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### Hearing and Talking to the Other Side: Antecedents of Cross-Cutting Exposure in Adolescents

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# Hearing and Talking to the Other Side: Antecedents of Cross-Cutting Exposure in Adolescents

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Although scholars have enthusiastically examined the outcomes of cross-cutting exposure, few studies have explored its antecedents. Moreover, most studies have attended to adults. But it is during adolescence and early adulthood that citizens are most likely to be socialized into valuing and engaging in heterogeneous discussion. The present study employs a panel survey of American adolescents, age 12 to 17, to examine the predictive power of home, school, and media use variables on two outcomes related to valuing and talking to the other side. Our findings demonstrate that adolescents' attitudes toward valuing cross-cutting exposure as well as indulging in heterogeneous talk are consistently predicted by concept-oriented home environment and school curriculum. Among the media variables, cable news negatively and newspaper and online news positively influenced our outcome variables. Implications are discussed.

Cross-cutting exposure gives people the tools to imagine how they would feel in the other person's position, thus engaging in a type of representative thinking that contributes to the legitimacy of the outcome. Basically, cross-cutting exposure is the concept of people's exposure to oppositional political perspectives (Mutz, 2006). Scholars have increasingly demonstrated enthusiasm in studying the implications of exposure to cross-cutting information or recognition of oppositional perspectives in face-to-face discussion (Beck, Dalton, Greene, & Huckfeldt, 2002; Huckfeldt, Beck, Dalton, Levine, & Morgan, 1998; Huckfeldt, Mendez, & Osborn, 2004; Huckfeldt & Sprague, 1995; Mutz, 2002a, 2002b, 2006). The underlying theoretical assumption is that if exposure to cross-cutting discussion is low, the possibility for meaningful deliberative exchanges is equally low (Huckfeldt, Mendez, et al., 2004).

Cross-cutting discussion is not some abstract concept, rooted only in democratic theory. No, this type of discussion alters how citizens think and participate in the political world. Scholarly research, however, sketches an unclear portrait about the nature of these effects. There is some evidence to suggest that cross-cutting exposure enhances democratic engagement (Huckfeldt, Johnson, & Sprague, 2004; McClurg, 2006; Scheufele, Nisbet, Brossard, & Nisbet, 2004), whereas other evidence suggests this particular type of discussion may actually hamper engagement (Lord, Ross, & Lepper, 1979; Mutz, 2006; Taber & Lodge, 2006). Given the variation in observed effects, a more careful explication of cross-cutting exposure is needed. We see two routes for clarification.

First, most research has focused on the *results* of heterogeneous discussion. Few studies have explored its *antecedents*, which may be equally or even more important as scholars confront questions of a society that may be increasingly moving into more homogeneous news media and discussion environments (Mutz, 2007). Further, a better understanding of the factors that encourage people to engage in and value cross-cutting exposure may be valuable in helping to disentangle the competing implications of this exposure on a variety of outcomes.

Second, most studies have attended to adults. But it is during adolescence and early adulthood that citizens are most likely to be socialized into valuing cross-cutting exposure and develop the habits that encourage exposure to the “other side.” Political socialization has been defined as the “learning of the norms, values, attitudes, and behavior accepted and practiced by the ongoing political system” (Sigel, 1965, p. 2). From this perspective, adolescents learning to value hearing the other side of political issues and forming the habit of talking with those who disagree with them are at the heart of political socialization. And scholars still struggle to fully understand how this socialization process occurs, which leaves several unanswered questions. What are some of the primary socializing factors for adolescents in attitudes and behaviors toward cross-cutting exposure? How do these factors play out in the context of an election cycle?

To answer these questions, this article employs a panel survey of American adolescents, age 12 to 17, measured during the 2008 presidential election. Using this sample of adolescents, the article examined the predictive power of seven blocks of variables—demographics, political orientations, talk, family communication patterns, school curriculum, media use, and cognitive engagement on two outcomes—one related to the values (“Is it important to hear the other side?”) and the other related to the behavior (“How often they talk to people who disagree?”) of these teens. The two-wave panel data also give us an opportunity to investigate the predictive powers of the focal variables on the change of these outcomes, whereas the ongoing U.S. presidential campaign offers an opportunity to see political socialization of young adults in action (Sears & Valentino, 1997). Thus, this article brings together literature from the cross-cutting research as well as political socialization to understand the antecedents of cross-cutting exposure.

## CROSS-CUTTING EXPOSURE

Within a democracy, it is important that citizens be adequately informed when making decisions. Information exchanges between citizens are vital to democracies because no single individual can anticipate all perspectives

on a given issue, nor possess all the relevant information pertaining to a decision (Benhabib, 1996). As a result, everyday political talk constitutes an important step in how citizens understand politics and form their opinions (Kim & Kim, 2008). Furthermore, it is through these informal, voluntarily interactions that individuals gain the confidence and resources for further political engagement (Barber, 2003). A wealth of empirical research demonstrates the role of political talk in spurring increases in knowledge (McLeod et al., 1999), political awareness (Rojas et al., 2005), political efficacy (Scheufele, Nisbet, & Brossard, 2003), and participation (McLeod et al. 1999; Rojas et al., 2005; Wyatt, Katz, & Kim, 2000).

More recently, scholars have focused on specific types of everyday political talk. One such area of research involves exposure to political talk containing either agreeable or disagreeable information. In general, individuals gravitate toward homogeneous, or agreeable, political talk. Because everyday political talk is voluntary, most people experience talk through their immediate surroundings. That is, individuals tend to cite family and close friends as primary discussion partners (Wyatt et al., 2000). Similarly, neighborhoods are structured in such a way that promote homogeneity (Huckfeldt & Sprague, 1987).

The work of Huckfeldt and colleagues approaches cross-cutting exposure as a feature of one's discussion networks. Here, the focus is not so much instances of political disagreement but on tracing the links between individuals and discussion groups (Huckfeldt & Sprague, 1991). For example, the composition of neighborhoods serves as the unit of analysis rather than individual levels of cross-cutting exposure: "People understand political information within the context of the world they know best—the world created by their own patterns of social interactions" (Huckfeldt et al., 1998, p. 1001). To better understand discussion networks, Beck et al. (2002) traced the level of voter disagreement (perceived and actual) for up to five discussion partners. They find that 70% of the public operates within homogenous discussion networks.

Conversely, cross-cutting talk represents a type of everyday political talk that contains the element of disagreeableness—a characteristic that includes important normative features. For example, political talk that includes a wide range of viewpoints enables a broader orientation (Benhabib, 1996) and "teaches citizens to see things they had previously overlooked, including the views of others" (Manin, 1987, p. 351). In other words, cross-cutting political talk gives people the tools to imagine how they would feel in the other person's position, thus engaging in a type of representative and reflecting thinking. Research has also associated cross-cutting exposure to increased awareness and knowledge of oppositional rationales (Mutz, 2006; Mutz & Mondak, 2006).

So where do adults tend to experience cross-cutting political talk? In their examination of cross-cutting exposure, Mutz and Mondack (2006) found the

workplace to be one source of divergent viewpoints. Workplace discussions mediate the relationship between online news use and more heterogeneous political discussions (Brundidge, 2010). More recently, online discussion groups that are not political in nature (e.g., travel, hobby, fandom) are also sources of cross-cutting information (Wojcieszak & Mutz, 2009). Taken together, it seems that the social structures of the workplace and nonpolitical groups provide adults with a space that encourages cross-cutting political talk.

Beyond the normative underpinnings of cross-cutting talk, several studies have tested the democratic implications of cross-cutting talk. Mutz (2002b) conducted a survey noting the frequency in which people talk politics with up to three other people and the level of political disagreement within these discussions. The survey revealed that exposure to cross-cutting viewpoints did not produce a deepening of the individual's *own* views; however, exposure to cross-cutting viewpoints deepened an individual's awareness of *oppositional* rationales—and by a substantial margin. A follow-up experiment suggests that individuals exposed to more cross-cutting exposure also had higher perspective-taking abilities, an ability linked to greater tolerance (Mutz, 2002a). Similarly, other research has linked cross-cutting exposure to increased voting turnout (Huckfeldt, Mendez, et al., 2004) and participation (McClurg, 2006, Scheufele, Nisbet, Brossard, & Nisbet, 2004).

However, cross-cutting exposure does not always yield democratically positive outcomes. Recent scholarly work has found cross-cutting exposure correlated with *decreased* political participation, greater reliance on out-group stereotypes, and polarization in attitudes (Huckfeldt, Johnson, et al., 2004; McClurg, 2006; Mutz, 2006). Polarization often results because individuals approach disagreeable information with their predispositions and prejudices firmly in place, making them less receptive to contrary views or ideas (Ditto & Lopez, 1992; Kunda, 1987). For example, research into motivated reasoning suggests that when confronted with information that advocates a position an individual disagrees with, people are driven to counterargue or refute that information (Edwards & Smith, 1996; Kunda, 1990; Taber & Lodge, 2006), which can lead individuals to become more polarized in support of their original position after exposure to cross-cutting views (Lord et al., 1979; Taber & Lodge, 2006). Hence the findings from empirical research on cross-cutting exposure are far from conclusive.

To help clarify the effects of cross-cutting exposure, more attention should be paid to the underlying forces that precede this type of political talk. It is not just the experience of exposure to cross-cutting views that produces beneficial outcomes; individuals must endorse the values of cross-cutting exposure. Mutz (2006) found that individuals who value both “frank opinion expression and social harmony learn the most from their cross-cutting interactions” (p. 119), making the case that the behavior itself is not enough: To really reap

the benefits of cross-cutting discussion, citizens must bring with them values that make that experience worthwhile. Few studies have investigated the socialization process, where adolescents could develop the habit of not only participating in heterogeneous talk but finding the experience itself rewarding. Examining the predictors of cross-cutting exposure in the political socialization process is indeed fundamental to the study of deliberative democracy.

### POLITICAL SOCIALIZATION

To understand how these values, orientations, and norms develop, we turn to the literature of political socialization. Political socialization can be understood from both a macrosocial perspective of how societies instill norms and practices in citizens as well as a microsocal perspective of the specific processes involved in political development (McLeod & Shah, 2009; Sapiro, 2004). In either case, political socialization is “fundamentally concerned with the mechanisms that create and maintain democratic institutions and practices” (McLeod & Shah, 2009, p. 1).

In the study of political socialization, adolescents become an important audience to study because this transition period is when “many key institutions and causal levers of initial political activation should be found” (McFarland & Thomas, 2006, p. 402). Political socialization occurs when young people develop an interest in politics, are given the opportunity to learn about political issues that are important to them, and see a role for themselves as active citizens (Delli Carpini, 2000). Scholarly research has focused on two general contributors to political socialization: (a) factors taking place within the home (i.e., parent–child communication) and (b) factors taking place outside (i.e., educational curriculum, involvement in voluntarily associations). Specifically, McFarland and Thomas (2006) found that 11% to 17% of youth political involvement effects on subsequent adult political participation was attributed to background differences (socio-economic status, race, age, and citizenship), around 8% to 16% was attributed to parental practices, and around 21% to 23% was attributed to student–peer practices. Therefore, the encouragement and opportunity to develop civic skills, taking place inside and outside the home, can have long-term implications for adult political involvement and behaviors.

### PARENT–CHILD COMMUNICATION

Parent–child communications is one of the most “pervasive forces” in the development of adolescents (Chaffee, McLeod, & Wackman, 1973, p. 349).



A two-dimensional model has been formulated consisting of socio-oriented and concept-oriented relations. In the concept-oriented family, children are encouraged to express their beliefs and challenge others (Chaffee, McLeod, & Wackman, 1973), whereas in socio-oriented families, children are encouraged to get along with others for harmonious social relations. Family communication patterns, including perceived norms of what type of parent-child communication is acceptable and the frequency of political talk, can also contribute to the political socialization process (Merelman, 1973). A family communication pattern that emphasizes inquiry and supportiveness should aid in the development of political communication skills.

Specifically, communication in concept-oriented families has been found to enhance adolescent political development rather than socio-oriented families (Shah, McLeod, & Lee, 2009). Scholarly research has found that adolescents raised with concept-oriented norms tend to be more interested in politics, be more knowledgeable about politics, and discuss politics more frequently than adolescents from socio-oriented families (McLeod & Chaffee, 1972). In addition, children who are encouraged to express themselves in spite of being at odds with their parents tend to also be more politically engaged (McLeod & Shah, 2009). Concept-oriented adolescents also are more active and successful in school and tend to participate more in politically related school activities (Chaffee, McLeod, & Wackman, 1973). Finally, children growing up in homes that encourage concept-oriented communication patterns should encounter more diverse views even within their own household, thus both heightening their exposure to cross-cutting views and enhancing its perceived value. Thus, past research clearly indicate the important role family communication patterns play—specifically concept-oriented norms in political socialization of young minds. Hence, we propose the first hypotheses of our study:

- H1a: Among adolescents, exposure to concept-oriented family communication patterns will be positively related to valuing exposure to cross-cutting information.
- H1b: Among adolescents, exposure to concept-oriented family communication patterns will be positively related to participating in heterogeneous talk.

### SCHOOL CURRICULUM

School curriculum can also be a significant contributor to the political socialization process. Initial research in this area focused broadly on school-based civics education such as high school civic courses and found minimal support for civics curriculum playing an important role in political

socialization (Jennings & Niemi, 1974; Langton & Jennings, 1968; Patrick, 1977; Riccards, 1973). However, recent scholars have emphasized the role of school curriculum as a whole, not just the teaching of civic textbook information (Hively & Eveland, 2009). Scholars have started examining the relationships between course activities and classroom environment with several socialization outcomes (Campbell, 2005; Gimple, Lay, & Schuknecht, 2003; Torney-Purta, 2002). For example, research conducted in 22 Philadelphia-area high schools found that curriculum that included deliberative discussions, community projects, and informational use of the Internet produced increased levels of knowledge, efficacy, and following/discussing politics (Feldman, Pasek, Romer, & Jamieson, 2007).

Similarly, Torney-Purta (2002) found open political discussion in the classroom enhanced the effects of civics education. The author emphasized that “narrow instruction restricted to facts from textbooks and covering few topics in depth leaves students with *disconnected knowledge* and a lack of excitement” (p. 210). Multiple discussion activities in the classroom promote learning and encourage students to be engaged outside of the classroom: When students discuss politics as part of their class requirements, it is indeed possible that these class discussions could lead to long-term effects and frequent discussion and elaboration as a result of increased interest (Campbell, 2005; McDevitt & Kioussis, 2004). Classroom-related political and social activities were thus an important predictor for our outcome variables, and our second set of hypotheses propose the following:

- H2a: Among adolescents, exposure to greater classroom-related political and social activities will be positively related to valuing exposure to cross-cutting information.
- H2b: Among adolescents, exposure to greater classroom-related political and social activities will be positively related to participating in heterogeneous talk.

## MASS MEDIA

Beyond the forces inside the school and home environments that socialize adolescents into their understanding of democratic norms and ideals, it is important to consider one of the other most important socializing agents: the mass media (Chaffee & Frank, 1996; Chaffee, Ward, & Tipton, 1973; Kraus, 1973; McLeod, 2000a). More specifically, engagement with news media has been linked to increases in interpersonal interaction, political knowledge, and participation, both civically and politically (Eveland, Hayes, Shah, & Kwak, 2005; Shah, Cho, Eveland, & Kwak, 2005; Shah, Kwak, &

Holbert, 2001). Therefore, engagement with the media—and particularly the news media—should play an important role in socializing adolescents into the democratic and political norms that shape their attitudes and behaviors.

Media also provide an important conduit between the political arena and an individual's personal life, facilitating an understanding of how the two are interrelated (Mutz, 1998, 2002a). However, studying “the media” obscures very real differences that exist in different types of media. In an increasingly fragmented media environment, these differences should impact whether people make connections between politics and their own life, as well as the values placed on norms of political discussion and interaction.

Print news formats continue to reflect many of the traditional values that dominated the news industry. In particular, print news adheres to norms of balance and objectivity (Kovach & Rosensteel, 2001), meaning that people are more likely to be exposed to both sides of political argumentation, often lacking in interpersonal communication (Mutz, 2006; Mutz & Martin, 2001). These norms that dominate print news coverage should be more likely to convey democratic norms of reciprocity and reasoned debate (Janssen & Kies, 2005).

H3a: Among adolescents, exposure to more print news media will be positively related to valuing exposure to cross-cutting information.

H3b: Among adolescents, exposure to more print news media will be positively related to participating in heterogeneous talk.

Meanwhile, television news offers more diversity in their adherence to these journalistic norms. Specifically, a distinction has arisen between broadcast television news, which adopt similar guidelines in producing news that is balanced and nonpartisan, and cable news programs less constrained by these principles (Forgette & Morris, 2006). Instead, cable news programs generally embrace a more combative style of news punditry and interpretation—a style that has been linked to decreased perceptions of democratic legitimacy for opponents, lessened trust in democratic systems, and competing preferences for news style (Forgette & Morris, 2006; Mutz, 2007; Mutz & Reeves, 2005). Therefore, although broadcast news may promote similar values of tolerance for oppositional views, the very different environment on cable news programs should make those individuals who tune into these programs less supportive of those values.

H4a: Among adolescents, exposure to more broadcast news media will be positively related to valuing exposure to cross-cutting information.

H4b: Among adolescents, exposure to more broadcast news media will be positively related to participating in heterogeneous talk.

H5a: Among adolescents, exposure to more cable news media will be negatively related to valuing exposure to cross-cutting information.

H5b: Among adolescents, exposure to more cable news media will be negatively related to participating in heterogeneous talk.

Turning to news sources online, despite the diversity of news available, most people continue to visit the popular offline news networks' online sites (Pew Research Center, 2010). Therefore, the same norms of objectivity and fairness that govern much of their offline content should be continued online—and may continue to inform individuals' attitudes and decisions about political discussion. However, the environment surrounding online news is different. Especially in a more diverse environment—such as represented online—people prefer ideologically congruent information (Garrett, 2009a, 2009b; Knoblish-Westerwick & Meng, 2009; Mutz, 2007). Further, it is possible that because of these selection biases—especially choosing to expose oneself to congruent ideas—and the differences in context inherent in online spaces, the adoption of democratic values favoring objectivity, balance, and diversity in offline news media is inhibited.

RQ1a: Among adolescents, how will exposure to more online news media relate to valuing exposure to cross-cutting information?

RQ1b: Among adolescents, how will exposure to more online news media relate to participating in heterogeneous talk?

## REFLECTION

The tendency to engage in the cognitive process of reflection is an important variable to consider when predicting cross-cutting exposure. McLeod et al. (1999) found the ability to reflect played a mediating role between interpersonal discussion and participation in deliberative forums and also between local media use and participation in deliberative forums. The authors suggest that reflection plays a key role in mentally piecing together information gained from the media or discussion into a more tenable fashion. Similarly, Kosicki and McLeod (1990) identify the ability to reflect as a strategy people use to cope with and make sense of information messages. As such, individuals who are high in the ability to reflect will be more prone to engage in cross-cutting discussions. Hence we propose the last set of hypotheses:

H6a: Among adolescents, reflection on experience with the media will be positively related to valuing exposure to cross-cutting information.

H6b: Among adolescents, reflection on experience with the media will be positively related to participating in heterogeneous talk.

We can see that there is value in testing the relationships that emerge between these agents of socialization and the norms and behaviors teens endorse. However, to more clearly examine the antecedents of valuing and engaging in cross-cutting discussion, we also wanted to investigate how those variables predict change. If the variables that produce a strong relationship with the norms and behaviors associated with cross-cutting exposure also predict change, we have found strong evidence of political socialization leading to an important political outcome.

Our panel study gave us an opportunity to test these hypotheses to determine whether the same factors that lead teens to adopt these values and behaviors also encourage change in our outcome variables during the 2008 election, which becomes especially important to study with the implication that political socialization occurs most strongly during the election context (Sears & Valentino, 1997). Therefore, we ask,

RQ2: Do our independent variables (home environment, school curriculum, news media use, and reflection) predict change in the outcome variables of valuing and participating in cross-cutting exposure?

## METHODS

### Survey Design and Sampling

To test our hypotheses and answer the research question posed by this study, we use data from a national survey of adolescents. These survey data were collected from a single panel of respondents in two waves during 2008.<sup>1</sup>

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<sup>1</sup>The collection of the data presented here was undertaken by a consortium of communication and political science faculty from six major universities: University of Arkansas (Todd Shields and Robert Wicks), University of Kansas (David Perlmutter), University of Michigan (Erika Franklin Fowler), University of Missouri (Esther Thorson), University of Texas (Dustin Harp and Mark Tremayne), and University of Wisconsin (Barry Burden, Ken Goldstein, Hernando Rojas, and Dhavan Shah). Shah organized this team of scholars and served as the principal investigator for this survey panel. These researchers are grateful for the support received from the following sources: The Diane D. Blair Center of Southern Politics at the University of Arkansas; the William Allen White School of Journalism and Mass Communications and the Robert J. Dole Institute of Politics at the University of Kansas; the Robert Wood Johnson Foundation Scholars in Health Policy Research Program at the University of Michigan; the Reynolds Journalism Institute at the University of Missouri; the University of Texas Office of the Vice President for Research; and the Hamel Faculty Fellowship, the Graduate School, and the Department of Political Science at the University of Wisconsin. Any opinions, findings, conclusions, or recommendations expressed are those of the authors and do not necessarily reflect the views of the supporting sources or participating faculty.

The first wave was gathered between May 20 and June 25, 2008, by Synovate, a commercial survey research firm, using a four-page mailed questionnaire. The second wave was gathered from these same respondents between November 5 and December 10, 2008, again using a four-page mailed questionnaire. Synovate employs a stratified quota sampling technique to recruit respondents. Initially, the survey firm acquires contact information for millions of Americans from commercial list brokers, who gather identifying information from drivers' license bureaus, telephone directories, and other centralized sources. Large subsets of these people are contacted via mail and asked to indicate whether they are willing to participate in periodic surveys. Small incentives, such as prepaid phone cards, are offered for participation.

Rates of agreement vary widely across demographic categories. For example, 5% to 10% of middle-class recruits typically consent, compared to less than 1% of urban minorities. It is from this prerecruited group of roughly 500,000 people that demographically balanced samples are constructed for collection. To achieve a representative pool of respondents, stratified quota sampling procedures are employed. That is, the sample is drawn to reflect the properties of the population within each of the nine Census divisions in terms of household income, population density, age, and household size. This starting sample is then adjusted within a range of subcategories that include race, gender, and marital status to compensate for expected differences in return rates (see Shah et al., 2005; Shah et al., 2007, for details).

For the purposes of this study, this technique was used to generate a sample of households with children age 12 to 17. A parent in each selected household was contacted via mail and asked to complete an introduction portion of the survey, and then to pass the survey to the 12- to 17-year-old child in the household who most recently celebrated a birthday. This child answered a majority of the survey content and then returned the survey to the parents to complete. Of the 4,000 mail questionnaires distributed, 1,325 responses were received in Wave 1, which represents a response rate of 33.1% against the mailout. A handful of responses were omitted due to incomplete or inconsistent information. As a result of these omitted responses, 1,255 was the final response for Wave 1. Of the recontact surveys distributed, 738 were returned, for a panel retention rate of 55.7% and a response rate against the mailout of 60.4%. Due to some mismatches in the age of the child within the household who completed the first and second survey, 163 respondents were dropped.<sup>2</sup> It is from these panel data that the measures constructed next were developed.

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<sup>2</sup>The final sample for the 12 to 17 panel was  $N = 575$ , with about one third of the mismatches due to the adolescent respondents failing to provide information on their age either in the first wave or second wave (Lee, Shah, & McLeod, 2012).

### Measurement: Independent Variables

**Concept.** Concept-oriented family communication pattern was measured by averaging two items (Lee, Shah, & McLeod, 2012). The degree of agreement was measured on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*) of the following item: “In our family, kids learn it’s OK to disagree with adults’ ideas about the world.” Responses from the adolescents and parents participants were combined to create an index of the concept-oriented family communication pattern ( $r = .40$ ,  $M = 3.71$ ,  $SD = .72$  for Wave 1;  $r = .42$ ,  $M = 3.81$ ,  $SD = .84$  for Wave 2).

**School curriculum.** School curriculum was captured by a mean scale of four items, reflecting how often respondents on an 8-point scale from 1 (*strongly disagree*) to 8 (*strongly agree*) engaged in the following activities in school: (a) learned about how government works, (b) discussed/debated political or social issues in class, (c) participated in political role playing in class (mock trials, elections), and (d) were encouraged to make up their own mind about issues in class. ( $\alpha = .84$ ,  $M = 3.58$ ,  $SD = 1.95$  for Wave 1;  $\alpha = .88$ ,  $M = 3.65$ ,  $SD = 2.06$  for Wave 2).

**Media use variables.** We used four different media use variables—newspaper use, broadcast news use, cable news use, and Internet news use. All news use items were measured on an 8-point scale indicating the number of days in which respondents had engaged in the behavior in an average week, ranging from 0 to 7 days. Newspaper use was measured with two items asking participants to answer how often they were exposed to a print copy of a national paper and of a local paper ( $r = .30$ ,  $M = 1.16$ ,  $SD = 1.43$  for Wave 1;  $r = .34$ ,  $M = 1.30$ ,  $SD = 1.45$  for Wave 2). For television news use we included two different variables: broadcast news and cable news. For broadcast news participants were asked to answer how often they watch national nightly news and local news ( $r = .68$ ,  $M = 1.78$ ,  $SD = 1.96$  for Wave 1;  $r = .72$ ,  $M = 1.78$ ,  $SD = 1.97$  for Wave 2). Cable news was captured by participants’ use of both CNN and FOX cable news ( $r = .49$ ,  $M = .31$ ,  $SD = 1.82$  for wave 1;  $r = .58$ ,  $M = .33$ ,  $SD = 1.89$  for Wave 2). Internet news use averaged two items, asking respondents how often they visited the website of national newspapers and television stations ( $r = .39$ ,  $M = .51$ ,  $S.D. = 1.04$  for Wave 1;  $r = .47$ ,  $M = .53$ ,  $SD = 1.08$  for Wave 2).

**Reflection.** Reflection was measured by averaging two items on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The two items employed are “I try to connect what I see in the media to what I already know” and “I often recall what I encounter in the media later on and think

about it" ( $r = .63$ ,  $M = 3.24$ ,  $SD = .94$  for Wave 1;  $r = .65$ ,  $M = 3.34$ ,  $SD = .91$  for Wave 2).

### Measurement: Control Variables

**Talk.** Talk was captured by averaging three items on an 8-point scale from 1 (*strongly disagree*) to 8 (*strongly agree*). The three items used are "talked about news and current events with family members," "talked about news and current events with friends," and "talked about news and current events with adults outside of your family" ( $\alpha = .87$ ,  $M = 3.70$ ,  $SD = 1.89$  for Wave 1;  $\alpha = .87$ ,  $M = 4.11$ ,  $SD = 1.92$  for Wave 2).

**Demographics.** Basic demographic variables such as age ( $M = 14.5$ ,  $SD = 1.61$ ), gender (49.5% female), and annual household income ( $M = 15.82$ ,  $SD = 6.03$ , on a scale of 1 to 27, where 1 is less than \$5,000 and 27 is greater than \$300,000) were included as controls. Income was the measure of family income answered by the child's parent.

**Party ID and partisan strength.** To measure partisan strength respondents were asked, "Of the two major political parties, which of the following best describes your party affiliation?" They answered on a 5-point scale from 1 (*strong Democrat*) to 5 (*strong Republican*). Partisan strength (coded from 0 to 2,  $M = .72$ ,  $SD = .60$ , for Wave 1) was a folded measure so that larger values indicate stronger partisanship. The same item was used to measure partisan identification, ranging 0 (*strong Democrat*) to 5 (*strong Republican*;  $M = 1.95$ ,  $SD = .94$  for Wave 1).

**Political interest.** Interest in politics was measured by a single item on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*): "I'm interested in politics" ( $M = 2.60$ ,  $SD = 1.14$  for Wave 1).

### Measurement: Dependent Variables

The two outcome variables for this study were measures of *valuing* the exposure to cross-cutting information and *actually* talking to people who disagree with one's views. We capture both these variables with single-item measures. Valuing the exposure to cross-cutting information was measured on a 5-point scale ranging 1 (*strongly disagree*) to 5 (*strongly agree*), and respondents answered the question, "I think it is important to hear others' ideas even if they are different from mine" ( $M = 4.07$ ,  $SD = .91$  for Wave 1;  $M = 3.93$ ,  $SD = .96$  for Wave 2). To measure talking to people who disagree with one's views, participants were asked to respond on an 8-point scale,



from 1 (*strongly disagree*) to 8 (*strongly agree*), “talked about news and current events with people who disagree with you” ( $M = 3.07$ ,  $SD = 2.10$  for Wave 1;  $M = 3.45$ ,  $SD = 2.16$  for Wave 2). To establish the validity of the two dependent variables, we tested the correlations between them, which shows very low correlations between the two items ( $r = .19$  for Wave 1;  $r = .21$  for Wave 2). The correlations confirm that the two variables are capturing different constructs.

## RESULTS

We conducted four regression models with seven blocks of variables predicting both our outcome variables. Specifically, we examined four sets of models: a cross-section in Time 1 (May 2008), a cross-section at Time 2 (November 2008), a fixed-effects model, and an autoregressive model. The seven blocks of variables consisted of demographics, political orientations, talk, family patterns, school curriculum, media use, and cognitive engagement. Besides these variables, each dependent variable was also included as a control for the other dependent variable, such that valuing cross-cutting exposure was included as a control for the models predicting heterogeneous talk and vice versa. The panel design of our study gave us an opportunity to test how the outcomes of interest change over time. Scholars have used different models to examine such changes (e.g., Bode, Vraga, Borah, & Shah, in press; Eveland et al., 2005; Shah et al., 2005), and comparing four of these models is a fairly straightforward method to understand the strength and durability of our findings. Moreover, the confidence in the findings from the present project is increased as the hypotheses are tested and compared amongst four different models.

### Valuing Cross-Cutting Exposure

*Cross-sectional models.* Altogether, our variables explain 20.9% of the variance in the attitude toward cross-cutting information. In Wave 1, none of the demographic variables were significantly related to the outcome variable. The second block consisted of political party identification, party strength, and political interest. Among these, only party identification ( $B = -.079$ ,  $p < .001$ ) was significant, such that Republicans valued the exposure to cross-cutting information less than Democrats. Talk was included as the last control variable in our models but did not demonstrate a significant relation with the outcome variable.

We tested our hypotheses with four blocks of independent variables. Our third block consisted of a single variable to examine the influence of

concept-oriented family communication pattern. The results show that belonging to a family emphasizing concept-oriented communication significantly predicted a higher value for exposure to cross-cutting information ( $B = .185, p < .001$ ), supporting H1a. The fifth block also includes only a single variable: school curriculum. The findings show that teens who were exposed to more political and social activities in their classrooms were also more likely to value cross-cutting discussion ( $B = .088, p < .001$ ), providing support for H2a.

To test our hypotheses about news media use, we entered a sixth block of variables, which includes broadcast news use, cable news use, newspaper news use, and online news use. Only two of the news use variables emerged as significant predictors of valuation cross-cutting exposure: cable news ( $B = -.079, p < .005$ ) was negatively related, whereas online news use was positively related ( $B = .74, p < .05$ ) to valuing cross-cutting exposure.

Our final block in the model examined the role of reflection, and supporting H6a, we found that reflection was positively related to valuing cross-cutting exposure ( $B = .308, p < .001$ ). A similar cross-sectional model was conducted to examine valuing cross-cutting in the second wave. This model explained 31% of the variance and demonstrated very similar patterns.

*Fixed-effects model.* To conduct the fixed-effects model, we used the raw difference score. We constructed the variables by subtracting the Wave 1 score from the Wave 2 score (see Shah et al., 2005) for every variable, except the control variables in the model. One of the main benefits of the fixed effects model is that it controls for constant effects of stable characteristics, both measured and unmeasured (Allison, 1990; Liker, Augustyniak, & Duncan, 1985; Shah et al., 2005). Hence, we excluded the controls for demographics, political affiliations, and so forth, as each individual serves as a control for himself or herself (see Shah et al., 2005).

Our variables explain 12.2% of the total variance. Similar to the patterns demonstrated in the cross-sectional model, both exposure to a concept-oriented family communication pattern ( $B = .105, p < .001$ ) and exposure to more classroom-related political and social activities ( $B = .053, p < .05$ ) have a positive relationship to change in valuing cross-cutting exposure. Next, the media use variables show that cable news has a negative ( $B = -.047, p < .05$ ) impact, whereas newspaper ( $B = .085, p < .05$ ) has a positive influence on the change in valuing cross-cutting exposure. The final block supports H6a, demonstrating the positive influence of reflection ( $B = .288, p < .001$ ) on change in valuing cross-cutting exposure over the course of a presidential campaign.

*Auto-regressive model.* Finally, we tested our hypotheses with the lagged autoregressive models. We use Wave 1 independent variables to

predict Wave 2 dependent variables, controlling for Wave 1 levels of the dependent variables. With the help of the lagged models, the predictors are able to explain the change of the outcome variables from Wave 1 to Wave 2. Scholars have often pointed out concerns about the fixed effects model because of its potential to inflate error variances (Cohen & Cohen, 1983). The autoregressive model is a type of a difference model that relies on aggregate-level change scores. The estimates of change are derived across the sample and not within each individual. Hence, unlike the fixed effects model, error variances in autoregressive models are usually reduced (Shah et al., 2005).

Our variables explained 39.3% of the total variance. Similar to the cross-sectional models, teens who identified themselves as Republicans not only value exposure to cross-cutting information less than Democrats but also experience a further decline in valuing that exposure ( $B = -.016, p < .05$ ). Further, both concept-oriented family communication patterns ( $B = .202, p < .001$ ) and school curriculum ( $B = .102, p < .001$ ) positively influenced change in valuing cross-cutting exposure, supporting H1a and H2a. Amongst the media variables, cable news viewership ( $B = -.094, p < .001$ ) was negatively related and online news ( $B = .078, p < .05$ ) was positively related to perceptions of the value of exposure to cross-cutting information. Last, reflection ( $B = .293, p < .001$ ), positively predicted an increase in valuing cross-cutting exposure over the course of the campaign (see Table 1).

### Heterogeneous Talk

*Cross-sectional models for heterogeneous talk.* We next test the same set of hypotheses, looking at actual behaviors—the frequency with which teens report talking to people who disagree with their views. In Wave 1, our variables explain 55.9% of the variance in talking with those who disagree with one's views. Examining these variables more closely, none of the demographic variables produce a significant relationship. The second block of variables included political orientations. Unlike attitudes toward valuing cross-cutting information, in terms of the actual behaviors, party identification did not influence whether teens were talking more to people who disagree with their views. Instead, both partisan strength ( $B = .038, p < .001$ ) and political interest ( $B = .055, p < .001$ ) were positively related to talking to people who disagree with one's views. Finally, people who talk more frequently about news and current events are also more likely to engage in heterogeneous conversations ( $B = .417, p < .001$ ).

Beyond these control variables, we also tested the same set of hypotheses predicting behavioral outcomes. To test H1b, we examine concept-oriented family communication patterns, which are positively related to heterogeneous talk ( $B = .152, p < .001$ ). Similar to the attitudinal outcome, teens experienc-

TABLE 1  
 Regression Analysis Predicting for Valuing Cross-Cutting Exposure in Cross Sectional Wave 1; Cross-Sectional Wave 2; Fixed Effects and Autoregressive

	<i>Cross-sectional wave 1</i>	<i>Cross-sectional wave 2</i>	<i>Fixed effects</i>	<i>Autoregressive</i>
Heterogeneous talk	.022	.118*	.044	.034
Valuing cross-cutting exposure Wave 1	—	—	—	.182*
Demographics				
Age	-.031	-.005	—	.035
Female	.028	.041	—	.007
Income	.038	-.035	—	.058
Political orientations				
Republican	-.079***	-.059*	—	-.016*
Party strength	.022	.041	—	.042
Political interest	.010	.035	—	.006
Talk	-.027	-.055	.006	-.039
Family patterns				
Concept-oriented family communication patterns	.185***	.201***	.105***	.202***
School environment				
School curriculum	.088***	.070*	.053*	.102***
Media use				
Broadcast news	.010	-.027	-.021	.016
Cable news	-.079**	-.100**	-.047*	-.094***
Newspaper news	.039	.032	.085*	.043
Online news	.074*	.007	.059	.078**
Cognitive engagement				
Reflection	.308***	.417***	.288***	.293***
Total adjusted $R^2$	.209***	.310***	.122***	.393***
No. of cases	1056	508	526	495

*Note.* The coefficients are standardized betas.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

ing concept-oriented patterns of communication in their home were significantly more likely to talk to people who disagree, providing support for H1b. Our next block examined the effects of school curriculum. Supporting H2b, a school curriculum high in political and social activities was positively related ( $B = .199, p < .001$ ) to talking to people who disagree with one's views.

The sixth block of variables added media use to the model. In this case, both newspaper use ( $B = .024, p < .05$ ) and online news use ( $B = .041, p < .05$ ) are positively related to talking to the other side. Thus, although online news use is related to both valuing and exposing oneself to those with disagreeable views, the effects of other news use variables are more idiosyncratic. Examining how people respond to and reflect on the media, the final block included reflection

of information. Teens who reflect more on media content were significantly more likely to talk to people who disagree with them ( $B = .011, p < .05$ ).

We tested the same cross-sectional model with the Wave 2 variables. The model explained 59.9% of the variance and again demonstrated similar patterns.

*Fixed-effects model.* Similarly, we tested the fixed-effects model for our second outcome variable, the frequency with which the adolescents report talking to people who disagree with their views. The predictor variables explained 41.7% of the total variance. The first two blocks, home environment ( $B = .099, p < .005$ ) and school curriculum ( $B = .174,$

TABLE 2  
Regression Analysis Predicting for Heterogeneous Talk in Cross-Sectional Wave 1, Cross-Sectional Wave 2, Fixed Effects, and Autoregressive

	<i>Cross-sectional wave 1</i>	<i>Cross-sectional wave 2</i>	<i>Fixed effects</i>	<i>Autoregressive</i>
Valuing cross-cutting exposure	.013	.067*	.029	.019
Heterogeneous talk Wave 1	—	—	—	.124*
Demographics				
Age	.019	-.001	—	.025
Female	.006	.057*	—	.007
Income	-.007	.003	—	-.036
Political Orientations				
Republican	.029	.024	—	.013
Party strength	.038*	-.030	—	.021
Political interest	.055**	.065*	—	.052**
Talk	.417***	.482***	.431***	.431***
Family patterns				
Concept-oriented family communication patterns	.152***	.110*	.099**	.141***
School environment				
School curriculum	.199***	.160**	.174***	.188***
Media use				
Broadcast news	.012	.064	.030	.008
Cable news	.015	.004	.009	.042
Newspaper news	.024*	.003	.012	.028*
Online news	.041*	.031*	.040	.040*
Cognitive engagement				
Reflection	.011*	.017*	.027	.016*
Total adjusted $R^2$	.559***	.599***	.417***	.685***
No. of cases	1056	508	526	495

Note. The coefficients are standardized betas.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

$p < .001$ ) were positively related to change in talking to people who disagree with one's views, but media variables and reflection were not significantly related to change in heterogeneous talk in the fixed-effects model.

*Auto-regressive model.* A second auto-regressive model was conducted to test the predicting power of the seven blocks of variables on heterogeneous talk. The variables explain a total of 68.5% of the variance. The patterns remained similar to the other three models. Among the control variables, political interest ( $B = .052, p < .005$ ) and general talk ( $B = .431, p < .001$ ) are the only significant predictors of change in amount of heterogeneous talk. Family communication patterns ( $B = .141, p < .001$ ) and school curriculum ( $B = .188, p < .001$ ) positively predicted change in heterogeneous talk during the course of the election. Among the media variables, newspaper ( $B = .028, p < .05$ ) and online news ( $B = .040, p < .05$ ) both predicted an increase in heterogeneous talk. Finally, reflection ( $B = .016, p < .01$ ) was significantly related to an increase in heterogeneous talk (see Table 2).

## DISCUSSION

This study sought to examine the antecedents of valuing cross-cutting exposure and the predictors of heterogeneous talk among adolescents. Our national panel study gave us an opportunity to test our hypotheses in the context of the 2008 election season and to examine not only cross-sectional relationship but also change over the course of the election. Our study contributes to the literature by examining the antecedents of two important outcomes: whether people engage in cross-cutting political discussion, and whether they believe that engagement across political lines is a valuable experience. As many scholars have noted, exposure to divergent viewpoints is a vital component to sustaining a healthy democracy (Benhabib, 1996; Mutz, 2006; Sanders, 1997). Moreover, this study investigates these antecedents in adolescents, thereby bridging the literature on cross-cutting exposure and political socialization.

Before we discuss the implications of the findings, it is important to address some of the limitations of our study. Both of our outcome variables are single-item measures. Although the face validity of both items is strong, we encourage future researchers to better develop these concepts. Our variables such as school curriculum or talk used agree/disagree items to measure frequency of the behaviors. It is possible that individuals might strongly agree that they talked about news and current events with people who disagree with them, even if they talked infrequently. To overcome this disadvantage, future studies should add items to capture how frequently

subjects participated in these behaviors. The timing of this study could be considered both as a limitation and a contribution to our findings. Our study was fielded during the 2008 presidential election, an intense campaign that captured a lot of media attention and public interest and one that proved especially interesting to youths. Growth in cross-cutting exposure is particularly likely during this period. However, this period also gave us an opportunity to investigate the antecedents of cross-cutting exposure during an historic election. A fruitful possibility for future research would be to investigate the same questions in a nonelection context.

Despite some of these limitations our study takes an important step in understanding antecedents of cross-cutting exposure in adolescents. Our findings demonstrate that adolescents' attitudes toward valuing cross-cutting exposure as well as engaging in heterogeneous talk are predicted by several factors. Home environment stands out as a fundamental socializing factor. Those teens that grow up in an environment where disagreeing with adults is okay not only value hearing the other side more but also talk more often to people with whom they disagree. Further, this concept-oriented household also produces *gains* in valuing and engaging in cross-cutting talk over the course of the election. These findings echo prior research that has shown the importance of concept-oriented values in the political socialization process of adolescents, specifically in regard to political development, increased interest in politics, knowledge about politics (Chaffee, McLeod, & Wackman, 1973), and political engagement (McLeod & Shah, 2009). Our findings add to this line of research by demonstrating that concept-oriented values encourage adolescents to value cross-cutting exposure and talk to the other side—and this encouragement is an ongoing process that accelerates during the course of an election.

We are also able to ascertain the importance of the school environment as a socializing factor for our two outcome variables. A multitude of prior studies have indicated that when students discuss politics as part of the school curriculum, they show increased political interest and inclination toward political discussion (Campbell, 2005; McDevitt & Kioussis, 2004) and increased levels of knowledge and efficacy (Feldman et al., 2007). Our findings demonstrate that teens who were encouraged to discuss/debate political issues in the classroom or learn about the government in class valued cross-cutting exposure more and also participated in heterogeneous talk—and that these predispositions were solidified during the election, leading those teens engaged in the classroom to become even more willing and eager to talk to the other side outside of it. Thus, the classroom environment plays a valuable role in cultivating not only valuing cross-cutting exposure but also actually performing the behavior. It indeed does not come as a surprise that those adolescents who get a chance to discuss politics in the class with their peers begin to see the importance of arguments and debates. They appear to

learn that they may not necessarily agree with the ideas being expressed but nonetheless understand the value of engaging with other side. These findings are crucial to both the cross-cutting and the political socialization literature.

In addition, our findings provide relevant evidence of the role of media use and the tendency to reflect on information from the media. Cable news was negatively related to valuing cross-cutting exposure, as well as decreases in this valuation over the course of the election. These findings may not be surprising: Cable news programs are known for their combative style of news punditry and interpretation, and cable news has been associated with lessened trust in democratic systems and delegitimizing oppositional viewpoints (Forgette & Morris, 2006; Mutz, 2007). That they also discourage teens from believing talking to these delegitimized others is a valuable experience is an important extension of this finding.

Conversely, online media use positively predicted valuing cross-cutting exposure and engaging in heterogeneous discussion in the majority of our models. Meanwhile, print news use was only linked to actual heterogeneous discussion, not perceptions of its value. Again, our findings complement prior research that has associated news media use with increases in interpersonal interaction and trust, political knowledge, and participation, both civically and politically (Eveland et al., 2005; Shah et al., 2005; Shah et al., 2001). Our finding that print and online news are linked to these outcomes suggests the style of news, and the amount of choice individuals have over their consumption may be important in predicting their willingness to talk to others. These more cool media, which continue to adhere to norms of objectivity and balance (Kovach & Rosensteil, 2001; Mutz & Martin, 2001) and allow time for reflection and consideration, are the ones linked to valuing the other side and engaging with them.

By relating research from cross-cutting and political socialization, our study takes the first step in understanding the antecedents of valuing and hearing the other side in adolescents. Our results consistently demonstrated the role of family communication patterns, school environment, and media variables play in the development of these values. In a political landscape where deliberation about issues (e.g., healthcare reform) seems at the least a considerable challenge, understanding the factors that can cultivate these habits in our adolescents is timely and valuable. By taking this preliminary step, our study reveals some fundamental patterns that future studies should investigate.

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