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Communication, Context, and Community

An Exploration of Print, Broadcast, and Internet Influences

This research explores the influence of mass media use and community context on civic engagement. The article presents a multilevel test of print, broadcast, and Internet effects on interpersonal trust and civic participation that acknowledges there are (a) micro-level differences in the motives underlying media use, (b) age-cohort differences in patterns of media use and levels of civic engagement, and (c) macro-level differences in community / communication context. Accordingly, the effects of individual differences in media use and aggregate differences in community context are analyzed within generational subsamples using a pooled data set developed from the 1998 and 1999 DDB Life Style Studies. The data suggest that informational uses of mass media are positively related to the production of social capital, whereas social-recreational uses are negatively related to these civic indicators. Informational uses of mass media were also found to interact with community context to influence civic engagement. Analyses within subsamples find that among the youngest adult Americans, use of the Internet for information exchange more strongly influences trust in people and civic participation than do uses of traditional print and broadcast news media.

Political scientists and sociologists have long debated how social affiliations and experiences intersect to produce community involvement and civic engagement (Almond & Verba, 1963, 1980; Coleman, 1990; Habermas, 1979;

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Inglehart, 1997; Taylor, 1989; Tönnies, 1940). These efforts typically provide an account of how individuals' social situations and social orientations generate involvement in the public sphere and then detail the obstacles to this normatively appealing goal. Among the factors found to enhance community participation are age and education, membership in the racial majority, employment, church attendance, and general sociability, with many of these variables arguably representing the latent or unmeasured constructs of social trust, civic skills, and networks of communication and recruitment (see Fukuyama, 1995; Putnam, 1993, 2000; Verba, Schlozman, & Brady, 1995). Conversely, media use, almost always television viewership, is viewed as a barrier to civic participation (Putnam, 1995b).

The arguments offered for the expectation of adverse media effects are intuitively appealing yet simplistic. Time spent with media supposedly privatizes leisure time and therefore displaces other activities that build the community (Moy, Scheufele, & Holbert, 1999; Putnam, 1995a). Furthermore, the depiction of social reality in mass media, particularly television, is thought to cultivate a perception of the world as a mean place, leading to social withdrawal (see Gerbner, Gross, Morgan, & Signorielli, 1980; Hawkins & Pingree, 1981). There is only weak support for these relationships, with tests of effects usually relying on crude hours-of-television-use measures (Brehm & Rahn, 1997; Putnam, 2000; Uslaner, 1998). Still, these arguments have been extended to the Internet, with research relating time spent online to the erosion of psychological well-being, social trust, real-world ties, and community involvement (e.g., Kraut et al., 1998; Nie & Erbring, 2000).

These findings, although provocative, must be questioned by any communication scholar who is attentive to the varied functions media serve (see McLeod & Becker, 1981; McQuail, 1987; Shah, 1998). That is, these simplistic critiques of the media are grounded on the assumption that there is one mass communication experience (rather than multiple motives and uses) and one audience (rather than different types of users). A considerable amount of mass communication research counters this perspective and even hints at differences in usage and effects across generational groups (McLeod, 2000; McLeod et al., 1996; McLeod, Scheufele, & Moy, 1999; Norris, 1996; Shah, Kwak, & Holbert, 2001). Thus, we contend that research on the topic of media use and civic engagement must be attentive to patterns of use, not simply hours of use, especially when considering the effects of the Internet—a medium that many have argued contains the potential of increased knowledge, tightened relations, and wired communities of coordination and cooperation (Bimber, 1998; Jones, 1995; J. E. Katz & Aspden, 1997; Rheingold, 1993). Simply, given today's multifold media environments, communication

variables must be conceptualized and operationalized with increasing care (Ball-Rokeach, 1998).

We also contend that scholars concerned with the relationship between communication and community life consider the role of social context—that is, properties of the collective in which the individual exists (Blau, 1977, 1994; Iversen, 1991). This ecological perspective assumes that the social structure of communities, the composition of societal subunits along certain salient dimensions, provides opportunities and imposes constraints on individuals' micro-level associational behavior. In particular, macro-level variation in "systemic and cultural-symbolic dimensions of community (e.g. friendship networks, rates of social participation, and collective attachment)" (Sampson, 1988, p. 767) may work in combination with individual differences in media use to foster engagement in civic life (see also Kasarda & Janowitz, 1974).

That is, structural and normative properties of collectives likely create certain pressures on citizens and condition how they use and respond to media, with connected communities encouraging greater attention to local news coverage and other mobilizing content. Tightly knit communities also provide a greater number of opportunities for discussion and deliberation about topics encountered in the press, a combination that has been found to foster civic participation (see McLeod et al., 1999). Considering the interplay of these two factors from the bottom up rather than the top down, news and information consumers may come to understand their communities through representations in communications (Ball-Rokeach, Kim, & Matei, 2001 [this issue]). This perspective takes it as given that individuals, even those living in highly connected communities, can know only a very small number of people that comprise their communities. Their sense of "we" (Durkheim, 1995)—that is, their imagined community (B. Anderson, 1991)—is symbolically generated by media discourse. This discourse conveys a common life and produces a local identity (Friedland, 2001 [this issue]; Kaniss, 1991). Individuals who are attentive to such content seem more likely to participate in community life, particularly if the community is represented as stable and connected because this likely reinforces norms of responsibility, reciprocity, and efficacy.

This article explores these issues. To do so, we conduct a secondary analysis of pooled cross-sectional data—the 1998 and 1999 DDB Life Style Studies—of more than 6,700 adults. By merging these data, we are able to analyze the effects of patterns of media use and social context on two important civic culture variables: interpersonal trust and civic participation. The size of the sample allows us to conduct subanalyses within generational age breaks to more closely examine changing patterns of traditional and new

media effects. Our approach also permits an examination of whether macro-social conditions and individual differences in media consumption work in combination to produce civic virtues and volunteerism.

Social Capital, Civic Culture, and Mass Media

In recent years, Putnam (1993, 1995b, 2000) has popularized the term *social capital* to describe how basic elements of community life, such as interpersonal trust and social networks, provide the means for citizens to cooperate on joint problems. Like earlier work on civic culture, social capital concerns psychological and sociological factors that, although not explicitly political, have implications for political functioning. It is this attention to social perceptions and practices beyond politics that makes theorizing on social capital and civic culture so valuable for structuring an examination of the relationship between patterns of media use and engagement in civic life.

We define social capital as the resources of information, norms, and social relations embedded in communities that enable people to coordinate collective action and to achieve common goals. It is an inherently multilevel construct manifested in communities at the macro level by properties and processes of local institutions and organizations both public and private, at the meso level by the sets of interpersonal communication networks and their connections, and at the micro level by individual characteristics that make citizens more likely to participate in community life (see Ball-Rokeach et al., 2001).[1]

Social capital research, despite its multilevel conceptual definition, has concentrated on the micro level with individuals as the unit of analysis, typically using sample surveys to measure citizens' levels of resources, motivation, attitudes, and knowledge that facilitate their civic participation (Brehm & Rahn, 1997; Shah, 1998; Uslaner, 1998). The meso network level is represented through individuals' reports of their social networks in terms of size, heterogeneity, and frequency of discussion (McLeod et al., 1999). More complete tracing of these networks and their connections to community institutions is rare (e.g., Galaskiewicz, 1979; Laumann & Pappi, 1976). Estimation of the influence of variations at the macro community institutional level (e.g., local government, schools, formal and informal organizations) has been restricted to examining individuals' knowledge, perceptions, and attitudes regarding specific local institutions and the community generally (e.g., community attachment) as they relate to participation.[2]

Recognizing these limitations, we contend that interpersonal trust and civic participation are important individual-level indicators of social capital

(Brehm & Rahn, 1997; Erickson & Nosanchuk, 1990; Sullivan & Transue, 1999; Uslaner, 1999), yet acknowledge that micro-, meso-, and macro-level factors influence their production. For example, social trust developed in group interactions is thought to function as a heuristic that is applied to decisions to participate in large-scale collective action efforts (Scholz & Lubell, 1998; Scholz & Pinney, 1995). Trust in the motives of others would seem to be foundational to the decision to become involved in civic life (Davidson & Cotter, 1989). Likewise, macro social conditions such as community stability and connectedness provide opportunities and impose constraints on the associational activity (Sampson, 1988). The experience of participating in community projects, volunteering, and engaging in other membership activities reinforces norms of obligation and cooperation, encouraging additional civic involvement (Ostrom, 1990; Putnam, 1995a, 1995b).

Notably, Putnam's concern with the aggregate decline in social capital also argues for the centrality of civic practices and interpersonal trust in studies of civil society. He asserts that participation and trust have slipped in tandem, reciprocally contributing to the erosion of community life (Putnam, 2000). These trends appear to be based as much on generational differences as on individual changes—that is, cohort and life-cycle effects. "Gen-Xers" are less participatory and trusting than their "Boomer" parents were as young people; likewise, Boomers are less connected and involved than members of the preceding "Civic" generation.

Aggregate changes in media adoption and use—for example, rising rates of television usage and declines in newspaper readership—are Putnam's (2000) culprits for the downward trajectory of these indicators of civic culture. There appear to be substantial cohort differences in media use (Peiser, 2000), especially newspapers and the Internet, suggesting that generational differences in patterns of influence should be considered. However, the differential influence of media on social capital production across generational groups may not simply reflect variation in levels of use; rather, age-cohort contrasts may be a function of media reliance, an affinity toward certain types of media as primary sources of gratification fulfillment (McLeod, Glynn, & McDonald, 1983; on media systems dependency theory, see Ball-Rokeach, 1985).

Research on media reliance has found that effects of media consumption tend to be concentrated among individuals who depend on a given medium, whether that be newspapers, television, or the Internet (McLeod & Becker, 1974; McLeod, Becker, & Byrnes, 1974; Shah et al., 2001). The contingence of media influence on media reliance has been demonstrated by the ability of gratifications sought from media to predict various political outcomes incrementally beyond exposure. Findings also suggest that older people are

more reliant on print media, the medium they developed a connection with in their youth. Extending this argument, younger Americans may not only be more likely to use the Internet; they may be particularly likely to experience its effects (Jung, Qiu, & Kim, 2001 [this issue]).

As all of this indicates, Putnam's simplistic conceptualization and operationalization of media variables leaves much to be desired. Arguments about time displacement and the mean-world effects that rely on single-item hours-of-use measures do not consider the complexity of the media environment and individual-level differences in media consumption. Unfortunately, some of these arguments have been extended to the Internet. Kraut et al. (1998) assert that "like watching television, using a home computer and the Internet generally implies physical inactivity and limited face-to-face social interaction" (p. 1019; see also Vitalari, Venkatesh, & Gronhaug, 1985). Their longitudinal analysis concludes that heightened use of the Internet erodes communication with family and friends. Similarly, Nie and Erbring (2000) relate increases in time spent online with decreases in time socializing and attending events outside the home, leading them to the oversimplified conclusion that Internet use causes people to lose touch with their social environment. The failure to consider how people use media, as opposed to how much they use it, likely leads to erroneous conclusions about connections to civic engagement. Some consideration of the varied functions and uses of media is clearly needed.

In particular, local media play crucial and varying roles in the production and distribution of social capital. We can specify informational and symbolic roles of local media in connecting community institutions and individual citizens. The more familiar informational role involves coverage of institutional sources and the efforts of citizens to exert influence on community institutions. Less recognized is their symbolic role in constructing an imagined community that may be adopted and shared by citizens (B. Anderson, 1991).[3]

Media Functions and Uses

Research on media uses and gratifications provides a framework for understanding the relationships between particular patterns of media use and the production of social capital. Work in this area has tried to answer the question of why individuals choose to attend to particular media channels or types of content and what gratifications they expect and gain as a result of these interactions (Blumler & Katz, 1974; E. Katz & Gurevitch, 1974; Rosengren, Palmgren, & Wenner, 1985; Swanson, 1987; Zillmann & Bryant, 1985). Research on print and broadcast media, and more recently the Internet, has discovered regular patterns of consumption and fulfillment that contrast

information and surveillance motives for media use with the entertainment and diversion functions they serve (Graber, 1993; McQuail, 1985, 1987; Norris, 1998; Shah et al., 2001; Zillmann, 1985). When viewed in this light, research linking traditional and new media use with civic engagement can be organized around key motives underlying patterns of consumption.

Information/Surveillance Uses

Information and surveillance motives for media use have received considerable scholarly attention from students of communication and community because they promise increased political knowledge and awareness of civic opportunities and objectives. The general conclusion of this work: Informational uses of mass media—that is, reading newspapers, watching news programs, and gathering and exchanging information over the Internet—have pro-civic consequences. For example, Norris (1996) finds support for her claim that news and public affairs programming is beneficial to the health of society. Her analysis indicates that viewing informational programming contributes positively to a wide range of participatory behaviors. Likewise, research by McLeod et al. (1996, 1999) has demonstrated that newspaper reading and local news viewing is related to civic participation at the community level, where individuals can use the information they acquire to reflect and deliberate about local issues. Such informational uses of mass media, then, do more than educate; they provide the basis for political discussion and deliberation that can lead to civic action. They may also play a symbolic role, helping individuals organize their thought about their imagined community, a point we return to below.

Shah (1998) contends that other types of television content also have the potential to provide information and foster increased reflection about civic life. In particular, social dramas that depict controversies in relation to the life-world allow for unique representations of various sides of sociopolitical issues; these programs are emotionally engaging, base truth claims on experimental knowledge, and treat the audience as being physically present within the program. These programs not only allow viewers to understand community problems in more complex and personal terms, they suggest avenues for involvement that are modeled by fictional characters. Consistent with this perspective, Shah's analysis of the 1995 DDB Life Style Study finds that viewing social dramas such as *ER* and *Law & Order* is positively related to civic participation.

Of course, newspapers and television are not the only media that serve surveillance functions. Research suggests that informational and communicative uses of the Internet encourage community involvement and foster civic participation (Norris, 1998; Shah et al., 2001). That is, individuals who use the Internet to explore interests, gather data, and send and receive e-mail have been found to be more socially and politically engaged (Davis, 1999; Jones, 1995; Rheingold, 1993). The Internet may promote civic engagement because it allows users to gain knowledge, reinforce social linkages, and coordinate their actions to address joint concerns (Bimber, 1998; Davis, 1999; Kern, 1997; Norris, 1998). The associative features of e-mail may amplify these effects because it allows individuals to coordinate their actions with great efficiency and permits the politically active to present opportunities for civic participation to likely prospects in their social circle (Corrado & Firestone, 1996; Pavlik, 1996). As this suggests, media use and social networks work together to produce civic engagement, reinforcing the need to be attentive to social context.

Although it is recognized that community properties such as aggregate residential stability and contextual trust promote the development of friendship and kinship bonds and encourage participation in local affairs (Fischer, 1982; Huckfeldt, 1979; Kasarda & Janowitz, 1974; Sampson, 1988; Uslaner, 1998), little consideration is given to the intersection of communication and context. In fact, there is reason to believe that informational uses of mass communication may work in combination with symbolic and sociostructural properties of the broader community—levels of institutional confidence, social connectedness, and community stability—to encourage civic engagement (Ball-Rokeach et al., 2001). Because residents can only know some small fraction of the people who comprise a community, they must rely on mediated information to form their rough evaluations of the community. The mass media—particularly newspapers and local broadcast news—actively work to develop a local identity and symbolically reflect features of the collective, creating a sense of "we" or a local identity (B. Anderson, 1991; Kaniss, 1991). News consumers may come to understand the symbolic properties of the collective through the media and respond to these normative standards. Furthermore, communities that are structurally integrated likely provide frequent opportunities for political discussion and civic deliberation about publicly debated issues and condition certain patterns of media use among their residents. As this suggests, the degree of connectedness within the collective may work with mass communication to provide a means for individuals to link community information to opportunities for discussion, reflection, and recruitment (Huckfeldt, Beck, Dalton, & Levine, 1995; McLeod et al., 1999).

Entertainment/Diversion Uses

The relationship between entertainment/diversion uses of media and involvement in community life has been of increasing research interest, given Putnam's scathing, albeit misplaced, critique of television. The studies considering this issue tend to focus on the civic consequences of consuming television content that portrays either a sanguine or dangerous social reality. Accordingly, situation comedies and reality programs have been of particular interest because of their ubiquity and their hypothesized connections to trust and participation. For situation comedies, Cappella, Lee, and Southwell's (1997) analysis of 1995 and 1996 National Election Study (NES) data led them to conclude that upbeat sitcoms such as *Friends* actually run counter to Putnam's expectations about television, yielding positive associations with interpersonal trust. Shah (1998) also observed a positive link between such sitcom viewing and trust; he concludes that watching programs that depict social reality in a lighthearted manner may be related to a more hopeful worldview of which interpersonal trust is one component. Extending this logic, situation comedy viewing should be negatively related to civic participation because such programming presents a life-world that is generally free of social controversy and value conflicts, in sharp contrast to the world of social dramas. Consistent with this perspective, Sotirovic and McLeod (in press) observe a negative relationship between sitcom viewing and the willingness to participate politically.

Reality-based programs such as *Cops* and *America's Most Wanted* (and more recently *Survivor* and *Temptation Island*) present a very different social world, one that is full of deception, betrayal, and wrongdoing. If there is any merit to arguments about mean-world effects of media consumption (Gerbner et al., 1980), reality program viewing should be related to social mistrust and civic disengagement. Such programming shows nonfiction events such as crimes, sinister happenings, and hazardous experiences. The conventional wisdom concerning this genre asserts that it fosters fear and a more dangerous view of societal interaction, encouraging withdrawal from community life. Arguably, this type of television programming represents the nadir of broadcast content with regard to civic engagement.

Like sitcoms and reality programs, the use of the Internet for entertainment and escape may have adverse civic consequences. Research by Shah et al. (2001) indicates that individuals who use the Internet for recreation and anonymous socialization may not experience many civic benefits. It seems such uses of the Internet privatize social recreation; chat rooms and other means of interacting anonymously in online environments provide the

illusion of face-to-face social interplay and belonging without the civic benefits. If a person goes online to socialize with geographically dispersed others, a smaller proportion of their social contacts will probably be with family and friends. Thus, they might gain "poorer quality social relationships for better relationships, substituting weak ties for strong ones" (Kraut et al., 1998, p. 1029). As such, recreational uses of the Internet—that is, visiting chat rooms and the like—may erode the individual-level production of social capital because these activities weaken social networks.

In addition to their conclusion concerning the connection between Internet use and civic life, Shah et al. (2001) find substantial generational differences in the relationship between Internet use and civic engagement. The positive and negative associations observed between patterns of Internet use and trust and participation were concentrated among the youngest American adults. Indeed, across the generational subsamples examined, the predictive power of Internet use became weaker as analysis moved from younger to older groups. In the absence of longitudinal data, it is difficult to determine whether these differences are the result of cohort or life-cycle effects. Nonetheless, these findings, along with work by Peiser (2000) on cohort differences in newspaper use, clearly suggest a need to consider generational differences in levels of media use and patterns of media effects.

Hypotheses

Although research on communication and community life has begun to clarify the linkages between patterns of media use and the production of social capital, few studies have simultaneously considered the effects of a full range of print, broadcast, and Internet variables. The influence of certain media classes is clear: Newspaper reading and broadcast news viewing have repeatedly been linked with civic participation (McLeod et al., 1996, 1999; Norris, 1996; Sotirovic & McLeod, in press). It seems reasonable to assume that the consumption of newsmagazines has a comparable effect. The social implications of televised entertainment content are somewhat less certain. Social dramas, with their "ripped from the headlines" stories and complex life-world depictions, have been linked to civic participation, whereas reality shows appear to be the best prospects for mean-world effects (Shah, 1998). Researchers have observed positive and negative relationships between sitcom viewing and civic engagement (Cappella et al., 1997; Sotirovic & McLeod, in press). Likewise, Internet effects appear to be contingent on patterns of use, with informational and recreational uses inversely linked to trust and participation (Shah et al., 2001).

Motives for media use appear to be the most fruitful basis for theoretically organizing the findings of extant research into a set of coherent hypotheses. Use of mass media for information and surveillance purposes (e.g., newspaper reading, broadcast news and social drama viewing, and Internet information exchange) generally seem to foster social trust and civic participation. In contrast, use of mass media for entertainment and diversion purposes (e.g., sitcom and reality program viewing, Internet chat room participation) typically appear to discourage social trust and civic engagement. Accordingly, we offer the following hypotheses:

Hypothesis 1: Information/surveillance uses of media will be positively related to civic engagement.
Hypothesis 2: Entertainment/diversion uses of media will be negatively related to civic engagement.

When examining the connection between mass communication and civic engagement, it is also important to consider another important difference between individuals, the symbolic and sociostructural properties of the collectives in which they reside. Cities vary not only in size, but also in their social dynamics, norms, and stability. One community may be more socially connected than another, more trusting of social institutions, or more stable in terms of residency. Individuals within these cities likely feel certain pressures to conform to local standards, especially if they use media to satisfy information/surveillance motives. Furthermore, communities that are socially integrated and stable may offer opportunities for discussion, reflection, and deliberation about social controversies. Thus, information/surveillance uses of media may interact with community context to provide a means for individuals to link community information to civic opportunities. Accordingly, we state the following hypothesis:

Hypothesis 3: Information/surveillance uses of media will be more strongly related to civic engagement in communities with supportive symbolic and sociostructural properties.

Given the generational differences observed in both patterns of media use (Peiser, 2000) and linkages between media use and civic engagement (Shah et al., 2001), research must attend to age-based variation in media uses and effects when exploring the antecedents of social trust and community participation. This is particularly necessary given findings about the contingency of media effects on media reliance and the apparent difference in media affinity across generational groups (Ball-Rokeach, 1985; McLeod, 2000; McLeod &

Becker, 1974; McLeod et al., 1983). Recent research on the digital divide suggests a growing youth reliance on the Internet (Jung et al., 2001; Shah, 2000). These dependencies may also shape how media and community context work in combination to influence civic engagement. Thus, we expect the effects of Internet use—both positive and negative—to be concentrated among the youngest Americans.

Hypothesis 4: The linkages between patterns of Internet use and civic engagement will be concentrated among the youngest birth cohorts.

Method

This study is a secondary analysis of DDB Life Style Study survey data collected in 1998 and 1999. The pooled sample consists of 6,738 adults. The Life Style surveys are funded by the DDB advertising agency and conducted by Market Facts. Initially, Market Facts acquired the names and addresses of a large number of Americans from commercial list brokers. Via mail, significant numbers of people from these lists were then asked to express their willingness to participate periodically in mail or telephone surveys for an incentive. From among the more than 500,000 people who agreed to participate, demographically balanced samples were then drawn for inclusion in the Life Style Survey. The starting sample of approximately 5,000 mail panelists was then adjusted within the subcategories of race, gender, and marital status to compensate for expected differences in return rates. The sample was drawn to approximate the demographic distribution of the population within the divisions of household income, population density, age, and household size. Each year, the roughly 5,000 mail surveys were distributed to mail panelists, and the number of usable responses received was 3,350 in 1998 and 3,388 in 1999.

This stratified quota sampling method differs markedly from more conventional probability sample procedures, yet produces highly comparable data. Putnam, who used 1975 to 1998 Life Style Studies as the primary data for his book *Bowling Alone* (2000), took great care to validate these data against the General Social Survey and Roper Poll (Putnam & Yonish, 1999). This validation involved longitudinal and cross-sectional comparisons of parallel questions found in the Life Style Studies and conventional samples. Putnam (2000) concludes that there are "surprisingly few differences between the two approaches," with the mail panel approach producing data that is "consistent with other modes of measurement" (pp. 422-424; see also Groeneman, 1994).

As previously mentioned, the use of merged data enlarged the sample size, and thus enabled the analyses of age cohort subsamples and contextual effects in relation to measures of community engagement. The variables included in the present analyses can be categorized into four groups: (a) criterion variables that are dependent variables in the regression models; (b) control variables that are demographic control variables, social situation variables, and social orientation variables; (c) media use variables that include print, broadcast, and the Internet; and (d) contextual variables that are constructed from the mean value of individuals' scores in each particular Metropolitan Statistical Area (MSA).

Criterion Variables

Two constructs serve as criterion variables. First, interpersonal trust was measured by a single item asking the respondent to what extent he or she agreed with the statement "Most people are honest." Responses were recorded on a 6-point Likert scale ranging from *definitely disagree* to *definitely agree*. Second, civic participation was measured by an additive index of three behavioral items: (a) did volunteer work, (b) worked on a community project, and (c) went to a club meeting (average inter-item correlation = .44). Responses were recorded on a 7-point scale ranging from *not in the past year* to *52 times or more in the past year*. See the appendix for complete question wording.

Control Variables

Demographic variables that served as control variables in our model are the respondents' age, gender, education, income, race, and ethnicity. All of these variables have been shown to have an impact on each of the two criterion variables to varying degrees, and it is important that each be studied in the context of the analyses conducted for this study (e.g., C. J. Anderson, 1996; Brehm & Rahn, 1997; Putnam, 2000; Rahn & Transue, 1998; Scheufele & Shah, 2000; Verba et al., 1995). In particular, racial minorities tend to be less trustful of others due to their personal and collective experiences of prejudice (Loury, 1977, 1987; Mullen, 1991). To tap this tendency, two dichotomous variables, Black and Hispanic, were created and included in the analyses. The year of the survey is also included as a dummy variable.

Another group of controls include the five variables we labeled social situation, which include locality size of the respondent's city of residence, employment status, ownership of a residence, and church attendance (DiPasquale &

Glaeser, 1999; Shah, 1998; Verba et al., 1995). These types of variables have been theorized to be associated with civic engagement and the level of trust. Populated city residents are less likely to have a strong sense of community and more likely to be anonymous, thereby resulting in fewer opportunities for recruitment of civic volunteerism. Homeownership is thought to tighten ties to the community. Likewise, people who are employed in white-collar jobs are rather easily exposed to opportunities for civic participation. Churches and other places of worship often facilitate participation in public life and enhance people's engagement in civic activities.

The third group of control variables is labeled social orientations, which include the level of trust in institutions, sociability, life satisfaction, and residential stability. These variables represent the respondent's psychological and behavioral involvement in the community (see Brehm & Rahn, 1997; Shah, 1998; Shah, Holbert, & Kwak, 1999). Trust in institutions is measured by the two items "I have little faith in the criminal justice system" and "Most big companies are just out for themselves" (inter-item correlation = .18). Responses are reverse-coded and summed. Sociability is measured by the levels of frequency that the respondent gave or attended a dinner party and entertained people in his or her home (inter-item correlation = .48). Life satisfaction is operationalized with an additive index of the following four statements: "I am very satisfied with the way things are going in my life these days," "I wish I could leave my present life and do something entirely different," "If I had my life to live over, I would sure do things differently," and "Some things I feel that I don't have enough control over the direction my life is taking" (Cronbach's alpha = .73). Residential stability was measured by an additive index of two attitude items: "We will probably move at least once in the next 5 years" (reversed) and "I would be content to live in the same town the rest of my life" (inter-item correlation = .34). Responses were appropriately reversed.

Media Use Variables

Our models utilize a total of 10 media-use variables across three different types of media. Print media use includes newspaper hard news and newspaper soft news and newsmagazine readership. Newspaper hard news is a three-item additive index consisting of dichotomous (yes/no) measures of reading the following sections of the newspaper: news section, business section, and editorial section (Cronbach's alpha = .71). Newspaper soft news is a four-item additive index consisting of dichotomous (yes/no) measures of reading the food section, entertainment section, lifestyle section, and magazine

section (Cronbach's alpha = .49). Newsmagazine use is a two-item additive index consisting of dichotomous (yes/no) measures of reading the following magazines: *Newsweek* and *Time* (inter-item correlation = .30).

Broadcast media use comprises four categories of content-specific television viewing: hard news, drama, sitcom, and reality programs. Television hard news use is a three-item additive index consisting of dichotomous (yes/no) measures of viewing of the local news, evening network news, and news interviews (average inter-item correlation = .35). Similarly, the social drama viewing index is composed of *NYPD Blue*, *Law & Order*, *ER*, *Chicago Hope*, *Diagnosis Murder*, *Touched by an Angel*, *Promised Land*, and *Walker, Texas Ranger* (Cronbach's alpha = .67), whereas the sitcom viewing index is composed of *Friends*, *Frasier*, *Caroline in the City*, *Third Rock From the Sun*, *Drew Carey*, *Mad About You*, and *Spin City* (Cronbach's alpha = .71). The reality program viewing index is built from two items: *America's Most Wanted* and *Unsolved Mysteries* (inter-item correlation = .51).

Internet use is made up of three types of activities: (a) information exchange (using e-mail, exploring hobbies, and information searching for business and education; Cronbach's alpha = .81); (b) financial management, which comprises two items (made banking transaction and made a stock transaction; inter-item correlation = .23); and (c) participation in a chat room or online forum, which is a single item. Consistent with the measurement of print and broadcast media, all items composing the Internet use indices were measured dichotomously (yes/no).

Contextual Variables

To operationalize relevant features of the social environment in which individuals exist, we developed three contextual variables from among our control measures and media use measures. Specifically, we constructed indicators of social context for institutional confidence, connectedness, and community stability. Note that these variables are the community-level aggregation of the following social orientation variables: institutional trust, sociability, and residential stability. These variables were created by assigning the mean values obtained from compiling and averaging individual responses within each MSA to each respondent who resided there (Iversen, 1991; Uslaner, 1998). Although 377 distinct MSAs were initially identified in the data, we only utilized MSAs that included at least 15 individual respondents to minimize colinearity among the individual and contextual variables. This decision led to a reduction of the sample size to 3,426 for the analyses that involve contextual variables. Weighted least squares regression was used to induce homoskedasticity of error variances due to the varying

number of individual cases used to create the contextual measures (Sampson, 1988).

Age Cohorts

As mentioned above, this study also analyzes the relationship of various forms of media use across subsamples defined in terms of generational or cohort age breaks. We define five generational breaks: Generation X, Late Baby Boomers, Early Baby Boomers, Late Civic Generation, and Early Civic Generation. We anchor our age breaks around Baby Boomers, who are defined as those individuals born between the years 1946 and 1963. Thus, the Generation X group contains adults born after 1963, the Late Boomer group contains adults born between 1955 and 1963, the Early Boomer group contains adults born between 1946 and 1954, the Late Civic Generation group contains adults born between 1935 and 1945, and the Early Civic Generation group contains adults born between 1924 and 1934. All respondents born before 1924 were dropped from subanalyses. These cut points resulted in roughly equal size subsamples.

As an initial analysis to examine whether we were justified in expecting differences across these groups, we standardized all variables and computed their mean values by age cohorts. The results of this analysis are presented in Table 1 and show substantial differences on key variables between age cohorts. Some of these contrasts—for example, income, employment status, and homeownership—are not particularly surprising. It is more notable that consistent with recent social capital research, interpersonal trust and civic participation ties rise across generational age breaks, as do church attendance, life satisfaction, newspaper and newsmagazine use, and hard news and drama viewing. In contrast, older Americans are less likely to watch sitcoms, exchange information over the Internet, or participate in chat rooms than their younger counterparts. The variation in levels of media use are particularly striking and suggest that there are cohort differences in patterns of media adoption and use.

In sharp contrast to the marked differences in levels of media use across age categories, there is a remarkable similarity in patterns of cross-media use within the five age cohorts (see Table 2). For example, the six coefficients representing the relationships among the four information surveillance uses of the four media—Internet information exchange, newspaper hard news, television news viewing, and newsmagazine reading—without exception are positive for each of the five age groups and 26 of 30 relationships are statistically significant. Despite the patterns of use showing Internet use dominating in the younger cohorts and the three traditional news media forms in

Table 1
Descriptive Statistics: Standardized Means

	Generation X: Born After 1963 (n = 1,497)	Late Boomers: Born 1955 to 1963 (n = 1,442)	Early Boomers: Born 1946 to 1954 (n = 1,291)	Late Civic: Born 1945 to 1935 (n = 1,067)	Early Civic: Born 1924 to 1934 (n = 960)
Criterion variable					
Interpersonal trust	–.29	–.10	.00	.16	.27
Civic participation	–.26	–.04	–.03	.07	.31
Demographics					
Gender (female)	.00	–.06	–.01	–.03	.06
Education	.04	.08	.04	.00	–.08
Income	–.21	.19	.24	.19	–.19
Black	.08	.01	.01	–.03	–.05
Hispanic	.16	.03	–.03	–.07	–.12
Social situation					
Locality size	–.17	–.01	–.02	.02	.23
Employment	.25	.35	.29	.06	–.86
Homemaker	.09	.00	–.12	–.03	.02
Home ownership	–.56	.01	.14	.23	.32
Church attendance	–.15	–.06	–.07	.08	.25
Social orientation					
Institutional trust	–.00	–.06	–.03	–.03	.13
Sociability	.02	–.03	–.06	.04	.11
Life satisfaction	–.09	–.13	–.16	.05	.36
Residential stability	–.59	–.13	.07	.20	.51
Print media					
Newspaper hard news	–.41	–.15	–.04	.23	.40
Newspaper soft news	–.24	–.12	.06	.13	.23
Newsmagazine	–.09	–.08	.00	.05	.13
Broadcast media					
Hard news	–.45	–.22	–.07	.28	.52
Social drama	–.22	–.14	.04	.16	.30
Situation comedy	.25	.12	.04	–.15	–.24
Reality program	.02	–.06	–.01	.03	.04
Internet					
Information exchange	.24	.25	.11	–.12	–.47
Financial transaction	.04	.07	.01	.02	–.11
Chat room participation	.28	.09	–.03	–.14	–.23
Social context					
Institutional confidence	.01	–.04	–.00	–.01	.02
Connectedness	–.03	.00	.03	–.01	.03
Community stability	–.16	–.04	.02	.04	.09

Table 2
Cross-Media Use Relationships Within Age Groups (zero-order Pearson correlation coefficients)

	Generation X: Born After 1963 (n = 1,497)	Late Boomers: Born 1955 to 1963 (n = 1,442)	Early Boomers: Born 1946 to 1954 (n = 1,291)	Late Civic: Born 1945 to 1935 (n = 1,067)	Early Civic: Born 1924 to 1934 (n = 960)
Internet information use and					
Newspaper hard news	.15***	.15***	.18***	.16***	.14***
Newspaper soft news	.04	.03	.05	–.03	–.06
Newsmagazine	.08***	.07**	.07**	.11***	.01
Broadcast hard news	.05	.03	.06**	.04	.06
Social drama	–.15***	–.11***	–.09***	–.14***	–.07**
Situation comedy	.10***	–.01	.03	.00	–.00
Reality program	–.21***	–.18***	–.15***	–.13***	–.07**
Internet chat room use and					
Newspaper hard news	.05	.06**	.05	–.01	.06
Newspaper soft news	.06**	.05	.01	–.03	.01
Newsmagazine	.08***	.03	–.01	.02	–.03
Broadcast hard news	.07**	.04	.02	.02	.08**
Social drama	–.08***	–.02	–.02	–.08**	.03
Situation comedy	.07**	–.02	.02	–.01	.07**
Reality program	–.05**	–.00	–.00	–.08***	.01
Newspaper hard news use and					
Newsmagazine	.18***	.16***	.16***	.16***	.13***
Broadcast hard news	.26***	.22***	.28***	.24***	.24***
Social drama	.05	.04	.00	–.02	–.01
Situation comedy	.03	.04	.04	.01	.03
Reality program	.04	.01	–.01	.00	–.06
Newspaper soft news use and					
Newsmagazine	.12***	.14***	.08***	.09***	.15***
Broadcast hard news	.17***	.17***	.12***	.13***	.11***
Social drama	.12***	.10***	.15***	.13***	.12***
Situation comedy	.09***	.21***	.14***	.15***	.12***
Reality program	.05	.00	–.05	.02	.04
Newsmagazine use and					
Broadcast hard news	.23***	.16***	.18***	.17***	.20***
Social drama	.06**	.02	.00	–.02	–.02
Situation comedy	.09***	.02	.06**	.02	.03
Reality program	.03	.01	.02	.06**	.09***

**$p < .01$. ***$p < .001$.

older groups (see Table 1), the tendency of Internet information exchange users to also use traditional news forms is remarkably consistent for citizens of all ages.

Internet information exchange use reveals somewhat less consistent patterns across age with respect to using media for purposes of respite or escape. It is unrelated to soft news reading in newspapers, but online information users are much less likely than nonusers to watch social dramas or reality shows on television. Internet chat room visiting, less common overall than is use for information exchange, is largely unrelated to uses of other media except among the youngest cohort. Younger chat room visitors also tend to be newsmagazine and soft content newspaper readers and viewers of television news and situation comedies. They tend not to watch social dramas and reality shows.

Results

To examine the relationship of media use with the different facets of community engagement—interpersonal trust and civic participation—hierarchical multiple regressions were run. These analyses provide a stringent test of relationships between communication and community life after considering the contribution of established demographic, social situation, and social orientation variables. As indicated in Table 3, these established indicators account for a sizable amount of variance in social trust (10.5%), with demographic variables accounting for most of the variance. Notably, only age and majority status survive to the final betas, with the effects of the other demographic effects partially mediated by church attendance, social orientation variables such as institutional trust, life satisfaction and residential stability, and media use. Church attendance is the primary social situation variable that enhances trust; it does so directly and indirectly, through primarily strengthening sociability.

Among the media variables, hard and soft newspaper reading contribute to social trust, though much of their effect is attenuated by demographic controls (zero-order $r = .13$ and .09, respectively; $p < .001$). Nonetheless, they survive to the final model. Newsmagazine and television hard news use, although positively related at the zero-order r (.05 and .09, respectively; $p < .001$), are reduced to nonsignificance after demographic variables are introduced. The significant negative coefficient observed for reality programs after demographic controls also fails to retain significance on entry. Sitcom viewing is the only broadcast media variable to attain statistical significance when entered into the model; it yields a positive coefficient consistent with previous research. Most interesting are the results for Internet use. Informa-

Table 3
Hierarchical Multiple Regression: Interpersonal Trust (standardized regression coefficients)

	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Block 1: Demographics						
Age	.214***	.199***	.173***	.159***	.165***	.173***
Gender	.037**	.033**	.024	.017	.015	.015
Education	.077***	.067***	.042**	.036**	.034**	.025
Income	.066***	.057***	.023	.020	.020	.012
Black	–.059***	–.062***	–.047***	–.049***	–.045***	–.042***
Hispanic	–.038**	–.035**	–.031**	–.031**	–.028*	–.027*
Year of survey	.002	.003	–.003	–.002	–.002	–.007
Incremental R^2 (%)	6.6***					
Block 2: Social situation						
Locality size	–.021[a]	–.012	–.003	–.003	–.005	–.006
Employment	–.001[a]	.002	.011	.012	.011	.007
Homemaker	–.016[a]	–.022	–.035**	–.036**	–.036**	–.033*
Home ownership	.036**[a]	.027	.016	.018	.017	.016
Church attendance	.076***[a]	.074***	.044***	.044***	.045***	.045***
Incremental R^2 (%)		0.7***				
Block 3: Social orientation						
Institutional trust	.156***[a]		.129***	.128***	.127***	.125***
Sociability	.044***[a]		.016	.009	.008	.007
Life satisfaction	.143***[a]		.103***	.103***	.103***	.101***
Residential stability	.062***[a]		.032*	.034*	.034*	.036**
Incremental R^2 (%)			3.2***			
Block 4: Print media						
Newspaper hard news	.049***[a]			.027*	.029*	.025*
Newspaper soft news	.037**[a]			.026*	.020	.023*
Newsmagazine	.022[a]			.015	.015	.015
Incremental R^2 (%)				0.2**		
Block 6: Broadcast media						
Hard news	.017[a]				–.005	–.005
Social drama	.028*[a]				.021	.022
Situation comedy	.029*[a]				.031*	.031*
Reality program	–.029*[a]				–.019	–.015
Incremental R^2 (%)					0.2**	
Block 7: Internet						
Information exchange	.051***[a]					.053***
Financial transaction	.025*[a]					.018
Chat room participation	–.019[a]					–.035**
Incremental R^2 (%)						0.3***
Total R^2 (%)						11.2

Note. Analyses of pooled sample (N = 6,738).
a. Partial correlation coefficients after demographic control.
*p < .05. **p < .01. ***p < .001.

tion exchange contributes positively to the model predicting trust, whereas chat room participation contributes negatively after entry. These relationships, along with the control variables, total to explain 11.2% of variance in interpersonal trust.

The hierarchical multiple regression predicting civic participation also performs well, accounting for a total of 21.1% of variance (see Table 4). Demographics reflect a familiar pattern, with age, education, and income positively related to participation. In keeping with previous research on local participation, females also show higher levels of activity. The upon-entry betas drop later due to mediation by church attendance and newspaper use; sociability also appears to mediate the effects of education and income. Consistent with previous research, church attendance is the key social situation influence, but low locality size and nonemployment also make participation more likely. Among the social orientation variables, sociability and (to a lesser extent) institutional trust enhance participation. There appears to be a tight association among the variables in this block that at least partly explains the attenuation of many relationships observed after demographic and social situation controls.

Hard and soft newspaper content and newsmagazine reading have a significant and robust impact on civic participation, emphasizing the important role of print media. Three of the four television variables also contribute to the final model, though hard news viewing is not among these. Confirming the effects observed in prior research, television use has contrasting effects on civic participation: Drama viewing positively predicts civic volunteerism and associational membership, whereas sitcom and reality program viewing negatively predicts such activities. Hard news viewing is significant after demographic controls, but does not attain significance on entry. Once again, the relationship of Internet use is particularly notable; individuals who use the Internet for the purpose of information exchange are more active in civic life. In fact, the size of this relationship exceeds the predictive power of any other media variable.

Subanalyses

As discussed earlier, one of the goals of this study is to examine whether age cohort subsamples demonstrate differential relationships between media use and the criterion variables. Tables 5 and 6 share the analyses that examine this question. These analyses control for the effects of demographic, social situation, and social orientation variables when testing for media effects. In the interest of space, discussion of these findings will focus on the relative predictive power of print, broadcast, and Internet use variables.

Table 5 shows the contribution of media use variables to predictions of interpersonal trust across these five subsamples. For Generation X, use of the Internet for information exchange is positively related to trust, whereas visiting chat rooms has a negative influence. Indeed, these are the only media

Table 4
Hierarchical Multiple Regression: Civic Participation (standardized regression coefficients)

	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Block 1: Demographics						
Age	.184***	.129***	.134***	.109***	.090***	.111***
Gender	.098***	.055***	.039**	.033**	.031*	.031*
Education	.194***	.170***	.150***	.139***	.136***	.120***
Income	.034**	.049***	–.001	–.007	–.006	–.017
Black	–.010	–.021	.000	–.001	–.009	–.003
Hispanic	–.027*	–.022	–.019	–.019	–.019	–.017
Year of survey	–.011	–.008	–.007	–.006	–.007	–.014
Incremental R^2 (%)	8.4***					
Block 2: Social situation						
Locality size	–.071***[a]	–.051***	–.053***	–.052***	–.049***	–.050***
Employment	–.044**[a]	–.065***	–.051***	–.050***	–.050***	–.054***
Homemaker	.032**[a]	.035**	.028*	.026*	.026*	.031*
Home ownership	.046***[a]	.014	.015	.016	.015	.015
Church attendance	.254***[a]	.247***	.210***	.210***	.200***	.201***
Incremental R^2 (%)		6.7***				
Block 3: Social orientation						
Institutional trust	.077***[a]		.041***	.038**	.035**	.033**
Sociability	.255**[a]		.218***	.207***	.209***	.206***
Life satisfaction	.099***[a]		.018	.017	.019	.017
Residential stability	.038***[a]		–.005	–.001	–.003	.002
Incremental R^2 (%)			4.7***			
Block 4: Print media						
Newspaper hard news	.105**[a]			.057***	.057***	.050***
Newspaper soft news	.074***[a]			.029*	.034**	.036**
Newsmagazine	.057***[a]			.030**	.033**	.032**
Incremental R^2 (%)				0.6***		
Block 5: Broadcast media						
Hard news	.047**[a]				.000	–.001
Social drama	.050***[a]				.039**	.042***
Situation comedy	–.064***[a]				–.061***	–.062***
Reality program	–.033*[a]				–.032**	–.027*
Incremental R^2 (%)					0.5***	
Block 6: Internet						
Information exchange	.096***[a]					.089***
Financial transaction	.007[a]					–.003
Chat room participation	.022*[a]					–.007
Incremental R^2 (%)						0.6***
Total R^2 (%)						21.1

Note. Analyses of pooled sample (N = 6,738).
a. Partial correlation coefficients after demographic control.
*p < .05. **p < .01. ***p < .001.

variables that predict trust among members of this age cohort. It is also notable that the positive relationship between trust and information exchange observed in Table 3 appear to be concentrated among the two youngest cohorts of Americans. In contrast, the effects of television use are focused on

Table 5
Hierarchical Multiple Regression: Interpersonal Trust (final standardized regression coefficients)

	Generation X: Born After 1963 (n = 1,497)	Late Boomers: Born 1955 to 1963 (n = 1,442)	Early Boomers: Born 1946 to 1954 (n = 1,291)	Late Civic: Born 1945 to 1935 (n = 1,067)	Early Civic: Born 1924 to 1934 (n = 960)
Block 1: Demographics					
Incremental R^2 (%)	4.8***	4.0***	3.6***	2.8***	1.5*
Block 2: Social situation					
Incremental R^2 (%)	0.9*	0.1	1.6**	0.7	2.8***
Block 3: Social orientation					
Incremental R^2 (%)	3.0***	4.3***	6.7***	3.4***	3.1***
Block 4: Print media					
Newspaper hard news	.045	.017	.057	.006	.016
Newspaper soft news	.026	.044	–.019	.043	–.005
Newsmagazine	.020	.022	.003	.043	.005
Incremental R^2 (%)	0.3	0.4	0.3	0.5	0.0
Block 5: Broadcast media					
Hard news	–.016	–.027	.011	.032	–.012
Social drama	–.002	–.013	.002	.045	.038
Situation comedy	.047	.061*	.020	.012	.023
Reality program	–.034	.021	–.085**	–.040	.037
Incremental R^2 (%)	0.4	0.4	0.7*	0.4	0.4
Block 6: Internet					
Information exchange	.066*	.069*	.027	.041	.000
Financial transaction	.042	.026	.016	–.039	–.017
Chat room participation	–.071*	–.042	–.005	.001	–.016
Incremental R^2 (%)	0.7*	0.4	0.1	0.2	0.1
Total R^2 (%)	10.1	9.7	13.0	7.9	7.8

*p < .05. **p < .01. ***p < .001.

Table 6
Hierarchical Multiple Regression: Civic Participation (final standardized regression coefficients)

	Generation X: Born After 1963 (n = 1,497)	Late Boomers Born 1955 to 1963 (n = 1,442)	Early Boomers: Born 1946 to 1954 (n = 1,291)	Late Civic: Born 1945 to 1935 (n = 1,067)	Early Civic: Born 1924 to 1934 (n = 960)
Block 1: Demographics					
Incremental R^2 (%)	4.0***	6.6***	7.8***	6.3***	7.4***
Block 2: Social situation					
Incremental R^2 (%)	5.5***	7.2***	6.1***	7.1***	8.8***
Block 3: Social orientation					
Incremental R^2 (%)	5.6***	4.7***	5.0***	4.9***	5.2***
Block 4: Print media					
Newspaper hard news	.036	.053*	.029	.088**	.037
Newspaper soft news	.080**	.032	.061*	–.016	.027
Newsmagazine	.028	.094***	.044	–.010	.007
Incremental R^2 (%)	1.3***	1.2***	0.7**	0.8*	0.3
Block 5: Broadcast media					
Hard news	.026	–.051*	–.010	.015	.037
Social drama	.001	.048	.027	.048	.077*
Situation comedy	–.050*	–.065*	–.059*	–.054	–.063*
Reality program	.002	–.045	–.009	–.016	–.083**
Incremental R^2 (%)	0.2	1.0***	0.4	0.4	1.3**
Block 6: Internet					
Information exchange	.159***	.103***	.055	.098**	.089**
Financial transaction	–.011	–.015	–.011	.005	.027
Chat room participation	–.012	–.022	.012	.026	–.050
Incremental R^2 (%)	1.7***	0.7**	0.3	1.0**	0.7*
Total R^2 (%)	18.3	21.5	20.3	20.4	23.8

*p < .05. **p < .01. ***p < .001.

Baby Boomers, with trust positively related to sitcom viewing among Late Boomers and negatively related to reality program viewing among Early Boomers.

The generational differences in patterns of media effects are especially apparent in analyses predicting civic participation (see Table 6). The positive effect of Internet use is most prominent among members of Generation X. For this group, the Internet block accounts for an addition 1.7% of variance, nearly double that for any other age cohort. Moreover, the beta for information exchange is the dominant media variable in the model predicting civic participation among Generation Xers, with soft news newspaper reading the only other significant predictor. Although information exchange predicts civic participation among three of four other generational groups, in each case its effect size is comparable to other media variables. For Late Boomers, newsmagazine reading and sitcom viewing are related to participation, the former positively and the latter negatively. Likewise, individuals composing the Early Boomers and Late Civic cohorts experience pro-civic consequences from newspaper reading (of soft and hard news content, respectively), further suggesting that newspaper effects are concentrated among older Americans.

Contextual Analyses

As a final set of analyses, we introduced three contextual variables and interactions of three media variables with these contextual variables into our models predicting trust and participation. After accounting for variance explained by the control variables and media variables, the main effect of contextual community stability contributes positively to interpersonal trust (see Table 7). In addition, community stability interacts positively with two media variables, television hard news and Internet information exchange, to marginally bolster trust.

Community stability as a contextual variable adds a marginally significant increment to explaining individual differences in civic participation (see Table 7). The context of a stable community also interacts positively and significantly with Internet information use to enhance participation. Newspaper hard news reading interacts positively with two contextual variables, significantly with institutional confidence and marginally with community connectedness. It should be noted that all significant and marginally significant interactions are positive, indicating that information conveyed by media about community contexts tends to foster trust and participation.

Following our interest in differences among generations, we compared contextual influences on the two youngest age cohorts with those of the combined three older generations. For interpersonal trust, the influence of

Table 7
Weighted Least Squares Regressions: Contextual Influences on Trust and Participation

	Interpersonal Trust	Civic Participation
Block 1: Demographics		
Incremental R^2 (%)	7.1***	7.5***
Block 2: Social orientations and media use		
Incremental R^2 (%)	3.7***	7.0***
Block 3: Social context		
Institutional confidence	–.001	–.007
Connectedness	.013	–.009
Community stability	.043**	.027†
Incremental R^2 (%)	0.2*	0.1
Block 4: Media-context interactions		
Newspaper hard news × institutional confidence	.001	.036*
Newspaper hard news × connectedness	–.007	.028†
Newspaper hard news × community stability	–.017	.012
Television hard news × institutional confidence	.015	–.023
Television hard news × connectedness	.001	–.003
Television hard news × community stability	.031†	–.011
Internet information exchange × institutional confidence	.007	–.002
Internet information exchange × connectedness	.025	.007
Internet information exchange × community stability	.029†	.033*
Incremental R^2 (%)	0.2	0.3
Total R^2 (%)	11.2	14.9

Note. N = 4,129. Analyses pertain to the subsample of large Metropolitan Statistical Areas (MSA count of 15 or more). Cell entries are incremental R^2 for Blocks 1 and 2, and final standardized regression coefficients for Blocks 3 and 4.
$^{\dagger}p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

contextual community stability appears as a main effect for the older generations only (see Table 8). In contrast, for the two younger generations, the effect of community stability appears as a strong interactive effect such that community stability builds trust largely among Internet information users.

Community participation also shows a parallel interaction with Internet information exchange strengthening the connection between the context of community stability and participation among younger generations only (see Table 8). Older generations who rely more on newspapers as a source of information have a contrasting interaction between hard news reading and contextual trust in community institutions in fostering civic participation.

Table 8
Weighted Least Squares Regressions: Contextual Influences on Trust and Participation by Generational Groups

	Younger Generations: Born 1955 or Later (n = 1,674)		Older Generations: Born 1924to 1954 (n = 2,455)	
	Trust	Participation	Trust	Participation
Block 1: Demographics				
Incremental R^2 (%)	5.7***	5.9***	3.7***	6.7***
Block 2: Social orientations and media use				
Incremental R^2 (%)	4.4***	7.0***	3.6***	7.6***
Block 3: Social context				
Institutional confidence	–.028	–.003	.010	–.014
Connectedness	.002	–.015	.023	.005
Community stability	.019	.016	.055*	.021
Incremental R^2 (%)	0.2	0.2	0.3*	0.1
Block 4: Media-context interaction				
Newspaper hard news × institutional confidence	–.007	.025	.004	.044*
Newspaper hard news × connectedness	–.017	.024	–.006	.024
Newspaper hard news × community stability	–.012	–.004	–.026	.023
Television hard news × institutional confidence	.000	–.007	.015	–.030
Television hard news × connectedness	.001	.001	–.002	–.010
Television hard news × community stability	.017	–.037	.032	–.003
Internet information exchange × institutional confidence	.024	.013	.006	–.009
Internet information exchange × connectedness	.032	–.010	.029	.033
Internet information exchange × community stability	.054*	.049*	.016	.020
Incremental R^2 (%)	0.4	0.4	0.2	0.2
Total R^2 (%)	10.6	13.6	7.9	14.8

Note. n = 4,129. Analyses pertain to the subsample of large Metropolitan Statistical Areas (MSA count of 15 or more). Cell entries are incremental R^2 for Blocks 1 and 2, and final standardized regression coefficients for Blocks 3 and 4.
*p < .05. **p < .01. ***p < .001.

Conclusions and Discussion

That the use of media content matters to civic engagement is once again demonstrated by evidence from this large national data set. What is new and most intriguing here is that Internet use patterns more strongly influence trust in people and civic participation than do uses of traditional media, print, and broadcast media, particularly among the youngest adult Americans. Using the Internet for exchange of information is associated with higher levels of interpersonal trust and civic participation. The limitations of cross-sectional design prevent us from saying more about causal direction: Does information gathering on the Internet foster trust and participation and/or is it that trust and participation stimulate information seeking from the Internet? The answer to this remains unclear, and the possibility of reciprocal causation is quite tenable; nonetheless, it is clear that it is patterns of use featuring the exchange of information, not Internet use per se, that matters. This is bolstered by findings that chat room participation has an effect on interpersonal trust opposite to that of exchange of information.

Results from the analyses within age breaks make the Internet findings even more important. Generation X respondents not only use the Internet for information more than do older people, but the strength of information exchange effects is greatest in the younger groups. The dominance in level and effect of the Internet over traditional news media among young adults has important implications for the future of news media and local civic life. Again, our cross-section design limits what we can expect to happen to this cohort as they advance through the life course.

Use of print media, newspapers, and newsmagazines do continue to have positive effects on participation and trust. This holds even for the youngest generation that is much less likely to read newspapers. The magnitude of newspaper effects overall is attenuated by weak measurement in this data set—by dichotomous measures of exposure to sections of the paper, rather than by continuous measures that would include attention and exposure to specific types of content. This weakness is compounded by less than optimal measurement of the dependent variables.

Findings for broadcast media use support the idea that effects are determined by exposure to specific content rather than by overall use. Watching hard news on television has no effect on trust or participation. Drama and sitcom viewing have opposite effects: Viewing dramas is associated with civic participation; in contrast, sitcom viewing is related to less participation but to greater trust. Reality program viewing has yet a different pattern in being

associated only with lower participation. Broadcast media effects are attenuated slightly by their being introduced after the print media and diminished more severely by the lack of attention measures that are crucial to appropriate estimation of television effects (Chaffee & Schleuder, 1986).

The findings clearly indicated that effects of print, broadcast, and Internet media were independent and cumulative rather than overlapping and alternative as they affected trust and participation. This was evidenced by the marked stability of the beta coefficients before and after each of the three blocks of media variables were entered.

Generational Differences

Research on civic participation has been rather insensitive to its development over the life course (McLeod, 2000). In this study, age is among the three strongest predictors of both dependent variables. The finding that young adults trust people less and participate less in their community replicates many previous studies. The size of the present data set and the variety of measures it contains permits a much closer examination of the youngest adults and allows more reliable comparisons with other age groups than is possible in other national data sets that have more restrictive sets of variables and smaller sample sizes.

Young adults (aged 18 to 36) differ from their elders in various ways that may affect their participation in civic life. Our analyses indicated that they have less income, are less likely to be home owners, and attend church less frequently. Overall, the influence of these social factors on individual social capital is offsetting in direction and insufficient to account for their lower engagement. The young differ from older generations most sharply in having lower levels of reading newspapers and of watching television news and dramas. They are more likely to watch situation comedies. Their pattern of traditional media use may help account for their lower civic participation, but this is partially offset by their higher informational use of the Internet. Apart from their own individual characteristics, young adults are apt to live in cities and neighborhoods whose social contexts differ from those where older adults live. Our findings indicate that young adults live in cities that are less stable in residential mobility, and this context predicted individual trust and participation beyond the influence of all individual-level predictors.

Young adults also differ from older people in terms of which variables influence their civic attitudes and behavior. Trust in people and participation are more closely connected among the young than in other age groups. Status and church attendance are less likely to play a role in the civic participation of young adults. The major difference in predictive power across age groups,

however, is the use of the Internet for information exchange; it is not only more common among young adults, but its effect is greater in relation to trust and participation in civic affairs. Recent life-course socialization models suggest a gradual development of trust and participation from childhood through old age (Flanagan & Sherrod, 1998; Sotirovic & McLeod, in press). Development of civic virtues and activity is neither inevitable nor linear. Varying life circumstances can alter civic engagement: academic tracking in high school, college major, work experiences, community and neighborhood of early adult residence, interpersonal network, and media environment. These effects may be temporary for a given period or carryover as more enduring effects on civic attitudes and behavior. These varying sources and types of civic effects are best evaluated in panel designs following individuals at various time points from adolescence into early adulthood. Although the data set used here permits only a cross-sectional view of differences among generations of adults, it does produce insights into what concepts and designs should be used in future research.

Impact of Social Structure

Social structure is most often accorded a commanding role in the shaping of political participation. Social status—as indexed by education, income, gender (male), age, and race (White, Anglo)—has been found to influence the more political aspects of participation. Most often, certain social situations and processes are offered as unmeasured constructs mediating between the measured social structural forces and participation. Media use as a potential mediating social process is usually limited to the alleged negative influences of television, not further specified. Our findings for social structural influences modify previous findings in varying degrees. Education had positive influences, strong for participation and modest for trust. Its influence on trust and participation was largely indirect, being heavily mediated through its relationships with church attendance, life satisfaction, sociability, and media use. Income had almost no direct effect, and its modest indirect effect is mediated by social orientations and media use patterns. Gender differences are reversed here from most of the political participation literature. This may largely reflect the fact that our dependent variables have a civic rather than political focus and concern the community rather than the national scene. Findings for age are strong and consistent, but the findings in Tables 5 and 6 indicate distinctive generational patterns rather than simple linear effects. After demographic controls, we found only minimal effects for race. Minorities (Black and Hispanic) are less trusting of people generally, but no significant differences were found for civic participation.

Social structural influences on participation were found to be partly mediated by church attendance and other social situational aspects. Church attendance influences participation directly and also indirectly (although only modestly) through its association with higher trust in people. The processes by which church attendance stimulates civic participation require specification in future research. It may represent the presence of networks of recruitment, sources of civic projects, and opportunities to hone skills. Sociability also has a strong, direct impact on participation, but surprisingly not on trust. The processes by which socializing is translated into participation in civic activities also needs clarification. It may be a covert indicator of the size of the person's social networks, or it could indicate that recruitment to such activities often takes place at social functions. Trust in institutions, beyond personal trust, also facilitates civic participation. These institutions may include organizations at the community level that are sites for voluntary activity.

Putnam (2000) and others concerned with social capital treat our individual level indicators of interpersonal trust and civic participation as highly connected and mutually facilitative. Our results appear to challenge assertions of strong interdependence. The two criteria here were modestly correlated at the zero-order level (.12), but trust is not a significant predictor of civic participation when demographics, social situation, and social orientation variables are controlled (not shown in the tables). Why the weak relationship? Trust in people has only a single indicator and participation has only three indicators. It also may be the case that there are important paths to civic participation that are built on opportunities and orientations other than trust. Stronger relationships might be found if multiple indicators of trust were not only of people in general, but also of attitudes to the city, neighborhood, and ethnic group within the community.

Social Influences and Media

Social influences on the various media measures were evident in our analyses (not shown in the tables), although most of the mediation of social structure took place through social situation and orientation before the media variables were entered. Our research replicates much that is already known about the audiences of print media and television. Newspapers are more likely to be read by the more educated and affluent and by older people. Newsmagazine reading is similarly stratified. Television news users are considerably older but are unselective as to social status. Lower social status characterizes avid viewers of dramas and reality shows. Drama viewers tend

to be older, whereas sitcom watchers predominate among younger respondents.

What is less well-recognized is that information seekers on the Internet are far more selective than are the audiences of traditional print and broadcast media. This has serious implications for access and effects-gap issues. Internet information-seeking is not only more common among young adults, but its effects are stronger than among older adults. It may even out age gaps in trust and participation between younger and older generations. Information exchange on the Internet is even more strongly connected to education and income than is use of newspapers and newsmagazines. Thus, it may act to widen the status gaps in trust and participation that in part result from patterns of traditional news media use. Effective programs involving Internet instruction in lower socioeconomic status (SES) secondary schools could narrow existing discrepancies.

Social Contextual Influences

Over and above the effects of more than two dozen individual-level variables, we found incremental effects on individuals for the contextual variables characterizing the community in which the person resides. Community stability as a contextual variable had a significant impact on individuals' trust and participation well beyond the positive influence of its individual-level counterpart, residential stability. The influence of contextual stability on trust was direct as a main effect and indirect through positive interactions with Internet information exchange use and television news viewing. The influence of two other contextual variables, institutional confidence and connectedness, had no direct impact but did interact positively with reading hard news in the newspaper. One interpretation of the interactions of media use with contextual variables is that the media provide users with factual and normative information about the community and people generally that translates into higher levels of individual trust and civic participation. Contextual influences may be normative in two senses of that concept—normative in the strong sense of community norms and sanctions, or in the weaker sense as guidelines to the ambiguities of appropriate citizen behavior.

The limitations of contextual influences should be noted. We should consider the findings as examples for future investigation, rather than as definitive explanations of the impact of community forces on citizens' behavior. As used here, they are limited to summing the individual scores of other respondents in the data set from the person's metropolitan area. In future research, we can add community data from external sources such as the Census and other government records. In terms of theory construction and research

design, the identification of contextual effects should be followed by research specifying the social and perceptual processes by which characteristics of the community are translated into the judgments and behaviors of citizens.

We do feel that we have advanced the study of contextual effects by developing community-level context measures. This is superior to the contextual analyses of Uslaner (1998), who used the less-specific unit of the state that mixes together communities of disparate sizes and qualities. A greater improvement still is the neighborhood level of analysis adopted by Ball-Rokeach et al. (2001), particularly when considering large metros that contain may different subcommunities. Ideally, we recommend using zip codes or census tract data within the community that roughly correspond to the person's neighborhood for the type of contextual analysis employed in the article. Combined with closer attention to patterns of media use, this should considerably advance research on communication and community life.

Final Note

We must be careful not to overstate generational differences in media use as indicating that the Internet will totally replace traditional media as sources of information. Although the Internet dominates in the younger cohorts who are much less likely than older generations to use traditional media, those using the Internet for exchange of information are still more likely than others of their same age to use newspapers and newsmagazines. The cross-media information use relationships are quite similar to those of older generations, who are much heavier users of traditional print and broadcasts news sources and less likely to be Internet users. This anomaly perhaps can be explained by common generational purposes of media use but distinctive patterns of preference for source. People seek information from whatever media sources are most accessible and normative in their social networks, but those with the highest informational needs are not likely to totally abandon other media sources. For older generations, traditional print and broadcast news sources are dominant and the Internet is supplementary. The reverse pattern holds for the young: The Internet is dominant and traditional sources supplement their needs. This is bolstered by newspaper research showing that the major changes in readership among younger cohorts is from regular reading to reading some days: Total never-reading has grown only slightly. The major problem for Generation X and generations that follow may be that there are many youth who fail to use any medium for serious informational purposes.

Appendix
Question Wording

Interpersonal Trust

In this section, I have listed a number of statements about interests and opinions. For each statement listed I'd like to know whether you personally agree or disagree with this statement. After each statement, there are six numbers from 1 to 6. The higher the number, the more you tend to agree with the statement. The numbers may be described as follows: 1 (*I definitely disagree with the statement*), 2 (*I generally disagree with the statement*), 3 (*I moderately disagree with the statement*), 4 (*I moderately agree with the statement*), 5 (*I generally agree with the statement*), and 6 (*I definitely agree with the statement*). For each statement, please circle the number that best describes your feelings about that statement. You may think many items are similar. Actually, no two items are exactly alike, so be sure to circle one number for each statement.

- Most people are honest.

Civic Participation

I have listed below some activities that you may or may not have engaged in. For each activity listed, please place an "X" in the appropriate box to indicate how often during the past 12 months you have engaged in this activity: 1 (*none in past year*), 2 (*1 to 4 times*), 3 (*5 to 8 times*), 4 (*9 to 11 times*), 5 (*12 to 24 times*), 6 (*25 to 51 times*), 7 (*52 times or more*), and 8 (*not specified*).

- Did volunteer work.
- Worked on a community project.
- Went to a club meeting.

Institutional Trust

See question wording for interpersonal trust.

- Most big companies are just out for themselves.
- I have little faith in the criminal justice system.

Sociability

See question wording for civic participation items.

- Gave or attended a dinner party.
- Entertained people in my home.

Life Satisfaction

See question wording for interpersonal trust.

- I am very satisfied with the way things are going in my life these days.
- I wish I could leave my present life and do something entirely different.
- If I had my life to live over, I would sure do things differently.
- Some things I feel that I don't have enough control over the direction my life is taking.

Residential Stability

See question wording for interpersonal trust.

- We will probably move at least once in the next 5 years.
- I would be content to live in the same town the rest of my life.

Newspaper Use

Below is a list of sections of the newspaper. Please "X" each section that you read most or all issues of ("X" as many as apply).

NEWSPAPER HARD NEWS

- News section
- Business section
- Editorial section

NEWSPAPER SOFT NEWS

- Food section
- Lifestyle section
- Entertainment section
- Magazine section

Newsmagazine Use

Below is a list of magazines. Please "X" each magazine that you read most or all issues of. ("X" as many as apply.)

- *Newsweek*
- *Time*

Television Use

Listed below are different television programs. Please "X" each television show you watch because you really like it ("X" as many as apply).

TELEVISION HARD NEWS

- Evening network news (Jennings, Rather, Brokaw)
- Local news
- News interviews (*60 Minutes*, *20/20*, *Nightline*, *Meet the Press*, etc.)

SOCIAL DRAMA

- *NYPD Blue*
- *Law & Order*
- *ER*
- *Chicago Hope*
- *Diagnosis Murder*
- *Touched by an Angel*
- *Promised Land*
- *Walker, Texas Ranger*

SITCOM

- *Friends*
- *Frasier*
- *Caroline in the City*
- *Third Rock From the Sun*
- *Drew Carey*
- *Mad About You*
- *Spin City*

REALITY PROGRAMS

- *America's Most Wanted*
- *Unsolved Mysteries*

Internet Use

Below is a list of ways people use the Internet/World Wide Web. Please "X" each way that you use the Internet/World Wide Web.

INFORMATION EXCHANGE

- Sent e-mail to a friend or relative.
- Searched for information about a company and its products/services.
- Explored an interest or hobby.
- Searched for information for business reasons.
- Searched for information for school or educational reasons.

FINANCIAL TRANSACTION

- Made a stock transaction.
- Made banking transactions.

CHAT ROOM PARTICIPATION

- Participated in a chat room or online forum.

Demographic Variables

Age. Exact age of respondent.

Gender. Coded as 0 = male, 1 = female.

Education. Education level of respondent: 1 (*attended elementary*), 2 (*graduated from elementary*), 3 (*attended high school*), 4 (*graduated from high / trade school*), 5 (*attended college*), 6 (*graduated college*), and 7 (*postgraduate school*).

Income. Into which of the following categories does your annual household income fall: 1 (*less than $10,000*), 2 (*$10,000 to $14,999*), 3 (*$15,000 to $19,999*), 4 (*$20,000 to $24,999*), 5 (*$25,000 to $29,999*), 6 (*$30,000 to $34,999*), 7 (*$35,000 to $39,999*), 8 (*$40,000 to $44,999*), 9 (*$45,000 to $49,999*), 10 (*$50,000 to $59,999*), 11 (*$60,000 to $69,999*), 12 (*$70,000 to $79,999*), 13 (*$80,000 to $89,999*), 14 (*$90,000 to $99,999*), and 15 (*$100,000 or more*).

Race. White, Black, Hispanic, or Other/Asian Pacific Islander. Coded into dummy variables Black and Hispanic.

Locality size. Recoded as 1 (*non–Metropolitan Statistical Area*), 2 (*50,000 to 499,999*), 3 (*500,000 to 1.9 million*), and 4 (*2 million or more*).

Employment. Employment status of respondent recoded as 0 (temporarily unemployed; works for someone else part-time; retired and not employed; disabled, student, etc. and not employed; full-time homemaker) or 1 (works for someone else full-time; self-employed).

Homemaker. Employment status of respondent recoded as 0 (temporarily unemployed; works for someone else part-time; retired and not employed; disabled, student,

etc. and not employed; works for someone else full-time; self-employed) or 1 (full-time homemaker).

Home ownership. Ownership of residence: 0 (rented for cash; occupied, no rent paid) or 1 (owned by respondent).

Church attendance. See question wording for civic participation items.

- Attended church or other place of worship.

Notes

1. Ball-Rokeach, Kim, and Matei (2001 [this issue]) make a similar distinction between three levels of storytelling agents. The meaning of macro, meso, and micro represent continua specified for the particular analysis. Community institutions are macro in the present analysis; they might be meso or micro in analyses where nation-states are micro units. For further discussion of levels of analysis in communication research, see Pan and McLeod (1991), McLeod, Pan, and Rucinski (1995), and Friedland and McLeod (1999).

2. To fully capture social capital as a multidimensional construct, multimethod research is needed to more directly assess the meso-network and macro-institutional levels. Communities vary greatly in their network and institutional structures, resources, and processes. Social capital is as much a function of what opportunities and contexts for action community institutions and networks provide as it is the individual characteristics of citizens.

3. At times, these two roles may conflict. The extent of crime coverage, which is largely independent of the extent of actual crime in the community, may partly override efforts to build images of a friendly participatory community through coverage of citizen activity and civic projects. Local media do vary greatly in performance of these roles and this should be part of research comparing social capital across communities.

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