.
- b. The relationship between political ideology and differentiation preferences disappears when the hierarchy is externally framed as illegitimate, in which case both political conservatism and liberalism result in preference for horizontally differentiating products.

Empirical Plan

Figure 1 outlines our theoretical model and the seven studies that test this model.

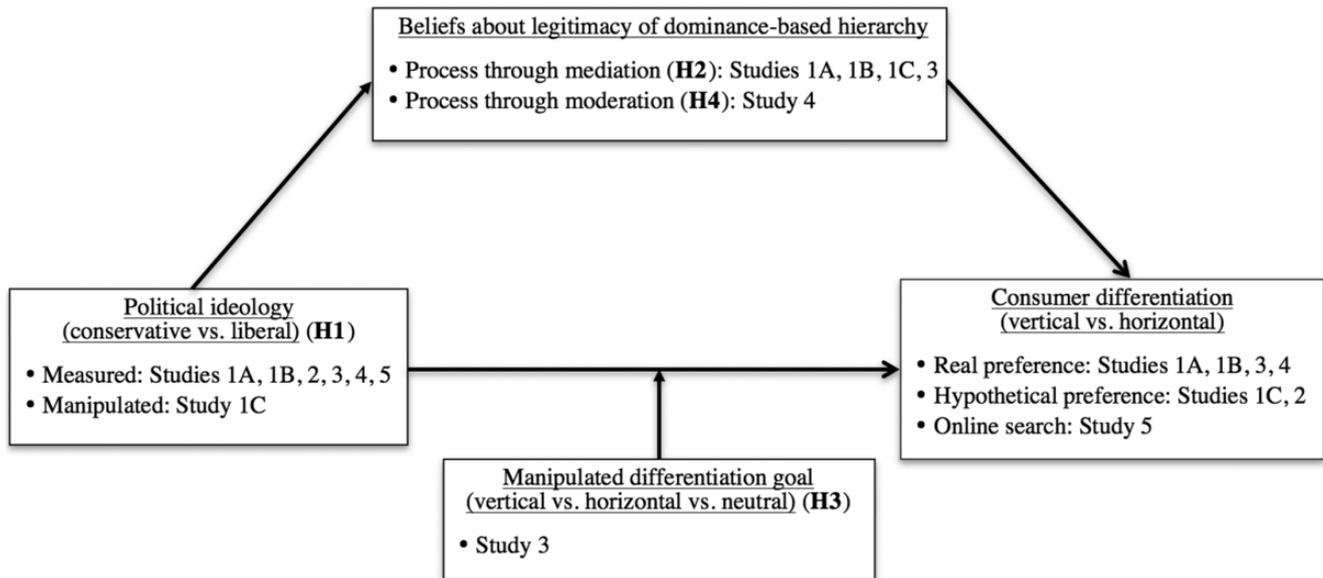
Studies 1A–1C test the influence of inherent (studies 1A–1B) and manipulated (study 1C) political ideology on preferences for vertically versus horizontally differentiating products (hypothesis 1), and they test the mediating role of hierarchy legitimacy beliefs (hypothesis 2). Study 2 demonstrates the effect of ideology on the individual appeal of vertically and horizontally differentiating products across a wide range of incomes. Studies 3 and 4 examine the moderating effects of manipulated differentiation goals (study 3: hypothesis 3) and manipulated hierarchy legitimacy (study 4: hypothesis 4). Finally, study 5 tests the theory using secondary data of online searches in conservative and liberal US states. Across studies, we use established measures as well as a manipulation of political ideology, real and hypothetical product choices, diverse participant samples, and immediate and delayed measures of ideology to establish the robustness and generalizability of the effects.

STUDY 1A: INFLUENCE OF MEASURED IDEOLOGY ON PREFERENCE FOR VERTICAL VERSUS HORIZONTAL DIFFERENTIATION, AND UNDERLYING PROCESS

Study 1A had three goals. First, the study sought to establish the link between political ideology and differentiation preferences (hypothesis 1) using a validated measure of ideology from the literature. Second, the study sought to examine the mediating role of hierarchy legitimacy beliefs

FIGURE 1

THEORETICAL MODEL AND EMPIRICAL PLAN



NOTE.—Figure 1 summarizes the theoretical model and the empirical plan.

1. Studies 1A-C show the effect of inherent (1A, 1B) and manipulated (1C) ideology on preferences for vertical vs. horizontal differentiation and test the process.
2. Study 2 shows the effect of ideology on individual appeal of vertical and horizontal differentiation across diverse income levels.
3. Study 3 shows the moderating effect of manipulated differentiation goal on preferences for vertical vs. horizontal differentiation.
4. Study 4 shows the moderating effect of manipulated hierarchy legitimacy on preferences for vertical vs. horizontal differentiation.
5. Study 5 validates the theory with secondary data of online searches for vertically and horizontally differentiating terms in conservative and liberal U.S. states.

(hypothesis 2). Third, the study sought to demonstrate these patterns with real product choice. We held the product constant across differentiation types, and we varied the message displayed on the product. This allowed us to rule out alternative explanations related to idiosyncratic differences between vertically and horizontally differentiating products, and to rule out the role of conservatives' and liberals' alternative motives, such as their distinct desire for product quality.

Method

We recruited 169 students ($M_{\text{age}} = 22$, 59% female) on a university campus in exchange for course credit.

Political Ideology. Participants completed a single-item political ideology scale (Jost 2006; 1 = "extremely liberal" to 9 = "extremely conservative," $M = 4.74$, $SD = 1.82$), which is highly consistent with other measures of ideology (Jost et al. 2003; Nail et al. 2009) and is highly predictive of voting patterns (Jost 2006).

Preference for Vertical versus Horizontal Differentiation. After completing the ideology scale, participants were informed that 10 study participants would win a coffee mug, and that they could choose between two mug designs. Both mug designs featured the university logo on one side, but they featured two different engraved messages on the other side: vertically differentiating "Just Better" or horizontally differentiating "Just Different." In a pretest, 68 students ($M_{\text{age}} = 21$, 37% female) rated a mug with one of the two randomly assigned messages (from 1 = "not at all" to 7 = "very much") on vertical differentiation ("to what extent does the mug message signal that one is different from others by enhancing their social standing—that is, by highlighting their superiority and status among other people?") and on horizontal differentiation ("to what extent does the mug message signal that one is different from others based on who they are as an individual—that is, the qualities, opinions, and traits that make one different from other people?").

Table 1 shows the products used in studies 1A through 4, and their vertical and horizontal differentiation ratings obtained using the same scales across pretests. Table 1

TABLE 1
STUDIES 1A–4: VERTICAL AND HORIZONTAL DIFFERENTIATION STIMULI AND PRETEST RATINGS

Study (Pretest N)	Differentiation type	Product stimuli	Vertical score	Horizontal score	t	p
Study 1A (68 students)	Just Better coffee mug		4.91	3.71	2.71	.010
	Just Different coffee mug		2.62	4.15	-5.27	<.001
Studies 1B and 4 (82 adults)	Ralph Lauren gift card		5.62	3.43	7.13	<.001
	Urban Outfitters gift card		3.77	5.43	-4.57	<.001
Study 1C (78 adults)	Vertically differentiating shoe line	Setia X shoes challenge the industry norms by offering athletic shoes that are luxurious and classy. Unlike standard athletic shoes, these shoes are different by being posh, elegant, and sometimes extravagant. The shoes cost \$100, and they received a rating of 94 (on a scale from 0 and 100) from an independent product-rating magazine, <i>Consumer Reports</i> .	5.68	3.59	5.26	<.001
	Horizontally differentiating shoe line	Setia Y shoes break with the industry standards by offering athletic shoes that are edgy and unique. Unlike standard athletic shoes, these shoes are different by being irreverent, hip, and sometimes eccentric. The shoes cost \$100, and they received a rating of 94 (on a scale from 0 and 100) from an independent product-rating magazine, <i>Consumer Reports</i> .	3.41	5.37	-4.83	<.001
Study 2 (91 adults)	Color red as vertically differentiating	You recently came across a magazine article suggesting that red is the color of luxury in the 21st century. The article explained that nowadays the color red is increasingly recognized as a symbol of one's success, prosperity, and accomplishments.	5.13	3.70	4.21	<.001
	Color red as horizontally differentiating	You recently came across a magazine article suggesting that red is the color of nonconformity in the 21st century. The article explained that nowadays the color red is increasingly recognized as a symbol of one's originality, rebelliousness, and edge.	3.36	4.89	-4.16	<.001
Study 3 (51 adults)	Just Better coffee mug		4.76	3.92	2.37	.026
	Just Different coffee mug		3.23	4.92	-2.81	.009

NOTES.—

- Each pretest used a participant sample that was relevant for the main study and manipulated differentiation type between subjects.
- Vertical differentiation was measured from 1 = "not at all" to 7 = "very much": "To what extent does... signal that one is different from others by enhancing their social standing—that is, by highlighting their superiority and status among other people?"
- Horizontal differentiation was measured from 1 = "not at all" to 7 = "very much": "To what extent does... signal that one is different from others based on who they are as an individual—that is, the qualities, opinions, and traits that make one different from other people?"

shows that the vertically differentiating mug more strongly enabled vertical (vs. horizontal) differentiation, and that the horizontally differentiating mug more strongly enabled horizontal (vs. vertical) differentiation. Another pretest with 66 students ($M_{\text{age}} = 22$, 52% female) verified that the two mugs were equally generally differentiating (“to what extent would the mug allow one to differentiate from other people in the social environment?”; 1 = “not at all,” 7 = “very much”; $M = 4.06$ and 3.85 for the vertically and the horizontally differentiating mug, respectively, $t(62) = .49$, $p = .63$). All pretests in this article sampled the relevant population for each study.

Participants chose between the two mug designs using a dichotomous scale. The presentation order of each mug at each anchor was randomized, and it is included in the analyses.

Process. To examine the mediating role of hierarchy beliefs, we administered the Social Dominance Orientation scale (Pratto et al. 1994; 16 items; $\alpha = .92$; $M = 2.55$, $SD = .98$), which captures the belief of individuals in the legitimacy of the dominance-based hierarchical structure (e.g., “some groups of people are simply inferior to others,” 1 = “not at all” to 7 = “very much”).

Demographics. Since prior research links political ideology to the age and socioeconomic status (SES) of individuals (Ghitza and Gelman 2014; McCarty, Poole, and Rosenthal 2006), we measured age and SES (from 1 = “high class” to 5 = “low class”; $M = 3.60$, $SD = .66$) at the end of the survey. We did not measure income in this study, because most students do not earn an income. We measured income in subsequent studies that involved nonstudent adult participants.

Results

Effect of Ideology on Differentiation Preference. A binary logistic regression on the dichotomous choice of the vertically (vs. horizontally) differentiating mug with mean-centered ideology as a predictor revealed a significant positive coefficient of ideology ($b = .32$, Wald = 10.67, $p = .001$), indicating that conservatives were more likely to choose the vertically differentiating mug over the horizontally differentiating mug than were liberals.

Adding the mugs’ presentation order (.5 when the vertically differentiating mug was presented on the left, $-.5$ when it was on the right), participants’ age and SES (both mean-centered around 0), and their interactions with ideology to the model did not change the results. Ideology still significantly predicted differentiation choice (ideology: $b = .62$, Wald = 4.24, $p = .04$; presentation order: $b = .66$, Wald = 2.70, $p = .10$; age: $b = .54$, Wald = 2.81, $p = .09$; SES: $b = .57$, Wald = 3.09, $p = .08$; all interactions: $bs < .28$, Wald’s < 1.36 , $ps > .24$). Table 2 shows the

coefficient estimates obtained in the analyses that included demographics in studies 1A–4.

Process. In order to test the mediating role of hierarchy beliefs, we ran a mediation model 4 in SPSS (Hayes 2013) with 10,000 bootstrap samples and 95% confidence intervals. The results revealed a significant indirect effect of ideology on differentiation preferences through hierarchy beliefs ($a = .1841$, $SE = .0668$, 95% CI = [.0724, .3343]). The reversed mediation model (model 4 with 10,000 bootstrap samples and 95% confidence intervals) testing if ideology mediated the effect of hierarchy beliefs yielded a nonsignificant indirect effect ($a = .1421$, $SE = .1080$, 95% CI = [−.0486, .3808]). These results confirmed the hypothesized order of the variables in the causal chain (hypothesis 2). Figure 2 shows the mediation results from studies 1A–C.

Discussion

Study 1A demonstrated the link between political ideology and differentiation preferences (hypothesis 1) using a well-established measure of ideology and real product choice. The study showed that this link is independent from individuals’ age and SES, and that it is explained by the diverging beliefs of conservatives and liberals in the dominance-based hierarchy’s legitimacy (hypothesis 2). While study 1A controlled for potential alternative accounts by keeping product features such as quality constant, one could argue that in contexts where product features naturally vary, conservatives may prefer vertically differentiating products because of their high need for quality, and liberals may prefer horizontally differentiating products because of their high need for uniqueness. To test this possibility, study 1B features real vertically and horizontally differentiating brands and tests alternative accounts, such as need for quality and uniqueness, through competing mediation.

STUDY 1B: ALTERNATIVE EXPLANATIONS

Study 1B had three objectives. First, the study sought to generalize the effect of ideology to a multi-item scale of political ideology (Kidwell et al. 2013). Second, the study sought to generalize the effect of ideology to a real choice between brands that actually promote vertical or horizontal consumer differentiation in the marketplace, in order to test whether the results of study 1A found with internally valid stimuli (mugs) would also hold with externally valid stimuli (brands). Importantly, the study examined alternative explanations, including consumers’ need for quality and uniqueness, by measuring these constructs and by checking their mediating effects.

TABLE 2

STUDIES 1A–4: REGRESSION RESULTS INCLUDING DEMOGRAPHICS (COEFFICIENT ESTIMATES AND STANDARD ERRORS)

Predictor	Study 1A	Study 1B	Study 1C	Study 2	Study 3	Study 4
IDEOLOGY	.62 (.30)**	.19 (.07)***	.71 (.30)**	.03 (.20)	.77 (.29)***	1.12 (.28)***
AGE	.54 (.32)*	.01 (.01)	.01 (.01)	-.01 (.10)	-.03 (.01)*	-.004 (.02)
SES	.57 (.32)*	.04 (.09)	-.29 (.12)**	.04 (.07)	.12 (.23)	-.23 (.24)
INCOME	—	-.03 (.4)	.09 (.05)*	.01 (.02)	.11 (.05)**	.05 (.05)
IDEOLOGY × AGE	.24 (.20)	-.01 (.01)	0 (.03)	.02 (.02)	.06 (.03)**	-.03 (.03)
IDEOLOGY × SES	.02 (.18)	.05 (.05)	.03 (.24)	.15 (.15)	-.34 (.47)	-.21 (.47)
IDEOLOGY × INCOME	—	-.03 (.02)	.01 (.10)	-.04 (.04)	-.06 (.10)	-.03 (.09)
FACTOR	—	—	—	.28 (.20)	.32 (.32)	.41 (.28)
IDEOLOGY × FACTOR	—	—	—	1.20 (.40)***	1.06 (.63)*	1.31 (.56)**
AGE × FACTOR	—	—	—	0 (.02)	0 (.03)	-.03 (.03)
SES × FACTOR	—	—	—	.19 (.15)	.40 (.52)	-.45 (.47)
INCOME × FACTOR	—	—	—	.01 (.04)	-.16 (.11)	.03 (.08)
IDEOLOGY × FACTOR × AGE	—	—	—	0 (.03)	-.09 (.06)	-.01 (.06)
IDEOLOGY × FACTOR × SES	—	—	—	.37 (.30)	1.27 (1.04)	-.85 (.95)
IDEOLOGY × FACTOR × INCOME	—	—	—	-.04 (.08)	-.16 (.22)	-.05 (.19)
VERTICAL	—	—	—	—	.70 (.35)**	—
IDEOLOGY × VERTICAL	—	—	—	—	.42 (.70)	—
AGE × VERTICAL	—	—	—	—	-.03 (.04)	—
SES × VERTICAL	—	—	—	—	-.14 (.55)	—
INCOME × VERTICAL	—	—	—	—	-.06 (.12)	—
IDEOLOGY × VERTICAL × AGE	—	—	—	—	.03 (.07)	—
IDEOLOGY × VERTICAL × SES	—	—	—	—	-.27 (1.09)	—
IDEOLOGY × VERTICAL × INCOME	—	—	—	—	0 (.23)	—
CONSTANT	1.35 (.45)***	-.57 (.12)***	3.88 (.15)***	4.01 (.10)***	-.35 (.15)**	-.44 (.14)***

NOTES.—

- *** indicates a significant coefficient at $p < .01$, ** indicates $p < .05$, and * indicates $p < .1$.
- The dependent variable is the dichotomous choice between vertical and horizontal differentiation in studies 1A, 1B, 3, and 4. The dependent variable in study 1C is the preference between vertical and horizontal differentiation, measured on a scale from 1 = horizontally differentiating product to 7 = vertically differentiating product, in response to questions, “Which product is more appealing to you?” and “Which product is more attractive to you?” The dependent variable in study 2 is the individual evaluation of vertical and horizontal differentiation, measured on a scale from 1 = “not at all” to 7 = “very much” in response to the questions, “How appealing is this product to you?” and “How desirable is this product to you?”
- IDEOLOGY is political ideology. It is a mean-centered, single-item, nine-point scale (from 1 = extremely liberal to 9 = extremely conservative) in study 1A. It is a mean-centered, multi-item, nine-point scale (from 1 = extremely liberal to 9 = extremely conservative) in study 1B. It is a manipulation, equal to .5 in the conservative condition and -.5 in the liberal condition in study 1C. It is a dichotomous measure, equal to .5 for conservatives and -.5 for liberals in studies 2, 3, and 4.
- AGE is the mean-centered age of the participant.
- SES is the mean-centered socioeconomic status of the participant. It is a five-point scale measure, from 1 = “high class” to 5 = “low class” that is subsequently mean-centered around 0, in studies 1A, 3, and 4. It is a 10-point scale measure, from 1 = “lowest social tier” to 10 = “highest social tier” that is subsequently mean-centered around 0, in studies 1B, 1C, and 2.
- INCOME is the mean-centered income of the participant. It is a 15-point measure, from 1 = “under \$20,000” to 15 = “\$150,000 or more” that is subsequently mean-centered around 0, in studies 1B, 1C, 3, and 4. It is a 20-point measure, from 1 = “below \$20,000” to 20 = “above \$200,000” that is subsequently mean-centered around 0, in study 2.
- FACTOR is a manipulated factor in each study. It is the type of consumer differentiation, equal to .5 for vertical differentiation and -.5 for horizontal differentiation, in study 2. It is the type of goal, equal to .33 in the vertical differentiation and horizontal differentiation goal conditions and to -.66 in the neutral goal condition, in study 3. It is hierarchy legitimacy, equal to .5 in the legitimate hierarchy condition and -.5 in the illegitimate hierarchy condition, in study 4.
- VERTICAL is the additional dummy created in study 3 to contrast the vertical and horizontal differentiation goal conditions, equal to .5 in the vertical differentiation goal condition, -.5 in the horizontal differentiation goal condition, and 0 in the neutral goal condition.

Method

Three hundred thirty-three ($M_{\text{age}} = 34$, 63% female) adult participants completed the study online for payment on Amazon Mechanical Turk.

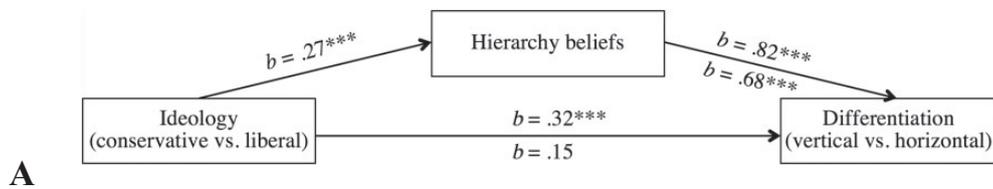
Political Ideology. Participants completed, in random order, the single-item scale of ideology used in study 1A (Jost 2006; $M = 4.61$, $SD = 2.10$) and a multi-item scale of ideology from the literature (Kidwell et al. 2013; $M = 4.55$, $SD = 1.79$; from 1 = “strongly oppose” to 9 = “strongly

support” capital punishment, abortion*, gun control*, socialized healthcare*, same-sex marriage*, illegal immigration*, and democrats*, where * marks reversed items; $\alpha = .83$).

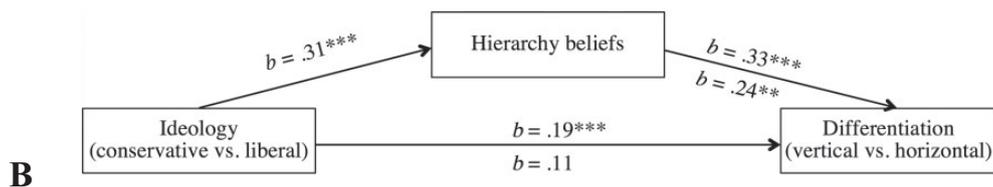
Preference for Vertical versus Horizontal Differentiation. Participants were informed that they could win a \$100 gift card from one of two clothing brands, and they chose, using a dichotomous scale, between Ralph Lauren, which is positioned as promoting vertical consumer differentiation, and Urban Outfitters, which

FIGURE 2

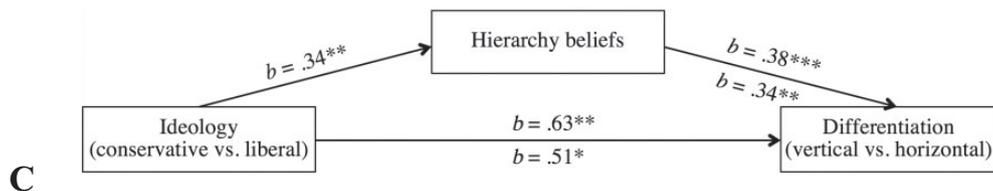
STUDIES 1A–C: HIERARCHY BELIEFS MEDIATE THE EFFECT OF MEASURED (1A, 1B) AND MANIPULATED (1C) IDEOLOGY ON DIFFERENTIATION PREFERENCES



- The predictor is measured ideology (1 = extremely liberal, 9 = extremely conservative).
- The outcome is the dichotomous choice of the vertically differentiating mug over the horizontally differentiating mug (1 = vertically differentiating mug, 0 = horizontally differentiating mug).
- Indirect effect of ideology through hierarchy beliefs: $a = .1841$, $SE = .0668$, 95% CI = [.0724, .3343].
- Indirect effect of hierarchy beliefs through ideology: $a = .1421$, $SE = .1080$, 95% CI = [-.0486, .3808].



- The predictor is measured ideology (1 = extremely liberal, 9 = extremely conservative).
- The outcome is the dichotomous choice of the vertically differentiating brand over the horizontally differentiating brand (1 = vertically differentiating brand, 0 = horizontally differentiating brand).
- Indirect effect of ideology through hierarchy beliefs: $a = .0844$, $SE = .0397$, 95% CI = [.0109, .1741].
- Indirect effect of hierarchy beliefs through ideology: $a = .0891$, $SE = .0619$, 95% CI = [-.0331, .2113].



- The predictor is manipulated ideology (-.5 = liberal condition, .5 = conservative condition).
- The outcome is preference for the athletic shoe line (1 = horizontally differentiating line, 7 = vertically differentiating line).
- Indirect effect of the ideology manipulation through hierarchy beliefs: $a = .1145$, $SE = .0719$, 95% CI = [.0114, .3108].

*** $p < .01$, ** $p < .05$, * $p < .1$

is positioned as promoting horizontal differentiation in the marketplace. Table 1 shows that in a pretest involving adults online, the two brands signaled vertical or horizontal differentiation as intended. Another pretest with 81 adults ($M_{\text{age}} = 34$, 65% female) confirmed that Ralph Lauren and Urban Outfitters were equally generally differentiating ($M = 4.45$ and 4.61 , $t(79) = -.45$, $p = .65$, on the same scale as in the study 1A pretest).

Process. To examine the process, we had participants complete multiple scales in random order. To test the hypothesized mediating role of hierarchy legitimacy beliefs,

we had participants complete the Social Dominance Orientation scale from study 1A (Pratto et al. 1994; $M = 2.29$, $SD = 1.12$; $\alpha = .94$). To test the role of consumers' need for quality as an alternative explanation, we had participants complete three items measuring desire for quality ($M = 5.68$, $SD = 1.12$; 1 = "not at all" to 7 = "very much": "product quality is very important to me," "I pay a lot of attention to product quality," "I seek out products of the highest quality"; $\alpha = .91$), as well as two established Quality Consciousness scales from the literature (the first scale was adopted from Sprotles and Kendall 1986; $M = 5.43$, $SD = 1.11$; seven items such as "getting very

good quality is very important to me”; $\alpha = .89$; and the second scale was adopted from Ailawadi, Pauwels, and Steenkamp 2008, $M = 4.66$, $SD = 1.11$; three items such as “quality is decisive for me while buying a product”; $\alpha = .65$). To test the alternative role of consumers’ general need for uniqueness, we had participants complete the Need for Uniqueness scale (Tian et al. 2001; $M = 3.54$, $SD = 1.12$; 12 items such as “I actively seek to develop my personal uniqueness by buying special products or brands”; $\alpha = .91$).

Demographics. At the end of the survey, participants indicated their age, income (from 1 = “under \$20,000” to 15 = “\$150,000 or more”; the scale progressed in \$10,000 increments; $M = 5.94$, $SD = 4.09$), and their SES on the MacArthur scale featuring a socioeconomic ladder (Adler et al. 2000; from 1 = “lowest social tier” to 10 = “highest social tier”; $M = 5.17$, $SD = 1.60$).

Results

Effect of Ideology on Differentiation Preference. A binary logistic regression on choice of a gift card from a vertically (vs. horizontally) differentiating brand with a mean-centered multi-item ideology scale as a predictor revealed a significant positive coefficient of ideology ($b = .19$, $Wald = 8.51$, $p = .004$), confirming that conservatives were more likely to prefer the vertically differentiating brand over the horizontally differentiating brand than were liberals. (All the results were identical when the single-item ideology scale was used in the analyses: $b = .16$, $Wald = 8.81$, $p = .003$. The results featuring the single-item ideology scale are detailed in web appendix A and are therefore no longer discussed.) Table 2 shows that this effect of ideology remained significant when demographics were added to the analysis ($b = .19$, $Wald = 7.91$, $p = .005$).

Process. To test the process underlying this effect, we ran a mediation model 4 in SPSS (Hayes 2013) with 10,000 bootstrap samples and 95% confidence intervals with hierarchy beliefs, desire for quality, the two quality consciousness scales, and need for uniqueness as competing mediators. The results revealed that the indirect effect of ideology on differentiation preferences through hierarchy beliefs was significant ($a = .0844$, $SE = .0397$, 95% $CI = [.0109, .1741]$). Importantly, the indirect effect of ideology through desire for quality ($a = -.0053$, $SE = .0108$, 95% $CI = [-.0321, .0121]$), the two quality consciousness scales ($a = .0055$, $SE = .0115$, 95% $CI = [-.0147, .0335]$ for the first scale; $a = .0011$, $SE = .0075$, 95% $CI = [-.0118, .0194]$ for the second scale), and need for uniqueness ($a = .0018$, $SE = .0059$, 95% $CI = [-.0089, .0160]$) was not significant. As in study 1A, the reversed mediation model (model 4 with 10,000 bootstrap samples and 95% confidence intervals) that used hierarchy beliefs

as the independent variable and ideology as the mediator was not significant ($a = .0891$, $SE = .0619$, 95% $CI = [-.0331, .2113]$), once again confirming the hypothesized order of variables in the theoretical model.

Discussion

While study 1A controlled for potential alternative explanations by holding various product characteristics constant, study 1B measured alternative explanations directly and found that hierarchy beliefs, rather than alternative constructs, mediate the influence of consumers’ ideology on differentiation preferences. Building on studies 1A and 1B that examined the influence of measured ideology on differentiation preferences, study 1C tests the causal effect of ideology using a manipulation of ideology, and it once again examines the underlying process.

STUDY 1C: EFFECT OF MANIPULATED IDEOLOGY ON PREFERENCE FOR VERTICAL VERSUS HORIZONTAL DIFFERENTIATION, AND UNDERLYING PROCESS

Study 1C tested the causal effect of ideology on differentiation preferences by manipulating ideology (hypothesis 1), and it examined the role of hierarchy beliefs in driving this causal effect (hypothesis 2). In order to control for confounds such as product quality and for alternative explanations such as desire for quality as we did in study 1A, we kept the product, brand, price, and quality ratings constant across differentiation types. We manipulated the vertically or the horizontally differentiating positioning of the product by varying the product description, in line with how products often attain their positioning through descriptions used in advertising.

Method

One hundred eighty-one ($M_{age} = 33$, 67% female) adult participants completed the study online for payment on MTurk.

Political Ideology. To manipulate ideology, we had participants perform a recall task. In the conservative (vs. liberal) condition, participants read the following instructions: “Please remember a time when you were talking to or interacting with someone who was obviously more liberal (vs. conservative) than you, and you felt that you had a more conservative (vs. liberal) position. Please take some time to think about the situation, and please describe it in detail, including whom you were with, what you did, what you and/or they said, how you felt, etc.” Our manipulation was inspired by recent work suggesting that social context influences individuals’ perceptions of their political

identity: a moderate individual may self-identify as a conservative in a strongly liberal geographic region, but as a liberal in a strongly conservative region (Feinberg et al. 2017). After the recall task, participants indicated their ideology on the single-item scale from studies 1A–B (Jost 2006; $M = 4.16$, $SD = 2.11$) as a manipulation check.

A pretest with 84 adults online ($M_{\text{age}} = 34$; 71% female) verified that the conservative recall task led to a more conservative ideology than the liberal recall task on a single-item scale ($M = 5.08$ vs. 3.56, respectively, $F(1, 82) = 13.49$, $p < .001$), a multi-item scale ($M = 4.92$ vs. 4.15, respectively, $F(1, 82) = 4.45$, $p = .038$; $\alpha = .80$; Kidwell et al. 2013), and a dichotomous scale (conservative vs. liberal; 53.85% vs. 24.44%, respectively, identified as conservative, $\chi^2(1) = 7.66$, $p = .007$; Tetlock, Hannum, and Micheletti 1984). The pretest also verified that the ideology manipulation did not influence self-esteem ($p = .37$, 10 items, $\alpha = .88$, Rosenberg 1965), mood (positive: $p = .24$, 10 items, $\alpha = .83$; negative: $p = .54$, 10 items, $\alpha = .87$; Watson, Clark, and Tellegen 1988), subjective status ($p = .46$, MacArthur ladder, 1 = “lowest social tier” to 10 = “highest social tier”; Adler et al. 2000), or desire for quality ($p = .11$; three items from study 1B; $\alpha = .80$).

Preference for Vertical versus Horizontal Differentiation. After the manipulation check, participants imagined that they were considering purchasing athletic shoes by a fictitious brand, Setia, and they were choosing between the brand’s two product lines: a vertically differentiating line and a horizontally differentiating line. They read a description of each line, which was adopted from Warren and Campbell (2014). The vertically differentiating line was “challenging the industry standards by offering athletic shoes that are luxurious and classy, [and that] unlike standard athletic shoes, are posh, elegant, and sometimes extravagant.” The horizontally differentiating line was “breaking with the industry standards by offering shoes that are edgy and unique, [and that] unlike standard athletic shoes, are irreverent, hip, and sometimes eccentric.” To control for potential confounds related to product quality, we set the price of both lines at \$100, and both lines were described as having received a rating of 94 (excellent) from *Consumer Reports*.

Table 1 shows the stimuli and the pretest results confirming that the two shoe lines were vertically or horizontally differentiating as intended. A separate pretest with 58 adults ($M_{\text{age}} = 33$; 54% female) verified that the two lines were equally generally differentiating ($M = 5.23$ vs. 5.50 for the vertically and horizontally differentiating line, $t(56) = -.75$, $p = .46$, on the same scale as in prior pretests). Since the stimuli were specifically designed to keep product quality constant, the second pretest also verified that the two shoe lines were perceived to have similar quality ($M = 5.77$ vs. 5.50 for the vertically and horizontally differentiating line, $t(56) = .85$, $p = .40$; from 1 = “not at

all” to 7 = “very much”: “to what extent do you think the shoes are high quality?” and “how well do you think the shoes would serve their purpose?”; $r = .67$).

Participants indicated which line was more appealing and attractive to them (1 = horizontally differentiating line, 7 = vertically differentiating line; $r = .92$, $M = 3.88$, $SD = 2.04$).

Process. We administered the Social Dominance Orientation scale used in studies 1A–B (Pratto et al. 1994; $\alpha = .93$; $M = 2.13$, $SD = 1.03$) to test the mediating role of hierarchy beliefs.

Demographics. At the end of the study, participants indicated their age, income (1 = “under \$20,000” to 15 = “\$150,000 or more”; the scale progressed in \$10,000 increments; $M = 5.64$, $SD = 3.58$), and SES on the MacArthur scale, which features a socioeconomic ladder (Adler et al. 2000; 1 = “lowest social tier” to 10 = “highest social tier”; $M = 5.12$, $SD = 1.53$).

Results

The manipulation check confirmed that the conservative recall task led to more conservative ideology ($M = 4.75$) than the liberal task ($M = 3.59$, $F(1, 179) = 14.90$, $p < .001$).

Effect of Ideology on Differentiation Preference. An ANOVA on preference for the vertically differentiating shoe line over the horizontally differentiating line with the ideology manipulation as a fixed factor revealed a significant effect: the preference for vertical (vs. horizontal) differentiation was significantly higher in the conservative ($M = 4.20$) than in the liberal condition ($M = 3.58$, $F(1, 179) = 4.34$, $p = .039$). Table 2 shows that this effect of ideology remained significant when demographics were added to the model ($b = .71$, $t = 2.36$, $p = .019$).

Process. A mediation model 4 with 10,000 bootstrap samples and 95% confidence intervals revealed a significant indirect effect of the ideology manipulation on differentiation preferences through hierarchy beliefs ($a = .1145$, $SE = .0719$, 95% CI = [.0114, .3108]).

Discussion

The results of study 1C complemented the findings of studies 1A and 1B by establishing the causal effect of ideology on differentiation preferences (hypothesis 1), by confirming the role of hierarchy legitimacy beliefs as the psychological process behind this effect (hypothesis 2), and by controlling for alternative possibilities. Study 2 tests how ideology impacts the individual appeal of vertical and horizontal differentiation by manipulating differentiation type between-subjects, instead of forcing participants to directly trade off between vertical and horizontal

differentiation. Study 2 also tests the role of income and SES more completely.

STUDY 2: INFLUENCE OF IDEOLOGY ON INDIVIDUAL APPEAL OF VERTICAL AND HORIZONTAL DIFFERENTIATION ACROSS INCOME BRACKETS

Study 2 had three goals. First, it examined how ideology impacts the *individual* appeal of vertical and horizontal differentiation. Second, whereas studies 1A–C showed that ideology effects are independent from SES and income among student participants who have no income and MTurk participants who have relatively low income, study 2 sought to further disentangle the role of ideology from SES and income by using a sample of participants with a wide range of incomes. Third, study 2 sought to generalize the effect of ideology by using a different measure of ideology and a new product. In order to control for confounds and alternative explanations, we held the brand and the color of the product constant. In line with the operationalization of consumer differentiation through product color in prior work (Bellezza et al. 2014; Warren and Campbell 2014), we varied the differentiation framing of product color in a magazine article.

Method

Study 2 had a 2×2 design with ideology (conservative vs. liberal) measured and differentiation type (vertical vs. horizontal) manipulated between-subjects. Three hundred fifty-three Qualtrics panelists ($M_{\text{age}} = 48$, 46% female) completed the study for payment. The sampling method required a similar representation of participants from four brackets of annual income: (1) \$0 to \$49,999, (2) \$50,000 to \$99,999, (3) \$100,000 to \$149,999, and (4) \$150,000 or above. In the result, 24%, 23%, 23%, and 30% of participants were in each respective bracket.

Political Ideology. Participants indicated their political ideology on a dichotomous scale (Tetlock et al. 1984; 54.96% identified as conservative and 45.04% identified as liberal).

Evaluation of Vertical and Horizontal Differentiation. Participants imagined that they were choosing an outfit to wear to a professional networking event. Participants read that most attendees would probably wear black and that they were considering wearing a red outfit from J.Crew. We used the J.Crew brand, because in a separate pretest it was rated to be equally vertically and horizontally differentiating ($N = 60$ adults, $M_{\text{vertical}} = 4.82$ vs. $M_{\text{horizontal}} = 4.58$, $t(59) = 1.06$, $p = .29$, on the same scales as in prior pretests). To manipulate differentiation type, we varied between-subjects the framing of the color red as vertically or horizontally differentiating. Participants

read that they came across an article that described red as “the color of luxury” and as being increasingly used to signal “one’s success, accomplishments, and prosperity” in the vertical differentiation condition, or as “the color of nonconformity” and as being increasingly used to signal “one’s originality, rebelliousness, and edge” in the horizontal differentiation condition. Table 1 shows the stimuli and the pretest results, which confirmed that the red outfit signaled vertical or horizontal differentiation in the two differentiation conditions as intended. A separate pretest with 57 adults ($M_{\text{age}} = 33$, 54% female) showed that the outfit was similarly generally differentiating across the vertical and horizontal conditions ($M = 5.38$ vs. 5.96, respectively, $t(54) = 1.52$, $p = .14$, on the same scale as in prior pretests). Since the stimuli were specifically designed to keep product quality constant, this pretest also confirmed that the outfit had similar perceived quality across conditions ($M = 5.09$ vs. 5.43 for vertical and horizontal differentiation, respectively, $t(55) = -1.18$, $p = .24$, on the same scale as in the study 1C pretest).

Participants indicated the extent to which wearing the red outfit would be appealing and desirable for them (1 = “not at all” to 7 = “very much”; $r = .93$, $M = 4.01$, $SD = 1.84$).

Demographics. At the end, participants indicated their age, income (1 = “below \$20,000” to 20 = “\$200,000 or above”; the scale progressed in \$10,000 increments; $M = 10.08$, $SD = 6.34$), and SES ($M = 5.82$, $SD = 1.64$ on the 10-point MacArthur ladder scale, Adler et al. 2000).

Results

We regressed the appeal of the differentiating outfit on ideology (.5 for conservative, $-.5$ for liberal), differentiation type (.5 for vertical, $-.5$ for horizontal), and their interaction. The results revealed nonsignificant coefficients of ideology ($b = -.04$, $t = -.20$, $p = .85$) and differentiation type ($b = .26$, $t = 1.33$, $p = .18$), but a significant ideology \times differentiation interaction ($b = 1.17$, $t = 3.02$, $p = .003$). Table 2 shows that this interaction remained significant when demographics were added to the model ($b = 1.20$, $t = 3.02$, $p = .003$), whereas the effects of income ($|b|s < .05$, $|t|s < 1.10$, $ps > .30$) and SES ($|b|s < .37$, $|t|s < 1.30$, $ps > .20$) were nonsignificant. This once again confirmed that the effect of ideology is independent of demographics, including income and SES, even among participants with wide-ranging incomes. As expected, conservative ideology significantly *increased* the appeal of differentiation over liberal ideology in the *vertical* differentiation condition ($M = 4.43$ for conservatives vs. 3.88 for liberals, $b = .55$, $t = 2.20$, $p = .029$), and it significantly *decreased* the appeal of differentiation in the *horizontal* condition ($M = 3.58$ for conservatives vs. 4.21 and for liberals, $b = -.63$, $t = -2.10$, $p = .037$). Whereas conservatives

found the outfit to be significantly more appealing in the vertical (vs. horizontal) condition ($t = 3.22, p = .002$), liberals found the outfit to be directionally, albeit nonsignificantly, less appealing in the vertical (vs. horizontal) condition ($t = -1.15, p = .25$).

Replication with Other Ideology Measures

We replicated the findings of study 2 with a group of 320 MTurk participants ($M_{\text{age}} = 35, 57\%$ female), who completed, in random order, the single-item (Jost 2006; $M = 4.34, SD = 2.03$) and multi-item (Kidwell et al. 2013; $M = 4.33, SD = 1.82$) ideology scales and then indicated their interest in the red J.Crew outfit using the measure of product appeal from study 2. Analyses revealed a significant ideology \times differentiation interaction ($b = .43, t = 4.32, p < .001$ for the single-item scale; $b = .42, t = 3.67, p < .001$ for the multi-item scale; $|t|s < .64, ps > .52$ for the remaining coefficients). Once again, conservative (vs. liberal) ideology significantly *increased* the outfit's appeal in the vertical condition ($b = .19, t = 2.76, p = .006$ for the single-item scale; $b = .17, t = 2.24, p = .027$ for the multi-item scale), and it significantly *decreased* the outfit's appeal in the horizontal condition ($b = -.24, t = -3.38, p = .001$ for the single-item scale; $b = -.24, t = -2.97, p = .003$ for the multi-item scale). Furthermore, conservative individuals (who scored 5.32 or higher on the single-item 1–9 ideology scale, and 5.39 or higher on the multi-item 1–9 scale) found the outfit to be significantly more appealing in the vertical (vs. horizontal) condition ($t = 1.97, p = .05$ for both scales). Liberal individuals (who scored 3.24 or lower on the single-item ideology scale, and 3.12 or lower on the multi-item scale) found the outfit to be significantly less appealing in the vertical (vs. horizontal) condition ($t = -1.98, p = .05$ for both scales).

Discussion

Study 2 showed that political ideology influences the individual appeal of vertical and horizontal differentiation independent from consumers' income and SES. Conservative ideology increases the appeal of vertically differentiating products, and liberal ideology increases the appeal of horizontally differentiating products. Study 3 tests the role of consumers' vertical and horizontal differentiation goals in giving rise to such distinct preferences by explicitly prompting the goal to differentiate vertically or horizontally in the hierarchy (hypothesis 3).

STUDY 3: MANIPULATING DIFFERENTIATION GOALS

Study 3 had three objectives. First, study 3 sought to verify that the hypothesized pattern emerges due to effects of

conservative and liberal ideologies on consumers' vertical and horizontal differentiation *goals* in the social hierarchy by manipulating a goal to differentiate vertically in the hierarchy, a goal to differentiate horizontally in the hierarchy, or a neutral goal. We predicted (hypothesis 1) that conservative (vs. liberal) ideology would boost the preference for vertical (vs. horizontal) differentiation under the neutral prompt. Furthermore, we predicted (hypothesis 3) that explicitly prompting a vertical or a horizontal differentiation goal would eliminate this effect of ideology by increasing people's general desire to differentiate vertically (as conservatives do under the neutral prompt), or to differentiate horizontally (as liberals do under the neutral prompt).

Second, since our previous studies measured or manipulated the political ideology of participants shortly before they made their product choices, one may question whether or not ideology needs to be explicitly salient for the hypothesized effects to emerge. Third, since studies 1A–C established the psychological process by measuring participants' hierarchy beliefs shortly after their product preferences, one may question whether or not the process evidence obtained in those studies may have been inflated. Since the measurement of the mediator and the dependent variable in the same survey may augment their correlation, introducing a temporal separation between them may provide a more cautious test of the psychological process (Podsakoff, Mackenzie, and Podsakoff 2012). To address these two issues, study 3 measured ideology and hierarchy beliefs one week after the measure of differentiation preferences.

Method

Two hundred eighty adults ($M_{\text{age}} = 34, 58\%$ female) completed two surveys online for a small payment through the TurkPrime application (Litman, Robinson, and Aberbock 2017).

Differentiation Goal. In the first survey, participants completed a recall task that prompted a vertical differentiation goal, a horizontal differentiation goal, or a neutral goal. In the vertical (vs. horizontal) differentiation goal condition, participants read: "Please take a moment and think of times when you felt very average (vs. conventional) compared to other people. In other words, think of times and situations where you felt that you were so average (vs. conventional) compared to other people that you lacked your own sense of accomplishment and success (vs. uniqueness and identity)." These instructions were adapted from widely used goal induction methods (Pickett et al. 2002). To ensure that the task, mood, and self-esteem were similar across conditions, in the neutral goal–control condition participants recalled times when they felt uncomfortable around other people. All participants described two memories that fit the prompt.

A pretest with 113 adults ($M_{\text{age}} = 31$, 52% female) verified that the goal manipulation did not impact ideology (single-item scale: $p = .83$; multi-item scale: $p = .75$; dichotomous scale: $p = .36$), self-esteem ($p = .72$), mood (negative: $p = .38$; positive: $p = .32$), or subjective status ($p = .32$). Importantly, it verified that the goal manipulation significantly impacted the desire (from 1 = “not at all” to 7 = “very much”) to differentiate vertically ($F(2, 111) = 5.17$, $p = .007$; “to what extent do you want to be considered as holding high prestige?”) and the desire to differentiate horizontally ($F(2, 111) = 5.77$, $p = .004$; “to what extent do you want to be considered as being non-conformist?”). The desire to differentiate vertically was higher in the vertical ($M = 4.84$) than in the horizontal ($M = 3.47$, $t(71) = 3.06$, $p = .003$) and neutral ($M = 3.71$, $t(76) = 2.56$, $p = .012$) goal conditions, and it did not differ between the latter two conditions ($t(75) = -.51$, $p = .61$). The desire to differentiate horizontally was higher in the horizontal ($M = 4.39$) than in the vertical ($M = 3.08$, $t(71) = 3.35$, $p = .001$) and neutral ($M = 3.32$, $t(75) = 2.62$, $p = .011$) goal conditions, and it did not differ between the latter two conditions ($t(76) = -.58$, $p = .56$).

Preference for Vertical versus Horizontal Differentiation. After the recall task, participants were informed, as in study 1A, that 10 participants would win a coffee mug, and they chose between two mug designs: one that featured the vertically differentiating message “Just Better” and one that featured the horizontally differentiating message “Just Different.” Whereas in study 1A the other side of the mug featured the logo of student participants’ university, to make the mug personally relevant to MTurk participants in the present study, we informed them that the other side of the mug would feature a name of their choosing (e.g., the name of their organization or alma mater). Table 1 shows that a pretest confirmed that the two mugs signaled vertical or horizontal differentiation as intended. A separate pretest with 53 adults ($M_{\text{age}} = 34$, 62% female) confirmed that the vertically and horizontally differentiating mugs were equally generally differentiating ($M = 3.74$ and 4.04 , $t(51) = .49$, $p = .63$, on the same scale as in prior pretests).

Political Ideology and Process. One week after the first survey, participants were recontacted through TurkPrime for the second unrelated survey, and they completed, in random order, the measures of ideology on a dichotomous scale (Tetlock et al. 1984; 37.50% were conservative, 62.50% were liberal) and hierarchy beliefs using the Social Dominance Orientation scale from studies 1A–C ($\alpha = .93$, $M = 2.30$, $SD = 1.10$).

Demographics. At the end of the second survey, we measured age, annual income (1 = “under \$20,000” to 15 = “\$150,000 or more”; the scale progressed in \$10,000

increments; $M = 5.70$, $SD = 3.77$), and SES (1 = “high class” to 5 = “low class”; $M = 3.37$, $SD = .80$).

Results

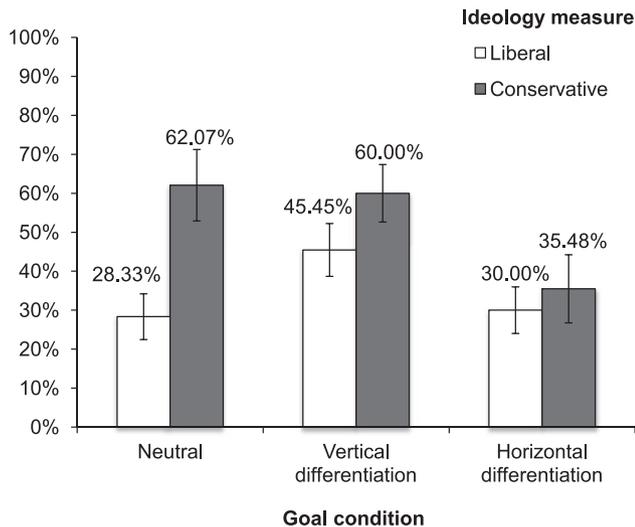
Effects of Differentiation Goal and Ideology on Differentiation Preferences. Since we expected a significant effect of ideology only in the neutral goal condition—that is, in one out of the three goal conditions—following prior work (Naylor, Lamberton, and Norton 2011), we created two dummy variables to capture the three goal conditions: dummy 1 was equal to .66 in the neutral condition and $-.33$ in the vertical and horizontal goal conditions; and dummy 2 was equal to .5 in the vertical goal condition, $-.5$ in the horizontal goal condition, and 0 in the neutral condition. We then conducted a logistic regression on choice of the vertically (vs. horizontally) differentiating mug with ideology (.5 for conservative; $-.5$ for liberal), the two dummy variables, and the interaction of each dummy variable with ideology as predictors.

The results revealed significant positive coefficients of ideology ($b = .75$, $Wald = 8.29$, $p = .004$) and dummy 2 (vertical vs. horizontal differentiation: $b = .83$, $Wald = 7.21$, $p = .007$), with preference for vertical over horizontal differentiation significantly higher among conservatives (53.33%) than liberals (34.29%) and when the vertical differentiation goal was prompted (52.0%) than when the horizontal goal was prompted (31.87%). Importantly, the key interaction of ideology with dummy 1 (neutral vs. vertical and horizontal differentiation goals) was marginally significant ($b = 1.01$, $Wald = 3.09$, $p = .079$). The remaining coefficients were not significant ($|b|s < .34$, $Wald's < .30$, $ps > .58$). Table 2 shows that these results remained unchanged when demographics were included in the model (ideology: $b = .77$, $Wald = 7.03$, $p = .008$; dummy 2: $b = .70$, $Wald = 3.96$, $p = .047$; ideology \times dummy 1 interaction: $b = 1.06$, $Wald = 2.84$, $p = .092$).

Breaking down the key interaction of ideology with dummy 1 (neutral goal vs. vertical and horizontal differentiation goals), as predicted (hypothesis 3) and shown in figure 3, conservative (vs. liberal) ideology led to a significantly higher preference for vertical over horizontal differentiation in the neutral condition (62.07% vs. 28.33%, respectively, $b = 1.42$, $Wald = 8.83$, $p = .003$), but it did not impact differentiation preferences when the vertical ($b = .59$, $Wald = 2.08$, $p = .15$) or horizontal differentiation goal ($b = .25$, $Wald = .28$, $p = .60$) was explicitly prompted. Compared to conservatives’ high baseline preference for vertical over horizontal differentiation in the neutral condition (62.07%), conservatives’ choice of vertical differentiation did not change in the vertical differentiation goal condition (60.0%, $b = .09$, $Wald = .03$, $p = .86$), but it significantly decreased in the horizontal goal condition (35.48%, $b = -1.09$, $Wald = 4.14$, $p = .042$).

FIGURE 3

STUDY 3: EFFECTS OF IDEOLOGY AND MANIPULATED DIFFERENTIATION GOAL ON CHOICE OF VERTICAL (VS. HORIZONTAL) DIFFERENTIATION



Compared to liberals' *low* baseline preference for vertical over horizontal differentiation in the neutral condition (28.33%), liberals' choice of vertical differentiation did not change in the horizontal goal condition (30.0%, $b = .08$, Wald = .04, $p = .84$), but it marginally significantly increased in the vertical goal condition (45.45%, $b = .75$, Wald = 3.58, $p = .059$). In other words, as expected, conservatives displayed similar preferences for vertical differentiation in the vertical goal condition as they did in the neutral condition, and liberals displayed similar preferences for horizontal differentiation in the horizontal goal condition as they did in the neutral condition.

Process. We tested whether hierarchy legitimacy beliefs mediated the main effect of ideology on differentiation preferences. Since we expected the vertical and horizontal differentiation goal prompts to boost consumers' desire for vertical and horizontal differentiation directly, without influencing hierarchy legitimacy beliefs, we ran a mediation model 5 (Hayes 2013), which states that the moderator (goal prompt) influences the dependent variable (mug choice) without influencing the link between the independent variable (ideology) and the mediator (hierarchy beliefs). The analysis with 10,000 bootstrap samples and 95% confidence intervals revealed a significant indirect effect of ideology on choice through hierarchy beliefs ($a = .3767$, SE = .1393, 95% CI = [.1420, .6908]). (A model 4 analysis also yielded a significant indirect effect of ideology through hierarchy beliefs: $a = .3805$, SE = .1365, 95% CI = [.1529, .6900].) Hierarchy beliefs

thus mediated the main effect of ideology on differentiation preferences even after a time delay. This minimizes the role of demand in facilitating the process.

Discussion

Study 3 verifies that the effect of ideology on distinct differentiation preferences is driven by the desire of conservatives and liberals to differentiate vertically or horizontally in the hierarchy. The study thereby adds to the results of studies 1A–C and 2 in ruling out alternative explanations related to the idiosyncratic preferences of conservatives and liberals for certain products (e.g., high-quality products). Study 3 also shows that ideology effects emerge even if ideology and hierarchy legitimacy beliefs are measured after a significant time delay. This minimizes the possibility that demand effects drive our findings. Importantly, study 3 proposes the first set of conditions that mitigate the ideological divide in consumption preferences—activating a vertical versus a horizontal differentiation goal in the hierarchy (hypothesis 3). Study 4 tests the second set of boundary conditions related to manipulated hierarchy legitimacy (hypothesis 4).

STUDY 4: MANIPULATING PERCEIVED HIERARCHY LEGITIMACY

Study 4 sought to corroborate the role of hierarchy legitimacy beliefs in driving the effect of ideology by manipulating, instead of measuring, hierarchy legitimacy perceptions. The study thus used an established method to test the process through moderation (Spencer et al. 2005). We predicted (hypothesis 4) that prompting people to consider that the dominance-based hierarchy may be illegitimate (vs. legitimate) would eliminate the effect of ideology on differentiation preferences, and that this would result due to the shift in the preferences of conservatives, not liberals.

Method

Two hundred seventy-two adults ($M_{\text{age}} = 32$, 65% female) completed the study on MTurk for a small payment.

Political Ideology. Participants indicated their ideology on a dichotomous scale (Tetlock et al. 1984; 43.45% identified as conservative, 56.55% identified as liberal).

Hierarchy Legitimacy. Participants then engaged in a recall task, which manipulated perceptions of hierarchy legitimacy by stressing the relative importance of either hard work or good luck in attaining high hierarchical positions. In the legitimate (vs. illegitimate) hierarchy condition, participants were instructed as follows: "It takes a combination of good luck and hard work for good things to happen to you. Please tell us the story of something good that

happened to you. In particular, we would like to know about the role that hard work, self-discipline, and wise decisions (vs. chance, opportunity, and help from others) played in helping you get there.” Two pretests, reported in the next section, verified the effectiveness of this manipulation.

Preference for Vertical versus Horizontal Differentiation. As in study 1B, participants were informed that they could win a \$100 gift card from Ralph Lauren (vertical differentiation) or Urban Outfitters (horizontal differentiation), and they made their choice on a dichotomous scale.

Demographics. At the end of the study, participants indicated their age, SES (from 1 = “high class” to 5 = “low class”; $M = 3.29$, $SD = .77$), and income (from 1 = “under \$20,000” to 15 = “\$150,000 or more”; the scale progressed in \$10,000 increments; $M = 5.57$, $SD = 3.61$).

Hierarchy Manipulation Pretests

Two pretests checked the effectiveness of the hierarchy manipulation. The first pretest included 80 adults ($M_{\text{age}} = 31$, 55% female) and verified that the hierarchy manipulation did not impact ideology (single-item: $p = .78$; multi-item: $p = .23$; dichotomous: $p = .28$), self-esteem ($p = .87$), mood (positive: $p = .68$; negative: $p = .11$), or subjective status ($p = .74$).

The second pretest checked whether the hierarchy manipulation would effectively change perceptions of hierarchy legitimacy, and if it would do so asymmetrically for conservatives and liberals. We expected the hierarchy manipulation to shift the hierarchy beliefs of conservatives, but not those of liberals, because conservatives have a high, and liberals have a low, need to justify and accept the existing social system. A group of 153 adults ($M_{\text{age}} = 32$, 62% female) completed the hierarchy manipulation and then indicated their belief in the legitimacy of the dominance-based hierarchy (“to what extent do you think that people deserve the outcomes that they get?” 1 = “not at all” to 7 = “very much”; $M = 4.95$, $SD = 1.10$). They also indicated their political ideology on the dichotomous scale used in the main study (Tetlock et al. 1984; 34.95% were conservative and 64.05% were liberal). A UNIANOVA revealed significant main effects of the hierarchy manipulation ($F(1, 149) = 4.89$, $p = .029$; perceived hierarchy legitimacy was higher in the legitimate condition: $M = 5.09$ than in the illegitimate condition: $M = 4.81$) and of ideology ($F(1, 149) = 4.34$, $p = .039$; perceived hierarchy legitimacy was higher among conservatives: $M = 5.20$ than liberals: $M = 4.82$). Importantly, as predicted, the hierarchy \times ideology interaction was significant ($F(1, 149) = 5.74$, $p = .018$) such that the hierarchy manipulation significantly boosted perceived hierarchy legitimacy among conservatives ($M_{\text{legitimate}} = 5.61$ vs.

$M_{\text{illegitimate}} = 4.78$; $F(1, 149) = 8.29$, $p = .005$), but not among liberals ($M_{\text{legitimate}} = 4.80$ vs. $M_{\text{illegitimate}} = 4.83$; $F(1, 149) = .02$, $p = .88$). This ultimately resulted in significantly different hierarchy legitimacy perceptions between conservatives and liberals in the legitimate hierarchy condition ($F(1, 149) = 10.25$, $p = .002$), but not in the illegitimate hierarchy condition ($F(1, 149) = .05$, $p = .83$).

Results

In the main study, we conducted a binary logistic regression on the choice of a gift card from the vertically (vs. horizontally) differentiating brand with the hierarchy manipulation (.5 for legitimate, $-.5$ for illegitimate), ideology (.5 for conservative, $-.5$ for liberal), and their interaction as predictors. The results revealed a significant coefficient of ideology ($b = 1.03$, Wald = 15.46, $p < .001$) such that conservatives were more likely to choose the vertically (vs. horizontally) differentiating brand (51.28%) than liberals (27.74%). The coefficient of the hierarchy manipulation was positive, albeit nonsignificant ($b = .37$, Wald = .26, $p = .15$). Importantly, the coefficient of the ideology \times hierarchy manipulation was significant ($b = 1.14$, Wald = 4.75, $p = .029$). These effects did not change when demographics were added to the analysis (ideology: $b = 1.12$, Wald = 16.19, $p < .001$; ideology \times hierarchy manipulation: $b = 1.31$, Wald = 5.55, $p = .019$; see Table 2 for details).

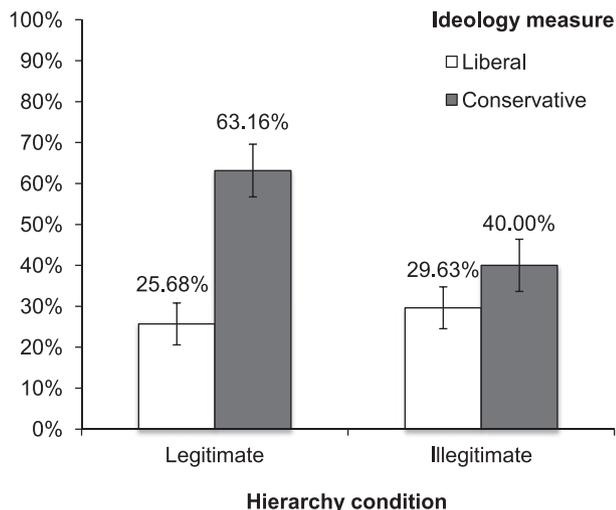
Breaking down the focal interaction, as predicted (hypothesis 4) and shown in figure 4, the effect of conservative (vs. liberal) ideology was significant in the legitimate hierarchy condition ($b = 1.60$, Wald = 17.55, $p < .001$), but it was not significant in the illegitimate hierarchy condition ($b = .46$, Wald = 1.64, $p = .20$). The preference shift in response to the hierarchy manipulation emerged because of the change in the preferences of conservatives, not liberals. Conservatives were *less* likely to choose the vertically differentiating brand when the hierarchy was cast as *illegitimate* (40.0%) than when it was cast as *legitimate* (63.16%, $b = .94$, Wald = 6.16, $p = .01$). Liberals were *equally unlikely* to choose the vertically differentiating brand regardless of whether the hierarchy was cast as legitimate (25.68%) or illegitimate (29.63%, $b = -.20$, Wald = .30, $p = .58$).

Discussion

Together, studies 1A through 4 provide converging evidence of the effect of measured and manipulated *individual-level* political ideology on consumers’ preferences for vertical and horizontal differentiation in the hierarchy, and for hierarchy beliefs as the psychological process behind this effect. Study 5 tests our theory using *state-level* political ideology and secondary data from online searches in conservative and liberal US states in order to boost external validity.

FIGURE 4

STUDY 4: EFFECTS OF IDEOLOGY AND MANIPULATED HIERARCHY LEGITIMACY ON CHOICE OF VERTICAL (VS. HORIZONTAL) DIFFERENTIATION



STUDY 5: IDEOLOGY AND ONLINE SEARCH

Study 5 tested whether the divide in differentiation preferences between conservatives and liberals was prevalent in the online searches of conservative and liberal US states. We used Google search data to approximate the differentiation interests of individuals for two reasons. First, Google searches are strongly related to the interests of individuals who perform the search, and aggregating millions of searches gives a good proxy for an area's interest in a topic (Ginsberg et al. 2009; Goel et al. 2010). Second, Google search data can reliably predict actual behaviors in a geographical area such as the consumption of movies, cars, homes, and video games (Goel et al. 2010), as well as broader outcomes such as the incidence of flu (Ginsberg et al. 2009) as long as potential confounds are controlled for. This is because people search for a phenomenon (e.g., flu) when it becomes prevalent in the area (when flu spreads) and for products before buying them. In line with our theory, we predicted that the level of conservatism (vs. liberalism) of a state would positively predict the state's online search for vertical differentiation terms and negatively predict the state's online search for horizontal differentiation terms.

Google Search Terms

We selected 12 terms that represent vertical differentiation (e.g., best) and 12 terms that represent horizontal

differentiation (e.g., distinct). In a pretest, 60 people ($M_{\text{age}} = 35$, 55% female) rated the vertical differentiation terms, and 64 people ($M_{\text{age}} = 37$, 59% female) rated the horizontal differentiation terms on the degree to which each term allowed vertical and horizontal differentiation, using the descriptions of vertical and horizontal differentiation and seven-point scales adopted from prior pretests. The terms that represent vertical differentiation were significantly more vertically differentiating ($M = 5.86$) than horizontally differentiating ($M = 3.32$, $t(59) = 10.93$, $p < .001$), and the terms that represent horizontal differentiation were significantly more horizontally differentiating ($M = 5.28$) than vertically differentiating ($M = 3.17$, $t(63) = 8.30$, $p < .001$). Table 3 shows the terms, pretest questions, and individual pretest ratings of the terms.

Factor analysis on the 12 vertical and 12 horizontal differentiation terms revealed that most terms fit to their respective factors (most factor loadings were strongly significant, $p < .01$; item-to-total correlations = .09 to .85 with an average of .49). We retained the terms (unorthodox, counterculture, bohemian) that did not load strongly on their factor, because they positively correlated with the other terms that pertained to the factor and yielded consistent pretest ratings, and because removing them from the analyses did not change the results. The 12 vertical and the 12 horizontal differentiation items formed reliable scales of vertical ($M = 73.08$, $SD = 7.16$, $\alpha = .90$) and horizontal differentiation ($M = 66.82$, $SD = 6.28$, $\alpha = .71$). Therefore, the scales of vertical and horizontal differentiation were internally valid. We used general concepts as stimuli instead of existing products or brands, because existing products or brands could introduce confounds (e.g., product/brand perceptions). We replicated the results using searches for Ralph Lauren and Urban Outfitters, which had been pretested and used as stimuli in studies 1B and 4.

Method

Vertical and Horizontal Differentiation. As proxies for vertical and horizontal differentiation search in each state, we examined Google searches for the selected 12 vertical and 12 horizontal differentiation terms in the period between January 2004 and November 2016. This yielded more than 130 million searches that included the terms on desktop computers, laptops, and mobile devices. For each term, we extracted a state-level search index from Google Insights (www.google.com/trends/). The search index is the percentage (from 0 = no search volume to 100 = maximum search volume) of an area's total Google searches that includes a given term relative to other terms. The relative scaling is required to preclude regions with the highest search volume overall from always ranking high, and it enables meaningful comparisons of indexes across regions. This yielded 24 search indexes in each of

TABLE 3
STUDY 5: PRETEST RESULTS FOR GOOGLE SEARCH TERMS

Differentiation type	Search terms	Vertical score	Horizontal score	<i>t</i>	<i>p</i>
Vertical (<i>N</i> = 60)	Better/best	5.12	4.12	2.37	.021
	Convertible	4.97	3.82	2.85	.006
	Diamonds	6.32	2.59	11.91	<.001
	Elegant	5.07	4.12	2.25	.028
	Elite	6.03	3.24	6.51	<.001
	Jewelry	5.73	3.64	6.06	<.001
	Luxury	6.36	2.95	10.90	<.001
	Mansion	6.33	2.87	10.60	<.001
	Money	6.32	2.80	11.30	<.001
	Prestige	5.95	3.10	7.26	<.001
	Rich	6.47	2.57	11.79	<.001
	Success	5.70	4.00	5.08	<.001
	<i>Average across terms</i>	<i>5.86</i>	<i>3.32</i>	<i>10.93</i>	<i><.001</i>
	Horizontal (<i>N</i> = 64)	Alternative	2.79	5.24	-6.28
Antiestablishment		2.59	5.27	-7.56	<.001
Bohemian		3.05	5.30	-5.87	<.001
Counterculture		2.98	5.11	-5.25	<.001
Creative		3.25	5.49	-6.20	<.001
Distinct		4.05	5.08	-2.86	.006
Edgy		3.40	5.32	-5.26	<.001
Geek		3.05	5.22	-6.53	<.001
Hipster		3.38	5.38	5.61	<.001
Indie		3.17	5.41	-6.20	<.001
Unconventional		3.13	5.21	-5.44	<.001
Unorthodox		2.71	5.38	-7.75	<.001
<i>Average across terms</i>		<i>3.17</i>	<i>5.28</i>	<i>-8.30</i>	<i><.001</i>

NOTES.—

- For each differentiation type, the terms are listed in alphabetical order.
- Vertical differentiation was measured from 1 = “not at all” to 7 = “very much” using the following item: “Vertical differentiation allows one to signal that they are different from others by enhancing their social standing—that is, by highlighting their superiority and status among other people. Please indicate the extent to which the concept allows vertical differentiation.”
- Horizontal differentiation was measured from 1 = “not at all” to 7 = “very much” using the following item: “Horizontal differentiation allows one to signal that they are different from others based on who they are as an individual—that is, by highlighting the qualities, opinions, and traits that make one different from other people. Please indicate the extent to which the concept allows horizontal differentiation.”
- For each term, the *t*-test compared the mean vertical differentiation score to the mean horizontal differentiation score.

50 states. We averaged the 12 search indexes of vertical differentiation and the 12 search indexes of horizontal differentiation into composite measures of interest in vertical differentiation and interest in horizontal differentiation per state.

Political Ideology. We collected two measures that have previously been used as proxies of state political ideology (Jost et al. 2003; Khan et al. 2013; Roos and Shachar 2014): (1) the percentage of people who self-identified as conservative in each state in the 2009–2015 Gallup state of the states metrics ($M = 38.77$, $SD = 5.59$), and (2) the number of times that the state was carried by a Republican candidate in the five presidential elections from 2000 to 2016 ($M = 2.74$, $SD = 2.24$). The two measures were strongly correlated ($r = .89$, $p < .01$). We standardized and then averaged these measures to form a single index of state conservatism. Separate analyses with each individual ideology measure, reported in [web appendix B](#), revealed consistent results.

Control Measures. We controlled for the influence of each state’s population density ($M = 164.48$, $SD = 204.54$ per square mile) and median age ($M = 37.40$, $SD = 2.32$) obtained from the [U.S. Census Bureau \(2010\)](#), and for each state’s gross domestic product (GDP; $M = 310,864.80$, $SD = 385,339.94$ in millions of USD) and average income per capita in 2010–2015 ($M = 43,263.99$, $SD = 6,555.64$ in USD) obtained from the [U.S. Bureau of Economic Analysis \(2015\)](#). These variables were used as proxies for state economic activity, income, and age.

Results

Table 4 reports correlations between variables. It shows that state conservatism was negatively correlated with states’ income per capita, GDP, median age, and population density. This is consistent with prior work showing that, compared to conservative individuals who are more likely than liberals to reside in suburban and rural areas,

TABLE 4
STUDY 5: VARIABLE CORRELATIONS

Variable correlations	1	2	3	4	5	6	7
1. Search for vertical differentiation	1						
2. Search for horizontal differentiation	.35**	1					
3. Income per capita	.06	.12	1				
4. GDP	.29**	.46***	.22	1			
5. Median age	-.02	-.03	.16	-.21	1		
6. Population density	.54***	.34**	.57***	.25*	.26*	1	
7. Conservatism	.34**	-.39***	-.57***	-.26*	-.39***	-.55***	1

NOTES.—

- *** indicates a significant coefficient at $p < .01$, ** indicates $p < .05$, and * indicates $p < .1$.
- In table 4 the correlations between conservatism and search for vertical and horizontal terms are the partial r equivalent to the models reported in table 5.

TABLE 5
STUDY 5: REGRESSION MODEL COEFFICIENTS

	Model 1 coefficients (OLS with only the control variables)		Model 2 coefficients (OLS adding conservatism)	
	Vertical search	Horizontal search	Vertical search	Horizontal search
Conservatism	—	—	.37**	-.49***
GDP	.17	.42***	.24**	.32**
Population density	.75***	.33**	.84***	.22
Income per capita	-.39***	-.16	-.27*	-.33**
Median age	-.11	.001	.01	-.15
R ²	.39	.23	.45	.34

liberal individuals are more likely than conservatives to reside in urban, metropolitan areas, which tend to report relatively higher levels of economic activity, population density, infrastructure, and life expectancy (Gelman et al. 2007; Pew Research Center 2014). Key to our predictions, table 5 summarizes the coefficient estimates of variables predicting search for vertical and horizontal differentiation. There was no multicollinearity: all variance inflation factors were below 3 and tolerance levels exceeded .50.

Effect of Ideology on Online Search for Vertical and Horizontal Differentiation. We regressed the composite measures of interest in vertical and horizontal differentiation in each state on state conservatism, GDP, population density, income per capita, and median age. State conservatism positively predicted search for vertical differentiation ($b = .37$, $t = 2.47$, $p = .02$) and negatively predicted search for horizontal differentiation ($b = -.49$, $t = -2.97$, $p < .01$). Political ideology explained a significant proportion of the variance: 6.27% for vertical differentiation search and 11.47% for horizontal differentiation search. Similar results were found for search for the vertically differentiating Ralph Lauren brand ($b = .33$, $t = 2.10$, $p = .04$) and the horizontally differentiating Urban Outfitters brand ($b = -.37$, $t = -3.22$, $p < .01$).

There were also significant or marginally significant effects of GDP ($b = .24$, $t = 2.05$, $p = .05$), population

density ($b = .84$, $t = 5.99$, $p < .01$), and income per capita ($b = -.27$, $t = -1.91$, $p = .06$) on search for vertical differentiation, and significant effects of GDP ($b = .32$, $t = 2.50$, $p = .02$) and income per capita ($b = -.33$, $t = -2.14$, $p = .04$) on search for horizontal differentiation. Search for vertical differentiation was more prevalent in states with greater economic activity, population density, and lower per capita income, and search for horizontal differentiation was more prevalent in states with greater economic activity and lower per capita income.

Robustness Checks. We performed three robustness checks: (1) instrumental variable analysis to account for potential omitted variables (Sargan 1958); (2) separate analyses with each measure of state ideology; and (3) stimulus sampling to account for the role of the sampling of specific search terms (Judd, Westfall, and Kenny 2012). The effect of ideology was significant and consistent in all of these specifications. Web appendix B details these robustness checks.

Discussion

Study 5 showed that conservatism and liberalism are linked to interest in different forms of consumer differentiation using secondary data from all 50 US states. Conservative states searched more for terms related to vertical differentiation, and liberal states searched more for

terms related to horizontal differentiation. Conservative states also searched more for Ralph Lauren (a vertically differentiating brand), and liberal states searched more for Urban Outfitters (a horizontally differentiating brand). These results boost the external validity of our theory.

GENERAL DISCUSSION

This research shows that political ideology affects consumers' preferences for vertical and horizontal differentiation in the social hierarchy. Conservatism leads to vertical differentiation and liberalism leads to horizontal differentiation in the hierarchy because conservatism endorses, and liberalism opposes, the view that the dominance-based hierarchical structure reflects legitimate differences in individual qualities. This effect is mitigated when vertical or horizontal differentiation goals are primed, or when hierarchy's legitimacy is called into question. The results hold with established ideology measures as well as an ideology manipulation, with online search, product evaluation, and actual and hypothetical choice of well-controlled as well as real-world product stimuli. The results also hold across different populations: students who were slightly more liberal than conservative (4.74 on a single-item 1–9 ideology scale, [Jost 2006](#)), MTurk participants who skewed liberal (4.41 on a single-item scale; 4.44 on a multi-item scale, [Kidwell et al. 2013](#); 40.43% were conservative, 59.57% were liberal on a dichotomous scale, [Tetlock et al. 1984](#)), and Qualtrics panelists who skewed conservative (54.96% were conservative, 45.04% were liberal). Consistent results across settings affirm the generalizability of the findings.

Theoretical Implications

Our findings have important implications for research on political ideology, social hierarchy, and consumer differentiation.

Our work contributes to research on political ideology and social hierarchy ([Graham et al. 2009](#); [Jost et al. 2003](#); [Pratto and Cathey 2002](#)) in three ways. First, it identifies the effects of conservatism and liberalism and of their distinct hierarchy beliefs on consumers' differentiation strategies in the marketplace. Since the desire for distinction is an important driver of consumer behavior ([Berger and Heath 2008](#); [Tian et al. 2001](#)), this is an important addition to the literature.

Second, our work adds to research on ideology and hierarchy beliefs by establishing the causal effect of ideology on hierarchy beliefs, which goes beyond correlational data used in prior studies ([Altemeyer 1998](#); [Jost et al. 2009](#)). We show that, since people's political positions can be temporarily shifted, ideological differences in hierarchical attitudes can also be bridged.

Importantly, our third contribution consists of identifying specific conditions that reduce the ideological gap

in hierarchy beliefs and consumption preferences. Specifically, our findings show that ideological differences in preferences can be bridged if the legitimacy of the dominance-based hierarchy is called into question (by stressing the importance of good luck vs. hard work in attaining dominant positions). It will be important for future studies to test if this intervention can mitigate ideological differences in other hierarchical attitudes, such as support for taxes, and whether it can impact broader outcomes, such as motivation. Notably, our research shows that manipulating hierarchy legitimacy does not change political ideology because the causal effect extends from ideology. Still, it is possible that for some adults, political ideology is a conscious result of hierarchy legitimacy beliefs. Future research can explore the more nuanced effects that hierarchy legitimacy beliefs may have on ideological positions by focusing on specific facets of political ideology. It is possible that manipulating hierarchy legitimacy changes some people's ideological positions along the economic dimension (which addresses economic distribution and fairness), but not along the social dimension (which tackles social life and values) ([Everett 2013](#)). Given the high importance of social beliefs in driving ideological positions ([Alesina and La Ferrara 2005](#)), the insignificant effect of the hierarchy manipulation on general ideology measures found in our research does not contradict this possibility.

Our work advances research on consumer divergence by identifying political ideology as a new driver of consumers' preferences between vertical and horizontal differentiation and by establishing hierarchy beliefs as the new process behind them. This extends prior work, which separately focused on one type of differentiation ([Bellezza et al. 2014](#); [Han et al. 2010](#); [Ordabayeva and Chandon 2011](#); [White and Dahl 2006](#)). Our findings suggest that, in consumers' eyes, not all differentiation strategies are equal. Hence, consumers' choices of differentiation strategies and perceptions of other people's differentiation attempts may vary as a function of their political ideology. But manipulating differentiation goals or beliefs about hierarchy legitimacy can mitigate these differences.

Finally, our findings contribute to emerging evidence on the role of political ideology in marketing ([Fernandes and Mandel 2014](#); [Khan et al. 2013](#); [Kidwell et al. 2013](#); [Roos and Shachar 2014](#); [Winterich et al. 2012](#)) by extending the influence of ideology to consumers' attempts to differentiate their identity. Our work thereby suggests that identity is a useful framework for studying the role of ideology in consumer behavior. Our findings further indicate that ideology is a unique predictor of behavior that operates independently from SES and income. This supports the importance of cultural, not just economic, interests in driving individuals' political behavior, and it adds to observations that low-SES people can be as conservative and as liberal as high-SES people ([Alesina and La Ferrara 2005](#)).

Notably, in our studies, SES did not have a consistent effect on differentiation preferences (table 2), nor did it consistently correlate with ideology (r ranged between $-.08$ and $.21$). These findings are consistent with prior studies showing that subjective status does not necessarily correlate with political ideology (Brown-Iannuzzi et al. 2015), and that SES may have conflicting—positive (Veblen 1899) or negative (Ordabayeva and Chandon 2011)—effects on vertical differentiation. They are also consistent with prior reports highlighting the limitations of measuring SES (Quon and McGrath 2014). Future research on how different measures and manipulations of SES may impact the link between political ideology and consumer differentiation will be useful.

More broadly, our work contributes to the emerging view that political ideology, with its norms and beliefs, may constitute a type of cultural lens (Markus and Kitayama 1991) that can explain individual behaviors. It will be interesting to study how such a political lens shapes other aspects of individual identity and how different cultural dimensions, such as power distance (Gao, Winterich, and Zhang 2016), interact with political ideology to influence behavior.

Practical Implications

Our findings have useful implications for marketers. First, they can inform marketers' targeting decisions. Our results indicate that conservative consumers may be a better target market for products that enable vertical differentiation in the hierarchy, and liberal consumers may be a better target market for products that enable horizontal differentiation in the hierarchy. This means that vertically differentiating products may fare better in politically conservative states and when advertised in conservative outlets such as the *Wall Street Journal*. Horizontally differentiating products may do better in liberal states and when advertised in liberal outlets such as the *New York Times*. Provided the distinct media preferences of conservatives and liberals (Experian Simmons 2011), our findings offer actionable opportunities to managers.

Second, studies 1C and 2 suggest that the same product may appeal differently to conservatives and liberals depending on the product's positioning. Hence, it may be profitable to tailor the positioning of products in advertising campaigns to the political orientation of target markets. However, when tailoring advertising campaigns to specific markets is infeasible, our study 2 results suggest that framing the product through tailored descriptions in companies' public relations efforts, such as press interviews or magazine articles, may also be effective.

From the policy perspective, our findings suggest that strategies that shift individuals' hierarchy legitimacy perceptions can bridge the divide between the opinions of conservatives and liberals about issues informed by hierarchy

beliefs. For example, it is possible that opinions on issues such as wealth redistribution could be depolarized, at least temporarily, if public discourse challenged individuals' inherent views about the legitimacy of the dominance-based hierarchy.

In conclusion, the present research shows that political ideology significantly affects how consumers differentiate from others in the marketplace. We hope that it will inspire future work on the role of political ideology in shaping consumer identity and behavior.

DATA COLLECTION INFORMATION

The first author supervised the collection of student data by research assistants for study 1A at Boston College (fall 2016) and the collection of Qualtrics panel data by Qualtrics for study 2 (spring 2017). Both authors jointly collected online data for studies 1B (fall 2017), 1C (spring 2017), and 4 (fall 2016) on Amazon Mechanical Turk and online data for study 3 (summer 2017) through TurkPrime. The second author collected online Google search data for study 5 (fall 2016). Both authors analyzed the data.

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