Ideology and Brand Consumption

Romana Khan, Kanishka Misra and Vishal Singh

Psychological Science 2013 24: 326 originally published online 4 February 2013
DOI: 10.1177/0956797612457379

Research Article

Psychological Science
24(3) 326–333

DOI: 10.1177/0956797612457379
http://pss.sagepub.com

Ideology and Brand Consumption

Romana Khan[1], Kanishka Misra[2], and Vishal Singh[3]
[1]Graduate School of Business, Ozyegin University; [2]Stephen M. Ross School of Business, University of Michigan; and [3]Stern School of Business, New York University

Abstract

Do mundane daily choices, such as what brands people buy in a supermarket, reflect aspects of values and ideologies? This article presents a large-scale field study performed to determine whether traits associated with a conservative ideology, as measured by voting behavior and religiosity, are manifested in consumers' routine, seemingly inconsequential product choices. Our analysis of market shares for a variety of frequently purchased products shows that both of these measures of conservatism are associated with a systematic preference for established national brands (as opposed to their generic substitutes) and with a lower propensity to buy newly launched products. These tendencies correspond with other psychological traits associated with a conservative ideology, such as preference for tradition and the status quo, avoidance of ambiguity and uncertainty, and skepticism about new experiences.

Keywords

decision making, sociocultural factors

Received 1/26/12; Revision accepted 5/28/12

Commentary in the popular press and the results of opinion polls reveal that the U.S. population is polarized on a wide range of issues, such as the role of government, taxes, affirmative action, aid to the disadvantaged, gun control, the death penalty, stem-cell research, abortion, and same-sex marriage. Many empirical studies have shown that self-ratings on a left-right or conservative-liberal scale provide a useful approximation to opinion on these issues (Bafumi & Shapiro, 2009; Jost, 2006). Recent research in social and political psychology has provided a theoretical framework for the liberal-conservative divide by linking ideological proclivities to dispositional (or situational) differences in psychological needs, cognitive styles, and personality traits (Duckitt, 2001; Jost, Glaser, Kruglanski, & Sulloway, 2003a, 2003b; Muller, 2001). For example, compared with liberals, individuals who gravitate toward conservative ideology tend to score lower on measures of integrative complexity, openness to new experiences, and tolerance for uncertainty and ambiguity, and to score higher on measures of conscientiousness, dogmatism, and need for order, structure, and closure (Altemeyer, 1996; Jost et al., 2003b; McCrae, 1996). In addition to explaining enduring differences in public opinions and attitudes, the psychological approach to the study of ideology has accounted for differences in many theoretical domains, such as the foundations of morality (Haidt & Graham, 2007) and system justification (Jost, Kay, & Thorisdottir, 2009).

Although the role of ideological differences in the sociopolitical domain is intuitive, are psychological traits associated with broad ideologies also reflected in mundane, seemingly inconsequential choices? For instance, religiosity has been shown to influence important life decisions, such as marriage, school attendance, participation in crime, and engagement in extramarital affairs (McCullough & Willoughby, 2009). Similarly, risk aversion, a trait associated with religiosity, not only is manifested in individuals' attitudes toward actions to reduce risk—such as fastening seat belts, maintaining a financial cushion, and purchasing medical and auto insurance—but also has been shown to influence decisions at an organizational level: Firms located in counties with higher levels of religiosity tend to take on less exposure to financial risk (Hilary & Hui, 2009). Do trivial choices, such as the choice between established national brands and "riskier" generic alternatives, reflect a similar phenomenon? Given that conservative values are associated with a preference for the status quo and skepticism about new experiences, do conservative individuals show a lower propensity than liberals to try new products and services? Do conservative and liberal traits manifest themselves in even low-involvement decisions, such as whether to buy a new flavor of yogurt on the supermarket shelf? For the study reported here, we used extensive field data on product

Corresponding Author:
Vishal Singh, Stern School of Business, New York University, 40 West Fourth St., Tisch Hall, New York, NY 10012
E-mail: vsingh@stern.nyu.edu

purchases and measures of conservatism to investigate these questions.

Product and brand choices can serve as a means of self-expression for consumers (Shachar, Erdem, Cutright, & Fitzsimons, 2010), and firms devote substantial advertising resources to create brand images and elicit specific feelings, attitudes, and thoughts regarding their products. Consumers often develop deep-rooted associations with products, even to the point of associating human characteristics with brands (Aaker, 1991), and may choose products as a means of signaling aspects of their personality. For example, a market-research study on buyers of the Toyota Prius found that the top reason for buying the car was that it "makes a statement about me" ("fuel efficiency" was ranked as the fifth most important reason; Maynard, 2007). Commercial surveys often find systematic differences in lifestyles and attitudes between, say, drivers of hybrid cars and drivers of Hummer SUVs, or Mac users and PC users, which is not particularly surprising given the well-defined positioning of such products. However, most products that serve as a signal of social status or that are purchased to make a statement about individual personality tend to be socially visible and relatively expensive (e.g., high-tech gadgets, fashion, and automobiles). Our study focused on low-involvement, frequently purchased products that are sold at supermarkets and are primarily for private consumption.

Extensive evidence indicates that human judgments and behaviors are often guided by implicit cognition that is spontaneous, effortless, and unconscious (Bargh, 1994; Greenwald & Banaji, 1995), suggesting that even mundane choices, such as the choice of which brand of detergent to buy or whether to try a new brand of breakfast cereal, can reflect aspects of deep-rooted ideologies, values, and personality traits. Although previous research primarily focused on explicit and consciously accessible self-reported measures of attitudes and opinions (Jost et al., 2003b), we hypothesized that aspects of ideology, in addition to existing in a reasoned and explicit form (Jost, Banaji, & Nosek, 2004), may be reflected in routine daily behavior.

Our empirical strategy in the present study relied on comprehensive scanner data for a variety of products frequently purchased at supermarkets. We used these data to create county-level measures of brand consumption and related those to the degree of conservatism in the populations of the corresponding counties. To operationalize conservatism, we created measures of Republican voting and religiosity, both of which have been shown to have a high degree of correspondence with conservative values. For example, both Republican voting and religiosity are positively associated with the desire to preserve order and tradition and to protect against uncertainty and threat, and are negatively associated with openness to new experiences and change (Jost et al., 2003b; Schwartz & Huismans, 1995). Research in cognitive neuroscience has suggested that Republican voting and religiosity are marked by similar reduced reactivity in the anterior cingulate cortex, an area of the brain involved in cognition and emotion (Amodio, Jost, Master, & Yee, 2007; Inzlicht, McGregor, Hirsh, & Nash, 2009).

Our measures of brand consumption were based on two aspects of the consumer-packaged-goods (CPG) industry. First, most CPG categories in the United States comprise several established national brands as well as generic products. Industry reports and academic research in marketing have suggested that consumers perceive generics as being riskier and of lower quality than national brands (Erdem, Zhao, & Valenzuela, 2004; Wong, 2009). Because a major function of branding is to reduce uncertainty and simplify decision making (Aaker, 1991), we expected that aspects of conservative values—such as preference for tradition and convention, and dislike of ambiguity and complexity—are reflected in higher reliance on national brands as opposed to generics (even after controlling for price and other socioeconomic factors). Second, new products are introduced frequently in the CPG industry. Our data included more than 4,000 new products, ranging from new brands to minor modifications of existing products (e.g., a new flavor). Compared with liberal consumers, conservative consumers (who are likely to have personality traits such as skepticism about new experiences) might be less accepting of new products.

Method

Brand consumption

The cornerstone of our empirical strategy was a comprehensive scanner database (SymphonyIRI, Chicago, IL) that tracks weekly store sales of thousands of products organized into 26 product categories (Bronnenberg, Kruger, & Mela, 2008). These categories include both edible (e.g., frozen pizza, canned soup) and nonedible (e.g., razors, laundry detergent) products. The data were obtained from 1,860 stores belonging to 135 supermarket chains and spanned a period of 6 years (2001–2006).

The data represent 416 counties and 47% of the total U.S. population. Each product category included several national brands and generic alternatives, and the data set included 4,151 new-product launches across the 26 categories. We used these data to create two measures of brand consumption at the county level: (a) market share of generics in each category and (b) market share of new products in the year after launch in each category. Summary statistics on both measures are reported in Table 1. The average market share of generics, across all stores, categories, and years, was 16%, and the average new-product share was 1.3%. However, market shares for both generics and new products varied considerably across categories and across markets within a category.

Conservative ideology

Merriam-Webster's Collegiate Dictionary (2005) defines *conservatism* as a "disposition in politics to preserve what is established" and "the tendency to prefer an existing or

Table 1. Market Share of Generics and New Products in the Categories Examined

	Generics	New products	
Category	Mean percentage market share	Number of products	Mean percentage market share
Coffee	12.57 (9.31)	254	1.02 (4.21)
Deodorant	0.83 (1.12)	148	0.94 (1.31)
Diapers	21.33 (11.35)	22	4.41 (5.43)
Facial tissue	24.88 (11.91)	38	3.14 (5.77)
Frozen dinner	1.39 (1.86)	183	1.20 (1.84)
Frozen pizza	12.09 (8.85)	39	3.35 (7.78)
Hot dogs	9.85 (8.00)	133	1.73 (3.56)
Household cleaner	6.79 (5.45)	117	1.05 (3.15)
Laundry detergent	6.49 (5.83)	180	2.16 (5.14)
Margarine and butter	13.17 (8.34)	61	2.29 (5.17)
Mayonnaise	12.95 (8.39)	56	2.07 (4.13)
Milk	75.72 (19.82)	78	1.86 (6.84)
Mustard and ketchup	23.29 (8.78)	192	1.31 (8.26)
Peanut butter	24.95 (10.59)	29	6.18 (9.66)
Photo supplies	20.12 (15.79)	45	2.08 (6.68)
Razor blades	14.72 (7.91)	83	1.94 (2.12)
Razors	6.00 (6.91)	30	7.96 (6.13)
Salty snacks	9.73 (6.89)	708	0.28 (1.08)
Sauces	7.75 (5.45)	504	0.55 (1.17)
Soda	11.21 (9.57)	301	0.53 (1.61)
Soup	11.46 (6.38)	244	0.84 (2.47)
Sugar substitute	10.96 (9.73)	45	4.20 (8.19)
Toilet paper	18.39 (11.19)	162	1.30 (1.94)
Toothbrush	17.81 (8.54)	150	1.01 (1.81)
Toothpaste	0.55 (1.02)	209	0.82 (4.23)
Yogurt	22.13 (12.50)	140	1.31 (2.41)
All categories	16.48 (17.18)	4,151	1.29 (3.45)

Note: Standard deviations are in parentheses.

traditional situation to change" (p. 265). We operationalized conservatism using measures of Republican voting and religiosity. To confirm that there was empirical support for using these measures, we analyzed data from the General Social Survey (GSS; National Opinion Research Center, 2011) from 1972 to 2010 and the American National Election Studies (ANES) survey from 1972 to 2008 (American National Election Studies, 2010). Both surveys contain self-reported measures of ideology (rated on a scale from 1, *extremely liberal*, to 7, *extremely conservative*) and political-party affiliation (rated on a scale from 1, *strong Democrat*, to 7, *strong Republican*). Religiosity was measured in the GSS by how often respondents said they attended religious services (rated on a scale from 1, *never*, to 9, *more than once a week*) and in the ANES survey by how respondents scored on a binary indicator ("Is religion important to the respondent?"). Table 2 provides the raw correlations between these measures in each survey. The correlations suggest that both Republican voting and religiosity capture aspects of conservative values, independently of each other.

County-level measures of religiosity and political affiliation

Religiosity is a complex, multidimensional construct that encompasses cognitive values and beliefs, affective feelings of spirituality and commitment, and behaviors such as prayer and church attendance. Because our product purchase data were at the aggregate county level, we could not rely on the self-reported measures of religiosity from the GSS and the ANES survey. Instead, we used county-level data on religious activity provided by the Association of Religion Data Archives (ARDA). The ARDA collects information on membership, adherence, and number of congregations for major religions and their specific denominations. Our measures of religiosity were constructed from data contained in the 2000 ARDA report (Association of Religion Data Archives, n.d.). In our main analyses, our measure of religiosity was adherence, which is strictly defined as the number of full members of a religious denomination and the number of nonmembers who attend services regularly. Adherence is a relatively accurate

Table 2. Correlations Between Ideology, Political Affiliation, and Religiosity

Source and measure	Liberal-conservative ideology	Political-party affiliation
General Social Survey		
Political-party affiliation	.32*	—
Religiosity	.18*	.03*
American National Election Studies survey		
Political-party affiliation	.39*	—
Religiosity	.17*	.000

*$p < .05$.

measure of the extent of religious activity in a population, as it does not include individuals who might identify with a particular denomination but do not actively practice the religion.

To assess political affiliation, we used county-level votes in presidential elections between 1980 and 2008 (Leip, 2012). Rather than rely on any particular election cycle, we used the average percentage of Republican votes in all eight presidential elections during this period.

We also incorporated into our analysis an extensive set of demographic variables obtained from the U.S. Census, to control for other factors that might affect brand consumption (U.S. Census Bureau, 2012b). The variables were median income, percentage of the population over age 65, percentage of the population that is unemployed, average number of years of education, average household size, and percentage of the population that is African American. Finally, we controlled for store size using all-commodity volume, which measures the total annual sales (in U.S. dollars) of all items sold in the store. Descriptive statistics for these measures are shown in Table 3.

Results

Main analyses

We conducted a series of regression analyses with measures of conservatism as predictors of brand consumption, both across categories and within categories. Although the quality of a national brand (e.g., Tide or Coca-Cola) is constant across markets, the quality of generics may vary across product types and retail chains. Hence, all regression analyses included a set of category and chain fixed effects that controlled for any quality differences. The parameters were identified by the variation in market shares between stores that belonged to the same retail chain but served different counties. Thus, our results capture the net impact of conservatism after we controlled for a variety of socioeconomic characteristics, marketing-mix variables (product, price, promotion, and placement), and a set of fixed effects that absorbed any differences in product quality across retail chains. Full regression results and estimates for the control variables are reported in the Supplemental Material available online.

Table 3. Means for the County-Level Demographic Variables

Variable	Mean
Religiosity (% adherence)	50 (11)
Republican votes (%)	52 (12)
Median annual income ($)	55,318 (11,452)
Elderly (% of population over age 65)	11.63 (2.60)
Unemployment (%)	5.30 (1.67)
Education (years)	13.52 (0.86)
Household size	2.66 (0.18)
African American (% of population)	12.89 (13.04)
All-commodity volume (millions U.S.$)	24.48 (13.39)

Note: Standard deviations are in parentheses.

Table 4 presents the results from the regression models for the market shares of generics and of new products in the year after launch. When the data for generics were pooled across categories, the coefficients for both religiosity and Republican voting were negative and statistically significant, indicating that market share for generics was significantly lower in predominantly conservative counties. The effect of religiosity on the market penetration of generics was negative and statistically significant for 19 of the 26 categories. In 6 categories, the effect was insignificant, and in 1 category, greater religiosity was associated with a higher market share for generics. We found essentially the same pattern in the associations between Republican voting and generics.[1] Across the two measures of conservatism, 38 (73%) of the 52 coefficients for specific categories were negative and statistically significant; 11 coefficients (21%) were insignificant, and only 3 (6%) were positive and significant. These results provide strong evidence that more conservative counties are associated with lower market shares for generics and a higher reliance on established national brands.

Similarly, the market share of new products was significantly lower in counties with higher levels of religiosity and Republican voting. At the category level, the coefficients for religiosity and Republican voting were either negative (63% of the estimates) or insignificant (37% of the estimates). More conservative counties did not have higher penetration of new products in any of the categories.

Table 4. Parameter Estimates From Regression Analyses of Religiosity and Republican Voting as Predictors of the Market Share of Generics and New Products

	Generics		New products	
Category	Religiosity	Republican voting	Religiosity	Republican voting
Coffee	0.00 (0.07)	−0.34 (0.07)*	−1.04 (0.16)*	−0.59 (0.17)*
Deodorant	0.18 (0.11)	−0.04 (0.11)	−0.40 (0.09)*	−0.54 (0.09)*
Diapers	−0.65 (0.07)*	−0.35 (0.07)*	−0.41 (0.20)*	−0.71 (0.21)*
Facial tissue	−0.21 (0.07)*	−0.66 (0.07)*	−0.31 (0.29)	−0.19 (0.28)
Frozen dinner	0.14 (0.08)	0.15 (0.08)	−0.50 (0.09)*	−0.53 (0.10)*
Frozen pizza	−0.07 (0.07)	−0.15 (0.07)*	−0.77 (0.30)*	0.01 (0.31)
Hot dogs	−0.62 (0.07)*	−0.49 (0.07)*	−0.46 (0.18)*	−0.18 (0.18)
Household cleaner	−0.15 (0.07)*	−0.48 (0.07)*	−0.52 (0.14)*	−0.88 (0.14)*
Laundry detergent	−0.23 (0.07)*	−0.46 (0.07)*	−1.25 (0.26)*	−0.45 (0.27)
Margarine and butter	−0.45 (0.07)*	−0.29 (0.07)*	−0.31 (0.24)	−0.66 (0.24)*
Mayonnaise	−0.59 (0.07)*	−0.71 (0.07)*	0.10 (0.24)	−0.17 (0.24)
Milk	−0.26 (0.07)*	0.35 (0.07)*	−0.56 (0.25)*	−0.38 (0.25)
Mustard and ketchup	−0.56 (0.07)*	−0.35 (0.07)*	−0.02 (0.19)	−0.86 (0.20)*
Peanut butter	−0.25 (0.07)*	−0.31 (0.07)*	−0.21 (0.48)	−0.06 (0.46)
Photo supplies	−0.53 (0.07)*	−0.27 (0.08)*	−0.11 (0.22)	−0.61 (0.23)*
Razor blades	−0.21 (0.07)*	−0.61 (0.07)*	−0.36 (0.11)*	−0.47 (0.12)*
Razors	−0.49 (0.10)*	−0.17 (0.10)	−0.15 (0.13)	−0.62 (0.14)*
Salty snacks	0.08 (0.07)	0.00 (0.07)	−0.06 (0.07)	−0.64 (0.08)*
Sauces	0.14 (0.07)*	−0.39 (0.07)*	−0.78 (0.08)*	−0.59 (0.08)*
Soda	−0.37 (0.07)*	−1.03 (0.07)*	−0.31 (0.09)*	−0.52 (0.10)*
Soup	−0.30 (0.07)*	−0.15 (0.07)*	0.02 (0.13)	−0.12 (0.13)
Sugar substitute	−0.23 (0.07)*	−0.43 (0.07)*	−0.54 (0.32)	−0.03 (0.32)
Toilet paper	−0.16 (0.07)*	−0.59 (0.07)*	−0.57 (0.09)*	−0.33 (0.10)*
Toothbrush	−0.33 (0.07)*	−0.50 (0.07)*	−0.73 (0.08)*	−0.23 (0.09)*
Toothpaste	−0.25 (0.11)*	0.47 (0.10)*	−0.54 (0.15)*	−0.40 (0.15)*
Yogurt	−0.12 (0.07)	−0.11 (0.07)	−0.24 (0.11)*	−0.53 (0.12)*
All categories	−0.26 (0.02)*	−0.34 (0.02)*	−0.43 (0.03)*	−0.49 (0.04)*

Note: Standard errors are in parentheses. We transformed the market shares as follows: log(share/1 − share); this is a monotonic transformation that ensures full support on the real line and allows the use of regression for analysis. The models controlled for marketing-mix variables (product, price, promotion, and placement), the socioeconomic characteristics detailed in Table 3, and a set of fixed effects that absorbed any differences in product quality across retail chains. Full regression results and estimates for the control variables are reported in the Supplemental Material available online.

*$p < .05$.

Figure 1 shows the marginal impact of a 1-*SD* increase in conservatism on the market shares of generics and new products. Almost all of the estimates are negative. Taken together, our results provide strong evidence that more conservative markets are associated with a higher reliance on established national brands and a lower penetration of new products.

Robustness checks

We conducted a variety of robustness checks using alternate measures of religiosity and political affiliation. First, using the ARDA data on religious adherence, we repeated the analyses at the denomination level, creating separate models for adherents identified as Evangelical Protestant, Mainline Protestant, Catholic, Jewish, and Islamic. Second, we repeated the analyses using the U.S. Census Bureau's County Business Patterns data for 2000 (U.S. Census Bureau, 2012a). The Census Bureau collects information on the number of "establishments primarily engaged in operating religious organizations, such as churches, religious temples, and monasteries and/or . . . establishments primarily engaged in administering an organized religion or promoting religious activities" (U.S. Census Bureau, n.d.). We used the Census Bureau's data on number of religious organizations per 100,000 residents for this measure (U.S. Census Bureau, 2012a). Finally, we reran our analyses using data for the 2004 presidential election alone as our measure of political affiliation, as that year coincides most closely with our sales data. Our results were consistent across denominations, and the pattern of results did not change when we measured religiosity using the number of religious establishments. Our main results were also replicated when the 2004 election was used as the sole measure of political affiliation.

In addition to testing alternative measures of conservatism, we tested whether conservatism predicted alternative outcome

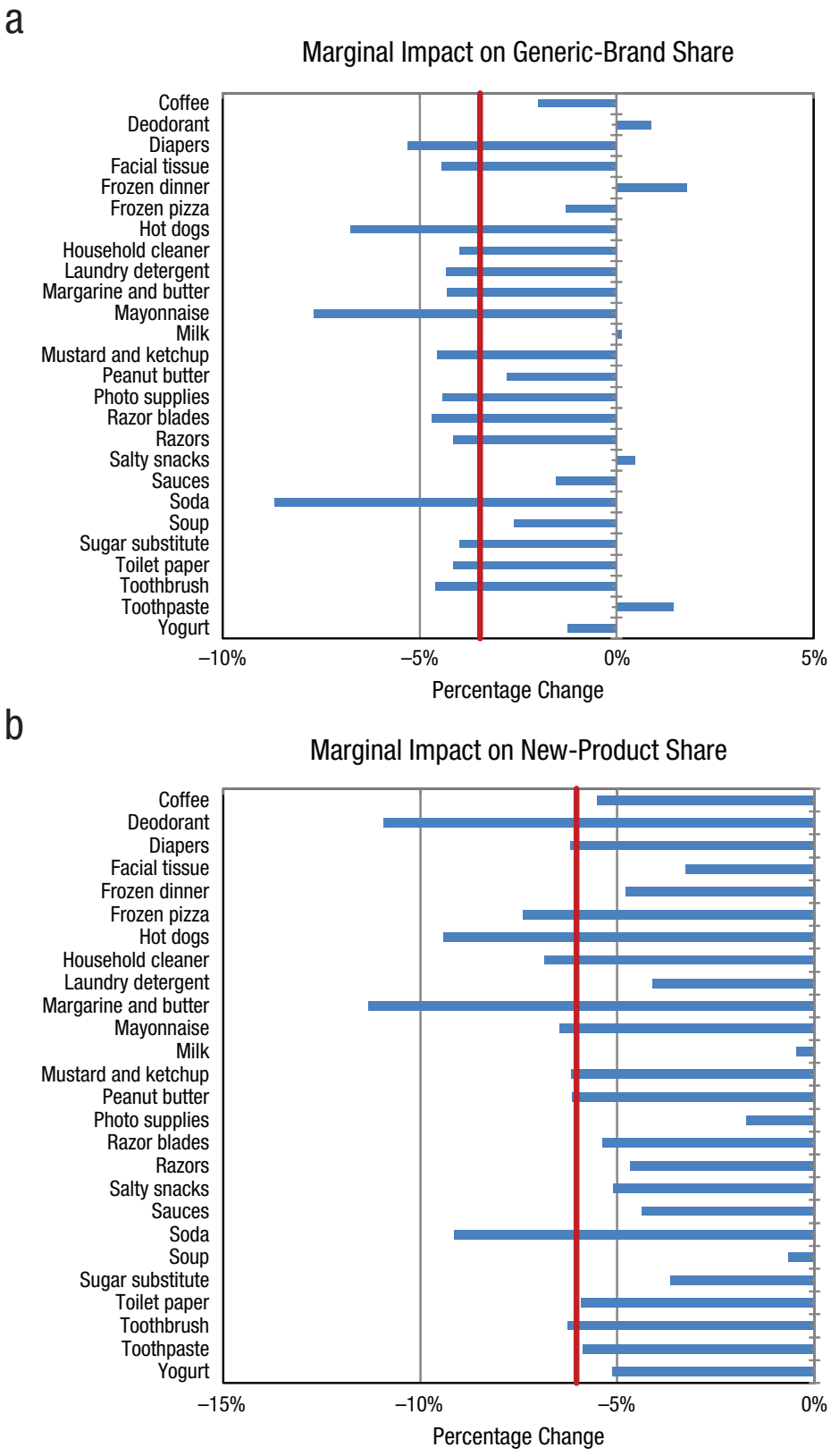

Fig. 1. Marginal impact of a 1-*SD* increase in conservatism (religiosity and Republican voting combined) on market share of (a) generic and (b) new products in the 26 categories. The bold vertical lines show the overall impact pooled across all categories.

variables: store size, product availability, and breadth of generic offerings (number of available Universal Product Codes, or UPCs). These analyses revealed no systematic effects of conservatism on these variables. Finally, we replicated our results for market share of both generic and new products using flexible quantile regressions (as opposed to ordinary least squares). For more information on our robustness checks, see the Supplemental Material.

Discussion

A large body of recent research has examined the social, cognitive, and motivational underpinnings of political affiliation (Jost et al., 2009) and the influence of ideological differences on attitudes, evaluation of sociopolitical issues, preference for political parties and candidates, and voting behavior (Erikson & Tedin, 2007). A relatively smaller literature has linked nonpolitical ideological differences, such as attitudes toward and preferences for various institutions, with choices regarding travel, films, and television (Carney, Jost, Gosling, & Potter, 2008; Jost, Nosek, & Gosling, 2008). We have added to this line of research by examining whether values and tendencies underlying conservative ideology are manifested in routine purchase decisions. Our empirical results, based on extensive field data, provide strong evidence that more conservative ideology is associated with higher reliance on established national brands (as opposed to generics) and a slower uptake of new products. These tendencies are consistent with traits typically associated with conservatism, such as aversion to risk, skepticism about new experiences, and a general preference for tradition, convention, and the status quo.

It is noteworthy that values and traits associated with conservatism affect routine, low-cost, low-involvement product purchases, which tend to be associated with minimal inherent risk. Research may reveal a similar influence of other kinds of psychological differences on purchase or consumption behavior. For example, there is substantial evidence that systematic differences in cognitive processes between subjects from individualistic (Western) and collectivist (Eastern) cultures (e.g., Heine, Lehman, Markus, & Kitayama, 1999; Mesquita, 2001; Nisbett, Peng, & Norenzayan, 2001) translate into differences in choice and decision making (Iyengar & Lepper, 1999; Kim & Markus, 1999). It would be interesting to examine whether these cultural differences permeate aspects of daily activities and purchase behavior. Our work is also related to the growing body of research examining how norms, beliefs, and behavior associated with ethnic, social-class, or regional groups may affect preferences for products (Nisbett, 1993; Plaut, Markus, & Lachman, 2002; Rentfrow, Gosling, & Potter, 2008; Snibbe & Markus, 2005).

Our study has several limitations that merit caution. First, our analysis was restricted to specific categories of frequently purchased, utilitarian products. Consumer behavior regarding ostentatious or conspicuous products may be quite different (Nisbett, 1993). Second, our analysis was conducted at an aggregate (county) level rather than at the individual level. Ideally, an examination of the relationship between political ideology and brand consumption would be based on data from a consumer panel with accurate measures of ideology and purchase behavior for a greater variety of products (including durable goods and fashion). However, such field data are rarely available.

Notwithstanding these limitations, this study used extensive field data to provide, to our best knowledge, the first evidence of a relationship between ideology and brand consumption. The consistency of our results across a large set of product categories suggests that aspects of ideology may indeed be reflected in daily behavior at an unconscious level or in an implicit manner.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Supplemental Material

Additional supporting information may be found at http://pss.sagepub.com/content/by/supplemental-data

Note

1. Estimates for two categories (toothpaste and milk) were positive. Note that these were somewhat unusual categories. Toothpaste had an extremely low market share for generics (0.55%), and milk had a very large market share (75.72%; see Table 1).

References

Aaker, D. A. (1991). *Managing brand equity*. New York, NY: Free Press.

Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.

American National Election Studies. (2010). *Time series cumulative data file* [Data set]. Retrieved from http://www.electionstudies.org/studypages/cdf/cdf.htm

Amodio, D. M., Jost, J. T., Master, S. L., & Yee, C. M. (2007). Neurocognitive correlates of liberalism and conservatism. *Nature Neuroscience*, *10*, 1246–1247.

Association of Religion Data Archives. (n.d.). *Religious congregations and membership study, 2000 (counties file)*. Retrieved from http://www.thearda.com/Archive/Files/Descriptions/RCMSCY.asp

Bafumi, J., & Shapiro, R. Y. (2009). A new partisan voter. *The Journal of Politics*, *71*, 1–24.

Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, efficiency, intention, and control in social cognition. In R. S. Wyer, Jr., & T. K. Srull (Eds.), *Handbook of social cognition* (2nd ed., pp. 1–40). Hillsdale, NJ: Erlbaum.

Bronnenberg, B. J., Kruger, M. W., & Mela, C. F. (2008). The IRI marketing data set. *Marketing Science*, *27*, 745–748.

Carney, D., Jost, J. T., Gosling, S. D., & Potter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology*, *29*, 807–840.

Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 33, pp. 41–113). San Diego, CA: Academic Press.

Erdem, T., Zhao, Y., & Valenzuela, A. (2004). Performance of store brands. *Journal of Marketing Research*, *41*, 86–100.

Erikson, R. S., & Tedin, K. L. (2007). *American public opinion: Its origins, content, and impact* (7th ed.). Boston, MA: Allyn & Bacon.

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*, 4–27.

Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, *20*, 98–116.

Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review*, *106*, 766–794.

Hilary, G., & Hui, K. W. (2009). Does religion matter in corporate decision making in America? *Journal of Financial Economics*, *93*, 455–473.

Inzlicht, M., McGregor, I., Hirsh, J. B., & Nash, K. (2009). Neural markers of religious conviction. *Psychological Science*, *20*, 385–392.

Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the value of choice: A cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology*, *76*, 349–366.

Jost, J. T. (2006). The end of the end of ideology. *American Psychologist*, *61*, 651–670.

Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology*, *25*, 881–919.

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. (2003a). Exceptions that prove the rule: Using a theory of motivated social cognition to account for ideological incongruities and political anomalies. *Psychological Bulletin*, *129*, 383–393.

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. (2003b). Political conservatism as motivated social cognition. *Psychological Bulletin*, *129*, 339–375.

Jost, J. T., Kay, A. C., & Thorisdottir, H. (Eds.). (2009). *Social and psychological bases of ideology and system justification*. New York, NY: Oxford University Press.

Jost, J. T., Nosek, B. A., & Gosling, S. D. (2008). Ideology: Its resurgence in social, personality, and political psychology. *Perspectives on Psychological Science*, *3*, 126–136.

Kim, H., & Markus, H. R. (1999). Deviance or uniqueness, harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology*, *77*, 785–800.

Leip, D. (2012). *Dave Leip's atlas of U.S. presidential elections*. Retrieved from http://uselectionatlas.org

Maynard, M. (2007, July 4). Say "hybrid" and many people will hear "Prius." *The New York Times*. Retrieved from http://www.nytimes.com

McCrae, R. R. (1996). Social consequences of experiential openness. *Psychological Bulletin*, *120*, 323–337.

McCullough, M. E., & Willoughby, B. L. B. (2009). Religion, self-regulation, and self-control: Associations, explanations, and implications. *Psychological Bulletin*, *135*, 69–93.

Merriam-Webster's Collegiate Dictionary (11th ed.). (2005). Springfield, MA: Merriam-Webster.

Mesquita, B. (2001). Emotions in collectivist and individualist contexts. *Journal of Personality and Social Psychology*, *80*, 68–74.

Muller, J. Z. (2001). Conservatism: Historical aspects. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences* (pp. 2624–2628). Amsterdam, The Netherlands: Elsevier.

National Opinion Research Center. (2011). *General Social Survey*. Retrieved from gss.norc.org

Nisbett, R. E. (1993). Violence and U.S. regional culture. *American Psychologist*, *48*, 441–449.

Nisbett, R. E., Peng, K. C. I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic vs. analytic cognition. *Psychological Review*, *108*, 291–310.

Plaut, V. C., Markus, H. R., & Lachman, M. E. (2002). Place matters: Consensual features and regional variation in American well-being and self. *Journal of Personality and Social Psychology*, *83*, 160–184.

Rentfrow, P. J., Gosling, S. D., & Potter, J. (2008). A theory of the emergence, persistence, and expression of regional variation in basic traits. *Perspectives on Psychological Science*, *3*, 339–369.

Schwartz, S. H., & Huismans, S. (1995). Value priorities and religiosity in four Western religions. *Social Psychology Quarterly*, *58*, 88–107.

Shachar, R., Erdem, T., Cutright, K., & Fitzsimons, G. J. (2010). Brands: The opiate of the nonreligious masses? *Marketing Science*. Advance online publication. doi:10.1287/mksc.1100.0591

Snibbe, A. C., & Markus, H. R. (2005). You can't always get what you want: Educational attainment, agency, and choice. *Journal of Personality and Social Psychology*, *88*, 703–720.

U.S. Census Bureau. (2012a). *County business patterns (CPB); ZIP code business patterns (ZBP)*. Retrieved from http://www.census.gov/econ/cbp/

U.S. Census Bureau. (2012b). *Demographic profiles: 100-percent and sample data* [Data set]. Retrieved from http://www.census.gov/census2000/demoprofiles.html

U.S. Census Bureau. (n.d.). *Does the Census Bureau have data for religion?* Retrieved from https://ask.census.gov/faq.php?id=5000&faqId=29

Wong, Elaine. (2009, July 10). Why risk prevents switching to private labels. *Adweek*. Retrieved from www.adweek.com