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Personality Strength and Social Capital

The Role of Dispositional and Informational Variables in the Production of Civic Participation

Many scholars have bemoaned declining levels of social trust and civic engagement in our society. A decline in trust, some have argued, is linked to a decrease in civic engagement and vice versa. This study examines the processes through which this dynamic, termed social capital, is maintained. The authors differentiate three dimensions of social capital: social trust, life satisfaction, and civic engagement. They also examine the influence of demographic, personality strength, political interest, and informational variables (hard news media use) on these dimensions. The authors use data from DDB Needham's 1997 Life Style Study to test their hypothesized model. Results of structural equation modeling revealed that personality strength, an amalgam of self-confidence and opinion leadership, has a relatively strong direct impact on all dimensions of social capital, whereas informational variables have rather weak effects that are limited to civic engagement.

Engagement in civic activities is considered by many to be an essential characteristic of a properly functioning society because cooperative actions enable citizens to efficiently pursue common goals (e.g., Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985; Coleman, 1990; Taylor, 1989; Tönnies, 1940). As this perspective suggests, the health of a society is determined at least in part by the aggregate level of public involvement in civic activities. Historically, Americans have participated in such collective activities to the benefit society at large (de Tocqueville, 1835/1969, 1840/1945). Consequently, the

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dramatic declines in traditional forms of civic participation over the past 30 years, as reported by Robert Putnam (1995a, in press), potentially pose a threat to the fabric of American society.

Pointing to evidence from a variety of sources, Putnam (1995b; Putnam & Yonish, 1997) concludes that participation in formal civic organizations has declined by more than one quarter, whereas levels of interpersonal trust have dropped by more than one third. Conceiving of these factors as mutually causal, he postulates a "virtuous circle" of civic engagement and interpersonal trust that is essential for the resolution of collective action problems (Putnam, 1995b). Termed *social capital*, these interrelated features of social life permit citizens to coordinate their activities and cooperate for mutual benefit (Putnam, 1995a). As such, their parallel declines are disconcerting, but not particularly surprising.

Putnam (1995b) speculates that the rise of television is responsible for the decline in social capital. That is, TV saps time we would otherwise spend engaging with others and makes use more distrustful. However, a number of critiques have been leveled against this thesis. Uslaner (1996, 1998) argues that affective evaluations, in particular, optimism or life satisfaction, do a better job of explaining the aggregate level decline and individual level production of social capital than television use. Furthermore, a number of theorists maintain that Putnam's conclusion is too simplistic and insist that the mechanisms underlying the sustenance of social capital require more complete specification (Brehm & Rahn, 1997; Levi, 1996; Moy, Scheufele, & Holbert, 1999; Shah, 1998). Finally, research has repeatedly found that viewership of public affairs programming has a positive effect on participation in civic life (e.g., Chaffee, 1982; McLeod, Scheufele, & Moy, 1999; Norris, 1996).

This study attempts to address several of these concerns. First, we specify the process through which social capital is maintained by conceiving of it as a three-way relationship among civic engagement (formal group memberships and civic participation), life satisfaction (contentment with respect to present condition and future prospects), and interpersonal trust (generalized faith in the honesty and integrity of others). Furthermore, we account for the contribution of major demographic variables (age, education, gender, and income) and consider the mediating roles of newspaper reading and broadcast news viewing within this context. Most importantly, we explicate the contribution of personality strength, a construct growing out of research on public opinion and political behavior that is an amalgam of self-confidence and opinion leadership, to the production of social capital.

Personality Strength

In their early work on political participation, Verba and Nie (1972) argued that a respondent's socioeconomic status (SES) was the predominant predictor of his or her engagement in public life. More recently, a number of scholars (e.g., McLeod et al., 1999; Nie, Junn, & Stehlik-Barry, 1996; Verba, Schlozman, & Brady, 1995) have suggested that the traditional SES model, which hypothesizes a direct link between SES and participation, might be too simplistic. Rather, they argue that the SES-participation link is mediated by a number of variables such as political interest, media use, interpersonal communication, or knowledge. Although most of these mediating variables are cognitive in nature, Noelle-Neumann (1999) has recently argued that the dispositional characteristic of personality strength (*Persönlichkeitsstärke*) might be of key interest in the study of political action and social capital. Personality strength is conceived to be a feature of individuals, a reflection of their confidence in leadership roles, their aptitude at shaping others' opinions, and their self-perceived impact on social and political outcomes. Such individuals, according to her data, show higher levels of life satisfaction and are more engaged in their communities (Scheufele, 1999).

The concept of opinion leadership (Lazarsfeld, Berelson, & Gaudet, 1944; Weimann, 1994) shares some commonality with personality strength (Noelle-Neumann, 1985; Weimann, 1991). Researchers have commonly agreed on conceptual definitions that are similar to Hellevik and Bjørklund's (1991) definition of an opinion leader as "a person who exerts influence on the opinions of others" (p. 158). Though typically conceived as exerting influence within a specific field, opinion leaders, like individuals with personality strength, are thought to shape their fellow citizens' reactions to social issues. These leaders "are to be found on every level of society and presumably, therefore, are very much like the people they influence" (Katz, 1957, p. 63).

Lazarsfeld and colleagues (1944) identified a number of key characteristics of opinion leaders. They define them as "people who are most concerned about the issue as well as most articulate about it" (p. 49). Weimann (1994) includes most aspects of previous definitions—i.e., higher levels of interest, knowledge, and social recognition than nonleaders. Beyond these factors, opinion leaders also display higher levels of political activity. "They come into contact with many people . . . through their activities in various voluntary associations . . . ; they speak at meetings, participate in discussions, and take part in many social events," (Weimann, 1994, p. 79).

In recent work, Noelle-Neumann (1999) echoes this perspective. Thus, we hypothesized the following:

Hypothesis 1: Personality strength will be positively related to engagement in civic activities.

This link between personality strength or opinion leadership and political activity can be expected to work both directly, as outlined by Weimann (1994) and others, and indirectly, mediated through social trust and a general feeling of life satisfaction. As far as trust is concerned, Bockman and Gayk (1977) found opinion leaders not only to be more trusting in other people than nonleaders, but they also felt more efficacious about the impact they personally could have on political processes. The relationship between personality strength and trust may reflect individuals' beliefs concerning the degree to which they can influence others to adopt certain attitudes or behaviors. Effective social influence may function as an indicator of the trust others have in the opinion leader (Kramer, Brewer, & Hanna, 1996). Thus, our second hypothesis asserts the following:

Hypothesis 2: Personality strength will be positively related to assessments of interpersonal trust.

Somewhat similarly, Noelle-Neumann (1999) argues that higher levels of social trust and political activity among individuals with personality strength are based on the generally positive self-image or life satisfaction that leadership fosters. Feelings of pride, for example, are "the sign of an intact [social] bond. . . . The clearest outer marker of pride is holding up one's head in public and looking others in the eyes" (Scheff, 1990, p. 15). Pride or life satisfaction, more generally, thus establishes bonds between opinion leaders and their social environment and makes them more altruistic and ultimately more active (Noelle-Neumann, 1999). Therefore, we hypothesize

Hypothesis 3: Personality strength will be positively related to assessments of life satisfaction.

Finally, it has been argued that opinion leaders are "considerably more exposed to the radio, to the newspapers and to magazines" (Katz, 1957, p. 64). Their status as influential members of their communities fosters concerns about civic issues and encourages the consumption of hard news content. This conclusion, however, has not been conclusively supported by

more recent research (e.g., Lin, 1973; Robinson, 1976). Nonetheless, we hypothesize

Hypothesis 4: Personality strength will be positively related to interest in politics and the consumption of hard news content.

Operational definitions of personality strength and opinion leadership have varied greatly between studies. Lazarsfeld and his colleagues (1944) had originally suggested that "the opinion leaders of a community could be best identified and studied by asking people to whom they turn for advice on the issue at hand" (p. 49). In subsequent research, the Columbia scholars singled out opinion leaders by asking two questions: "Have you recently tried to convince anyone of your political ideas?" and "Has anyone recently asked you for your advice on a political question?" (Katz, 1957).

More recently, scholars have asserted that personality strength can be identified using the self-designating technique.[2] Employing such a technique, Noelle-Neumann (1985) had originally proposed an instrument consisting of 10 statements tapping self-confidence and opinion leadership, with which respondents could agree or disagree. Her data suggest that these 10 items can be combined into a unidimensional and highly reliable scale. Subsequent research reduced the number of items while maintaining high reliability.

Information Seeking and Collectivism

As postulated by a number of political behavior researchers, the effects of opinion leadership or personality strength on social capital may by explained at least in part by the relationship of leadership to informational variables, such as interest in politics and news consumption (Noelle-Neumann, 1999; Weimann, 1994). Moreover, such informational variables have been found to mediate the SES-participation link, indicating that demographic variables work through political interest, newspaper reading, and television news viewing (as well as other variables) to influence involvement in collective action (McLeod et al., 1999; Nie et al., 1996; Verba, Schlozman, & Brady, 1995). In this vein, some studies have explained public affairs information-seeking, generally, and use of newspapers, in particular, as a consequence of generalized interest in political life (e.g., McLeod et al., 1996, 1999). From this perspective, political interest spurs increased attention to news media and encourages other forms of political information consumption. Thus we hypothesize

Hypothesis 5: Interest in politics will be positively related to the consumption of hard news.

Another possible explanation for these oft-observed linkages is that interest in politics and news consumption reflects a broader collectivist outlook. Recent research by Funk (1998) explores whether a "value commitment" to benefit the community explains civic engagement. Using data from the 1990 to 1992 NES panel study, she found that endorsement of a collectivist outlook, which she terms *societal interest*, does contribute to "efforts to solve community problems and giving money to charities" (p. 610). Awareness and concern about community needs, it is argued, fosters civic participation (Unger, 1991). This is not to say that participation always reflects an "other-regarding" disposition (see Cialdini et al., 1987; Omoto & Snyder, 1995; Schaller & Cialdini, 1988) but that societal (or political) interest may foster engagement in collective action. As Kramer and colleagues (1996) contend, individuals who see themselves in terms of a social, as opposed to individualistic, identity "are more likely to think and act in collective terms" (p. 368). Thus, for our sixth hypothesis, we assert

Hypothesis 6: Interest in politics and hard news consumption will be positively related to engagement in civic activities.

The collectivist outlook reflected by an interest in politics may also be related to interpersonal trust. Organizational behavior scholars have long recognized that there are motives underlying trust in social settings that go beyond reciprocity or morality (Brewer & Kramer, 1986). In particular, elicitative trust, which is grounded in the belief that one can produce reciprocal trust through unilateral initiatives (see Schelling, 1978), and compensatory trust, which rests on the assumption that trust by some members of an organization can compensate for free-riding by other members (see Brewer, 1985), may be integral to developing a more complete conception of social trust within the social capital dynamic. These differing forms of trust are not mutually exclusive; rather, they should be considered complementary.

With respect to interest in politics, individuals who hold a collectivist perspective may be more likely to display trusting attitudes and engage in trusting behaviors for the "good of society." As Kramer and colleagues (1996) suggest, "If the collective trust is perceived by organizational members as a valuable shared resource worth protecting," then individuals may be willing to engage in trusting behaviors to offset the lack of trust by some and to illicit trust from others (p. 374). From this perspective, the frequently detected relationship between newspaper reading and social trust that social

theorists have had some difficulty explaining (see Cappella, Lee, & Southwell, 1997; Putnam, 1995b) stands to reason. That is, newspaper reading may be functioning as a surrogate for societal interest in analyses predicting trust; the collectivist outlook held by the politically interested accounts for the relationship between reading and trusting. Thus, we hypothesize that

Hypothesis 7: Interest in politics will be positively related to assessments of interpersonal trust.

Participation, Life Satisfaction, and Trust

Putnam (1993, 1995a, 1995b) uses the term *social capital* to describe elements of social life such as networks, norms, and trust that provide the means for citizens to resolve collective action problems. Accordingly, a society's general level of engagement and trust are component parts of the aggregate social capital concept. For a community, frequent cooperation by its members is expected to lead to tighter social linkages and increased trust in one another: a "virtuous circle" of participation and trust. Support for this can be found in research on prisoner's dilemma games. In noniterated games, trust leads to cooperation; in iterated games, cooperation generates trust, which leads to further cooperation (Axelrod, 1984; Wrightsman, 1992).

Research across a number of disciplines suggests that satisfaction with one's life may be a third component in this virtuous circle. Especially noteworthy is work on civic culture that maintains that trust and life contentment are tightly bound together as a cluster of attitudes supporting mass participation and democratic governance (Inglehart, 1997; Sullivan & Transue, 1999; cf. Galbraith, 1992). Some research supports this view; in labor unions, for example, personal satisfaction appears to predict participation in joint actions (A. Cohen, 1993; Fuller & Hester, 1998; Harlow & Cantor, 1996). Furthermore, a large literature demonstrates that social integration and participation are important determinants of life satisfaction (for a review, see S. Cohen & Wills, 1985). Psychologists and communication scholars also have demonstrated strong ties between civic engagement and personal contentment. Especially relevant is work on volunteerism and other helping behaviors, some of which suggests that a primary motive for participation is "to feel good [and] boost self-esteem" (Omoto & Snyder, 1995, p. 671; see also Cialdini et al., 1987; Schaller & Cialdini, 1988).

Similarly, life satisfaction and social trust appear to be closely bound together, particularly within interpersonal relationships. Psychological research has come to view life satisfaction as an effectively charged interpretive schema that shapes social evaluations (Feist, Bodner, Jacobs, Miles, &

Tan, 1995; Manusov, 1990). As a result, dissatisfaction may lead individuals to question the honesty and underlying motives of those around them, whereas satisfaction with one's current circumstances fosters more favorable evaluations (Andersen, 1985; Patterson, 1982). In contrast, some sociological researchers contend that "life satisfaction begins with trust" (Swords, 1998, p. 34). Trusting attitudes, some argue, are socialized early in life, subsequently serving as the foundation for a generalized sense of well-being.

Uslaner (1996) extends these arguments. He reckons that feelings of well-being and optimism are central to the broader social capital dynamic. According to this perspective, rising pessimism and dissatisfaction explain the erosion of social capital, not television use. In particular, he argues that a worldview that reflects satisfaction with one's personal life, socioeconomic circumstances, and value system is central to the maintenance of social capital. Life satisfaction works through the value of trust to influence citizens' willingness to join social organizations and engage in community activities.

Notably, some of the postulated relationships among participation, life satisfaction, and trust have been observed in individual-level assessments of social capital using national survey data. Brehm and Rahn (1997) and Shah (1998) find that feelings of personal well-being predict trust in others, whereas Uslaner (1998) finds a mutual relationship between satisfaction and trust. Further, Brehm and Rahn find the relationship between trust and participation to run in both directions. Although Uslaner (1998) only finds support for a link from participation to contentment, Shah (1998) observes that contentment predicts civic engagement. A recent analysis treating all three variables as endogenously related to one another finds strong support for reciprocal links among civic engagement, contentment, and interpersonal trust (Shah, Holbert, & Kwak, 1999). In sum, these studies suggest that life satisfaction directly and indirectly influences both civic engagement and interpersonal trust. Therefore, we hypothesize that

Hypothesis 8: Interpersonal trust, life satisfaction, and civic engagement will be positively associated with one another.

Method

The Data Set

The data used in this study were collected as part of an annual mail survey conducted by Market Facts and funded by the DDB Needham advertising agency. Initially, Market Facts acquires the names and addresses of a massive number of Americans from commercial list brokers. Via mail, large

numbers of people from these lists are then asked to express their willingness to participate periodically in mail or telephone surveys, and if so, to provide some basic demographic information. Demographically balanced samples are then drawn from among the 500,000-plus people agreeing to become part of the prerecruited "mail panel" for inclusion in the DDB Needham Life Style Survey.

In an effort to achieve a balanced final sample, the starting sample of approximately 5,000 mail panelists is adjusted within the subcategories of race, gender, and marital status to compensate for expected differences in return rates. As Putnam and Yonish (1999) explain, "Weights are then applied to the actual respondents to match the demographic composition of the final sample target population" (p. 5). In short, the sample is drawn to approximate "actual distributions *within the 9 Census divisions* of household income, population density, panel member's age, and household size" (Groeneman, 1994, p. 4, emphasis original). In 1997, of the roughly 5,000 mail surveys distributed to mail panelists, 3,462 usable responses were received, for a final response rate of 69.2%.

Measures

Our final analyses included four exogenous variables. The measures of age (M = 47.94) and gender (55% females) were relatively straightforward. Education levels were assessed on a 7-point scale ranging from *attended elementary school* to *postgraduate school*. The sample median was 5, (i.e., having attended some college). Household income was measured on a nonlinear 15-point scale that increased in $5,000 increments between incomes of below $10,000 and $49,999 and in $10,000 increments for incomes higher than $50,000. The mode of responses fell between $50,000 and $59,999.

Four antecedent endogenous variables were included in our analyses. Interest in politics was measured on a 6-point scale (M = 3.12, SD = 1.54). An additive personality strength index (M = 14.95, SD = 3.69) was created from four items tapping respondents' perceptions of self-confidence and opinion leadership in their community.[3] This operationalization reflects an effort to integrate traditional self-designating measures of opinion leadership into the broader construct of personality strength, which focuses on feelings of self-confidence and being influential (see Noelle-Neumann, 1985; Weimann, 1994). The items comprising this scale used the same anchors as the political interest scale. A newspaper hard news use index (M = 1.17, SD = .76) was constructed using dichotomous measures of exposure to the news section and the editorial section (r = .26) in daily newspapers. Television hard news combined three dichotomous measures into an additive index (M = 1.66, SD =

1.09): exposure to evening network news, exposure to local news, and exposure to news interviews such as *60 Minutes*, *20/20*, or *Nightline*. The Kuder-Richardson reliability coefficient of this measure was .60.

The three final endogenous variables were social trust, life satisfaction, and civic engagement. To measure social trust (M = 3.74, SD = 1.24), respondents were asked to express their agreement with the statement, "Most people are honest." The anchors were *definitely disagree* and *definitely agree*. An additive index of life satisfaction combined four items measuring respondents' satisfaction with their lives and the level of control that they felt they had over their own lives (M = 15.31, SD = 4.52).[4] Finally, civic engagement was measured as an additive index of three items, tapping how often respondents had engaged in civic or community activities (M = 5.98, SD = 3.60). Each item was measured on a nonlinear 7-point scale ranging from *none* to *52 times and more*.[5] The reliability coefficient was α = .65.

Analytical Methods

To be able to test interrelationships among independent and dependent variables, we employed structural modeling techniques, in this case, using LISREL (Jöreskog, 1993). In contrast to other multivariate techniques, structural equation modeling allows for the simultaneous estimation of all coefficients in the model. Any given coefficient therefore represents the relationship between two variables controlling for all other relationships and variables in the model.

As far as the overall model is concerned, structural equation models postulate "a pattern of linear relationships among these variables" (MacCallum, 1995, p. 18) and tests these relationships against the data collected. By treating endogenous variables as both independent and dependent variables, structural equation modeling allows for the estimation of direct and indirect effects. An indirect effect is the influence of an independent variable on a dependent variable through one or more intervening or mediating variables (Bollen, 1987; Hoyle, 1995).

In analyzing the proposed relationships, we follow Jöreskog's (1993) "model generating approach." This approach proceeds in two steps. In the first step, an initial model is specified, based not necessarily on specific hypotheses about single paths between variables, but "at least some tentative ideas of what a suitable model should be" (Jöreskog, 1993, p. 313). In the second step, based on this core model, paths can be freed or fixed based on the so-called Lagrangian Multiplier (LM) test (Bollen, 1987). All parameters that are added based on the LM test should be meaningful and substantively interpretable.

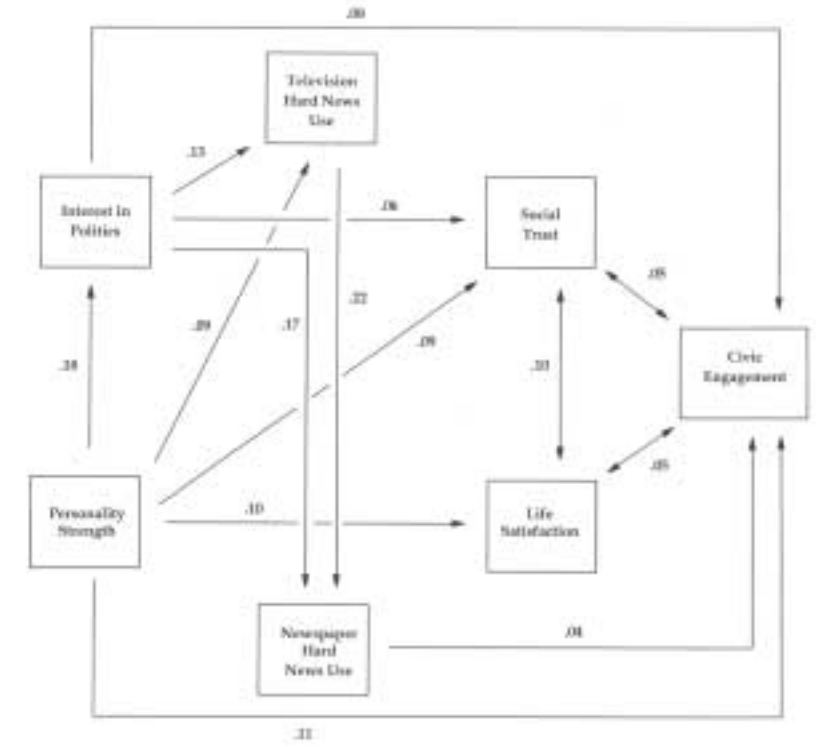

Figure 1. Structural Model (exogenous variables controlled)

Results

After testing an initial model that contained all hypothesized paths, a final model emerged that fit the data very well (see Figure 1). The chi-square (14, N = 3,462) is 16.56, which translates into a Bayesian Information Criterion statistic (see Raftery, 1995) of –97.53. The Goodness-of-Fit index (GFI) and Adjusted-Goodness-of-Fit index (AGFI), accounting for multivariate nonormality, both indicate an equally excellent fit with coefficients of 1.00 each. The variables included in this model accounted for 8% of the variance in social trust, 6% in life satisfaction, and 9% in civic engagement. The zero-order relationships among these variables are shown in Table 1.

As is apparent from the figure, almost all predicted paths were statistically significant and in the hypothesized direction. The two exceptions, which were parsed from the initial model, are the expected direct links between

Table 1
Zero-Order Correlations

	1	2	3	4	5	6	7	8	9	10	11
1. Age	1.00										
2. Gender (f)	–.00	1.00									
3. Education	–.12**	–.02	1.00								
4. Income	–.07**	–.10**	.39**	1.00							
5. Personality strength	–.02	–.17**	.16**	.17**	1.00						
6. Political interest	.18**	–.11**	.18**	.08**	.22**	1.00					
7. Newspaper hard news use	.22**	–.01	.06**	.11**	.03	.14**	1.00				
8. TV hard news use	.40**	.04*	–.02	–.02	.09**	.20**	.23**	1.00			
9. Life satisfaction	–.08**	–.01	–.15**	–.24**	–.21**	–.10**	–.04*	–.04*	1.00		
10. Social trust	.23**	.01	.06**	.12**	.08**	.13**	.09**	.10**	-.19**	1.00	
11. Civic engagement	.18**	.11**	.21**	.10**	.18**	.18**	.08**	.12**	–.13**	.14**	1.00

*$p < .05$. **$p < .01$.

Table 2
Impact of Exogenous Variables

	Age	Gender (f)	Education	Income
Personality strength	–.03*	–.03*	.10*	.11*
	—	—	—	—
	–.03*	–.03*	.10*	.11*
Interest in politics	.20*	–.08*	.17*	—
	–.01*	–.01*	.02*	.02*
	.19*	–.09*	.19*	.02*
Newspaper hard news use	.16*	.03*	.06*	.05*
	.12*	.00	.04*	.01*
	.28*	.03*	.10*	.05*
TV hard news use	.37*	.06*	—	—
	.02*	–.01*	.03*	.01*
	.39*	.05*	.03*	.01*
Life satisfaction	.13*	—	.08*	.15*
	.00	—	.01*	.01*
	.12*	.00	.09*	.16*
Social trust	.22*	—	—	.11*
	.01*	–.01*	.02*	.01*
	.23*	–.01*	.02*	.12*
Civic engagement	.15*	.05*	.18*	—
	.02*	–.01*	.03*	.02*
	.17*	.04*	.21*	.02*

Note. Coefficients in the first row of each cell indicate direct effects, coefficients in the second row indicate indirect effects, and coefficients in the third row indicate total effects.
*$p < .05$.

personality strength and newspaper hard news use (Hypothesis 4) and between television hard news use and civic engagement (Hypothesis 6). As discussed below, while direct relationships between these variables were not observed, indirect effects were detected, providing some support for these hypothesized links. Notably, all other hypotheses were fully supported, providing strong support for our theorized model.

Effects of Demographic Variables

As can be seen in Table 2, older respondents tended to be more interested in politics ($\gamma = .20$) and they were more likely to expose themselves to political content in newspapers ($\gamma = .16$) and on television ($\gamma = .37$). In addition, they displayed higher levels of social trust ($\gamma = .22$) and civic engagement ($\gamma = .15$), and they tended to be more satisfied with their personal life ($\gamma = .13$). How-

ever, older respondents were less likely to demonstrate personality strength (γ = –.03).

Males tended to be more interested in politics (γ = –.08) and were more likely to identify themselves as having personality strength (γ = –.03). Females, however, showed higher levels of exposure to political content in newspapers (γ = .03) and on television (γ = .06). They were also more likely to engage in civic activities (γ = .05).

Respondents' education and income levels showed very similar patterns of relationships to the endogenous variables in our model. Both education and income were positively related to personality strength with gammas of .10 and .11, respectively, to life satisfaction (γ = .08 and γ = .15) and to exposure to political news in newspapers (γ = .06 and γ = .05). In addition, higher levels of education were also linked to higher levels of political interest (γ = .17) and civic engagement (γ = .18). Respondents with higher levels of income displayed higher levels of interpersonal trust (γ = .11).

Relationships Among Antecedent Endogenous Variables

As can be seen in Table 3 and Figure 1, personality strength was relatively strongly related to political interest (β = .18), as expected. Self-confident opinion leaders also tended to be more satisfied with their personal life (β = .10). Even though there was no direct association between personality strength and exposure to political news in newspapers, a moderate indirect link between the two variables emerged (indirect effect of .06), mediated by political interest, providing some support for Hypothesis 4. Respondents who rated themselves as having personality strength were also more likely to expose themselves to political content on television (β = .09), were more trusting in others (β = .09), and displayed higher levels of civic engagement (β = .11). In sum, these results provide strong support for Hypotheses 1, 2, and 3, and partial support for Hypothesis 4.

Respondents with higher levels of political interest were also more likely to expose themselves to political content in newspapers (β = .17) and on television (β = .13). They tended to be more trusting in other people (β = .06) and were more likely to engage in civic activities (β = .08). These results provide support for Hypotheses 5, 6, and 7 as they relate to interest in politics.

With the exception of a link between exposure to political content in newspapers and civic engagement (.04), media use variables were not directly related to any of the criterion variables. Exposure to political content on television showed a small but significant indirect effect (.01) on civic engagement, providing some support for Hypothesis 6 as it relates to hard news use. In addition, consistent with previous research (e.g., McLeod et al., 1999), we

Table 3
Impact of Endogenous Variables

	1	2	3	4	5	6
1. Personality strength	—	—	—	—	—	—
	—	—	—	—	—	—
	—	—	—	—	—	—
2. Interest in politics	.18*	—	—	—	—	—
	—	—	—	—	—	—
	.18*	—	—	—	—	—
3. Newspaper hard news use	—	.17*	—	.22*	—	—
	.05*	.03*	—	—	—	—
	.05*	.20*	—	.22*	—	—
4. TV hard news use	.09*	.13*	—	—	—	—
	.02*	—	—	—	—	—
	.11*	.13*	—	—	—	—
5. Life satisfaction	.10*	—	—	—	—	—
	—	—	—	—	—	—
	.10*	—	—	—	—	—
6. Social trust	.09*	06*	—	—	.10*	—
	.01*	—	—	—	—	—
	.10*	.06*	—	—	—	—
7. Civic engagement	.11*	.08*	.04*	—	.05*	.05*
	.02*	.01*	—	.01*	—	—
	.13*	.09*	.04*	.01*	—	—

Note. Coefficients in the first row of each cell indicate direct effects, coefficients in the second row indicate indirect effects, and coefficients in the third row indicate total effects. Coefficients for relationships between life satisfaction, social trust, and civic engagement are nondirectional phi-coefficients. Therefore, no indirect and total effects are listed for these links.
*$p < .05$.

found respondents who used more television news to be more likely to follow up this information in newspapers ($\beta = .22$). This relationship was not formally predicted; it emerged in the process of model specification in response to limitations of the initial model.

Relationships Among Criterion Variables

The triangle of criterion variables explicated earlier shows significant interrelationships. Life satisfaction was significantly and positively related to levels of social trust ($\Psi = .10$) and to civic engagement ($\Psi = .05$). Social trust and civic engagement were related with a psi coefficient of .05. These results provide support for Hypothesis 8. In sum, we found support for all hypothesized relationships with the exception of some direct links predicted in Hypotheses 4 and 6. It seems, then, that dispositional features such as personality strength and interest in politics play an important role in the

Table 4
Construct Validity: Opinion Leadership Versus Informational Variables

	Social Capital		
Variance Accounted for by	Social Trust	Life Satisfaction	Civic Engagement
Demographic variables Age Gender (f) Education Income	7.4**	6.9**	9.6**
Informational variables (unique variance) Newspaper hard news use TV hard news use	0.0	0.0	0.1
Personality strength (unique variance)	0.4**	2.8**	2.5**
Shared variance	0.0	0.1	0.2

**$p < .01$.

production of social capital that goes well beyond the contribution of media variables such as newspaper and television hard news use.

To strengthen our argument, a final, more formal examination of this relationship was conducted by calculating the unique proportions of the variance in dimensions of social capital accounted for by personality strength, on one hand, and informational variables on the other hand. As Table 4 shows, personality strength accounts for significant amounts of variance in all three dimensions of social capital beyond informational variables and demographics. The proportions of variance shared by informational variables and personality strength are essentially negligible. At the same time, the proportions of variance accounted for in the three dimensions of social capital differ between dimensions. Whereas the proportion of the variance on social trust that is accounted for only by personality strength and not by other variables is only 0.4, the unique variance accounted for by personality strength is substantially higher for life satisfaction and social engagement.

Discussion

In this study, we examined the impact of personality strength and cognitive informational variables on dimensions of social capital. Scholars such as Noelle-Neumann (1999) have suggested that personality strength as reflected in opinion leadership might play a role in creating social capital that goes beyond SES (e.g., Verba & Nie, 1972), resources (e.g., Verba,

Schlozman, & Brady, 1995), or cognitive and informational variables (e.g., McLeod et al., 1996). Our findings support this assertion.

As far as our criterion variables are concerned, previous research has consistently supported the notion that social capital is a multidimensional construct. There has been substantial disagreement, however, about the conceptualizations of these subdimensions and, more importantly, about the interrelationships among them (Brehm & Rahn, 1997; Putnam, 1995b; Shah, 1998; Shah et al., 1999; Uslaner, 1998). Based on this previous research, we conceptualized social capital as a multidimensional construct. We distinguished three dimensions: social trust as an interpersonal dimension, life satisfaction as an intrapersonal dimension, and social engagement as a behavioral dimension. We found support for the relationships among these variables and observed that both demographic, dispositional, and informational variables contribute to their maintenance.

Restrictions of Our Model

Our model certainly simplifies reality and therefore suffers from a number of weaknesses endemic to such efforts. First, the research presented here makes a distinction between types of media but not between types of media content. Moy and colleagues (1999) and Scheufele and Moy (1998) found distinct differences, for example, with respect to the relationships between entertainment television use and television hard news use on one hand, and dimensions of social capital, on the other. Somewhat similarly, Shah (1998) found that consumption of different genres of television had both positive and negative relationships with interpersonal trust and civic engagement.

Other research has examined the differences between entertainment and hard news content and their impact on dimensions of social capital. We therefore decided not to add measures of different types of media content into our model. In other words, our research is concerned with the contribution that variables such as personality strength make to social capital beyond informational and cognitive variables. We are less concerned with an examination of the dimensionality of media use and its implications for social capital.

Second, our model is not explicating the directionality of the relationships among interpersonal trust, life satisfaction, and social engagement (for such an examination, see Shah et al., 1999). It is important to note that by defining the interrelationships among these variables as nondirectional, we are not arguing for a conceptualization of these links as reciprocal. Rather, as outlined earlier, arguments can be made for unidirectional and bidirectional pathways between all three criterion variables.

Formally testing bidirectional links between variables in cross-sectional data is only possible if instrumental variables are identified and employed in the nonrecursive model. Statistically, tests of reciprocal paths between variables create problems for ordinary regression methods, because any sample will only yield one coefficient to express a relationship between two variables (Marsh, 1982; Wright, 1960). Relatively advanced statistical techniques such as two-stage least squares regression (e.g., James & Singh, 1978) or simultaneous equation models with various estimation techniques (e.g., Bollen, 1987; Loehlin, 1992) are necessary to test reciprocal links between variables. In addition, stringent assumptions about causal effects of outside instrumental variables differentially feeding into the reciprocal variables need to be formulated to ensure appropriate model identification (e.g., Berry, 1984; Bollen, 1987; Loehlin, 1992). Even when such predications are possible, researchers run the risk of capturing only one phase of the reciprocal relationship during the cross-sectional snapshot or estimating coefficients for individuals at different stages in the reciprocal process (Marsh, 1982). Therefore, in this study, we decided not to define the links between our three criterion variables as directional.

Conclusions

Our examination of personality strength and informational variables and of their impact on social capital showed that informational variables played only a minor role in predicting dimensions of social capital when all other variables in the model were controlled in the structural models. Consistent with previous research (e.g., McLeod et al., 1999), people who exposed themselves to television hard news use were also more likely to expose themselves to hard news content in newspapers. Both newspaper and television hard news use, however, showed relatively weak links to only one dimension of social capital: civic engagement. Furthermore, the impact of television hard news use was only indirect, mediated through newspaper hard news use. This limited role of media use variables poses a challenge to news organizations, especially given the more recent attempts to connect news media more directly to communities as part of civic journalism movements (Merritt & Rosen, 1995). Our findings raise the question of how successful these attempts have been, given the relatively weak relationships between media use variables and dimensions of social capital.

Similar to this, interest in politics showed relatively weak links with civic engagement. However, as suggested by Kramer and colleagues (1996) and

Funk (1998), a positive, albeit weak, direct link was observed between interest in politics and interpersonal trust. This provides some support for the perspective that interest in politics reflects a collectivist outlook, which may have important implications for various forms of identity-based trust. Personality strength, in contrast with the informational variables, proved to be a strong antecedent of all dimensions of social capital. It is important to note that the links between personality strength and dimensions of social capital were mostly direct. Although self-confident opinion leaders tended to display higher levels of political interest and media use, there were only minimal indirect effects of leadership on social capital, mediated by interest or informational variables. These findings strongly suggest that personality strength plays a role in promoting social capital that goes beyond SES, political interest, or informational variables.

Overall, we have shown that personality strength does matter for the study of social capital. It matters normatively as an important antecedent of trust and engagement; it should also matter for researchers studying participatory processes, in particular, and social capital, in general, as a variable that has an impact in conjunction with but also beyond informational variables. Self-confident leaders are more trusting in other people, they are satisfied with their life and their achievements, and they are more likely to engage in various forms of community activities. The self-reports used in this research tap a person's confidence in being able to persuade others to follow their lead and in giving advice on various topics. As this study shows, part of their influence might come from leading by example.

The broader implications of these findings are twofold. First, as stated above, much of the focus of efforts to revive civic society have focused on supplying citizens with information. This research suggests that it may be more important to identify individuals with personality strength and direct resources toward them. To this end, such individuals may be much more consequential for the health of American democracy than public journalism, behind which so many institutions and individuals have directed their efforts. Second, this research suggests that the dispositional roots of personality strength should be more fully explored. It appears that income and education contribute substantially to confidence in one's own leadership and the ability to influence others. There may be other factors that are exogenous to this construct that are deserving of exploration, namely diversity of discussion networks, cognitive complexity, and prior leadership experience. Future research should explore these variables in relation to personality strength within the context of social capital production.

Notes

1. The authors, who contributed to this article, wish to thank DDB-Chicago for access to the 1997 Life Style Study, and Marty Horn and Chris Callahan, in particular, for making these data available and sharing methodological information.

2. Of course, such measurement is open to challenge from a number of perspectives. As far as the general design of our study is concerned, it is important to note that the self-designating technique applied here is only one of four possible approaches. In addition to self-designation, opinion leaders can be identified through observation. In this design, an observer monitors a group's activities, the main actors, and the flow of information. The shortcoming of this method is self-evident: It is "limited to only small social units (a class, a village, a military unit, etc), and requires a relatively longer time than . . . other methods" (Weimann, 1994, p. 46). Second, opinion leadership has been measured using the sociometric technique. This method is very similar to Lazarsfel, Berelson, & Gaudet's (1944) original suggestion. Group members are asked whom they go to for advice or information about a given issue. This method is more applicable to a "design in which all members of a social system are interrogated than to one in which a relatively small sample within a larger universe is contacted" (Rogers & Cartano, 1962, p. 438). Finally, to address the problems of the sociometric technique in studies with large populations, key informants can be interviewed and asked to identify opinion leaders. Similar to studies employing the sociometric technique, however, "the informants' rating method will not be applicable to sample designs. Therefore it will be of limited usefulness in the study of large communities" (Weimann, 1994, p. 33). For cross-sectional studies, Rogers and Cartano (1962) assert that a "self-designating opinion leadership scale is reliable, valid, and unidimensional. Other advantages are that it may be administered in less than five minutes in a research interview, and the nature of the items suggest that they might be adapted to studies of any type of opinion leadership" (p. 441).

3. The exact wording of the questions was, "I have more self confidence than most of my friends," "I like to be considered a leader," "I am the kind of person who knows what I want to accomplish in life and how to achieve it," and "I am influential in my neighborhood." The reliability of the 4-item index was $\alpha = .66$. The main criteria we applied in the development of our measure of personality strength were based on validity and reliability considerations. Specifically, an item analysis revealed that a number of the items in the questionnaire designed to measure opinion leadership did not scale well with the total opinion leadership index. These items were therefore excluded from our analyses. Additional items that had originally not been designed to tap opinion leadership, but instead tapped aspects of personality strength such as self-confidence and leadership abilities, were included based on their apparent face validity and the fact that they showed high levels of internal consistency with the other items in the index. Even though the Cronbach's alpha of .66 of our final index might be considered relatively low, it should be noted that the average item-total correlation among the four items was .44. In data collected by Verba, Schlozman, Brady, and Nie (1995) as part of their Civic Participation Study, a similar self-report measure was employed with a total of eight items. Even though the Cronbach's alpha of the measure by Verba and colleagues (1995) was higher ($\alpha = .72$), their average item-total correlation was lower, at .41 (see Carmine & Zeller, 1979).

4. The exact wording of the questions was, "I wish I could leave my present life and do something entirely different," "I dread the future," "If I had to live my life over, I would sure do things differently," and "Sometimes I feel that I don't have enough control over the direction my life is taking." All items were measured on 6-point scale

ranging from *definitely disagree* to *definitely agree* and inverse-coded. The reliability coefficient was $\alpha = .70$.

5. The items were, "Went to a club or meeting," "Did volunteer work," and "Worked on a community project." Each item was coded on a 7-point scale. The scale points were 1 = *none in the 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*, and 7 = *52 times and more*.

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