Why Do People Watch News They Do Not Trust? The Need for Cognition as a Moderator in the Association Between News Media Skepticism and Exposure

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Prior research has found only modest associations between news media trust and exposure. Many news skeptics report moderate to high levels of mainstream news exposure, despite their mistrust of mainstream news. Why do people watch news they do not trust? This study investigates the moderating role played by the psychological construct of "the need for cognition" (NFC) in this association. An NFC × Media Skepticism interaction is hypothesized and tested on survey data (N = 424). Results provide evidence for such an interaction. For those with a reduced NFC, mainstream media skepticism is strongly associated with news exposure. As NFC increases, the association between news skepticism and exposure disappears. It is concluded that people consume news they do not trust when their media skepticism is irrelevant to their motivation for news exposure.

Trust was called by social scientists "the chicken soup of social life" (Uslaner, 2002, p. 1). Research in the social sciences shows that trust plays an important part in many human interactions (for a review, see Uslaner, 2002). For example, trust in politicians is related to political participation, trust in our teammates is related to teamwork, and trust in health care providers facilitates effective treatment. Media scholars investigating the correlation between trust in news organizations and news media exposure, however, have found only minor, albeit in

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most cases significant, associations (Kiousis, 2001; Rimmer & Weaver, 1987). In terms of explained variance, news media skepticism accounts for only a fraction of the variance in news exposure. In a previous study (Tsfati & Cappella, 2003), we estimated that there is a minimal difference—only 1.6 days of watching national television news per week—between the amount of time the most skeptical and least skeptical audiences spend watching national network television news, and that even the most skeptical audience members watch the national and local news on television and read daily newspapers.

Why do people watch what they do not trust? One answer might be that news gratifies diverse needs even when trust is abrogated. In this article, we explore the moderating role of the psychological "need for cognition" (NFC) in the association between media trust and exposure. It is argued that, for people with a high level of NFC, the need to think, to understand, to make sense of the world, and to learn about various points of view motivates news exposure, regardless of whether the news media are perceived as trustworthy or not.

TRUST AS A CONSEQUENTIAL PHENOMENON

Fukuyama (1995) defined trust as

the expectation that arises within a community of regular, honest and cooperative behavior, based on commonly shared norms. Those norms can be about deep "value" questions like the nature of God or justice, but they also encompass secular norms like professional standards and codes of behavior. (p. 26)

In trust relations, there are, at the very least, two sides: the side that places trust and the side being trusted. For trust to be relevant, there must be a possibility for one side to act contrary to the expectations of the other by betraying the shared norms of cooperation.

Ample social research demonstrates that trust is consequential for understanding a variety of social behaviors. Interpersonal trust was found to promote winwin solutions to prisoner-dilemma and other games of social exchange (Orbell & Dawes, 1991). Political trust is related to civic engagement and participation (Putnam, 1993, 2000). Trust is found to be a predictor of successful psychotherapy (Johnson & Talitman, 1997) and a facilitator of persuasion (Hovland, Janis, & Kelly, 1953), various economic activities (Lorenz, 1999), and even the delivery of effective health care (Davies & Rundall, 2000).

NEWS MEDIA TRUST AND EXPOSURE

Scholars investigating the role played by news media trust in shaping audience news exposure have found only modest, although statistically significant, relations. The bivariate correlations between people's trust in the institutions of the news media and the amount of mainstream news they consume are at best, and even after correcting for attenuation, under .20. Partial correlations show that, after controlling for several factors potentially influencing both media trust and media exposure, the correlation between the two constructs is much lower. Although mainstream media skeptics are somewhat less exposed to mainstream news channels on average, they still get much of their current affairs information from media sources they mistrust. In a previous study, we analyzed four large sample data sets and found that trust of mainstream news media is only moderately correlated with mainstream news consumption (Tsfati & Cappella, 2003).

How can people watch news they do not trust? Trust in the news media is based on our belief in the professionalism of journalistic practice (Liebes, 2000). Given the definition of trust and assuming rational audiences, exposure to mistrusted news sources does not make much sense. Trust is an expectation by the trustor that the trustee can be relied on and that the interaction with the trustee will increase the probability of gains, rather than losses, to the trustor (Coleman, 1990). Audiences motivated to learn about the world would benefit little, if at all, from exposure to mistrusted sources. This was the kind of thinking that led scholars to hypothesize that media trust should correlate with media exposure.

FACTORS SHAPING NEWS EXPOSURE

The idea that consuming information from an untrustworthy source is not rational, however, ignores a simple but important finding from research about media exposure: It is not just the referential function of news (i.e., the need to learn accurate information about the impersonal world) that drives news consumption. Any set of media materials, news included, is capable of serving multiple needs and functions (Katz, Blumler, & Gurevitch, 1973–1974). The reasons for watching news are diverse (Gantz, 1978; Wenner, 1985). Schramm (1949) claimed that news consumption is guided by either reality motives or pleasure motives (or both). The traces of this reality–play distinction can be found in the writings of scholars who talked instead about information–entertainment (Rubin, 1984) or content–process (Cutler & Danowski, 1980) distinctions. Many additional motives have been identified, however. Wenner (1985) offered a map of news gratifications that contains 16 different motivations, including ego-defense, expressive, tension reduction, and so on.

Some people follow the news to fulfill social integrative needs (Levy, 1977). These social gratification seekers are not very interested in the political world, but they do not want to lose touch with other people. For others, the news may fulfill "surveillance" functions (Wright, 1960). These audience members follow the news to get bits of information necessary for their daily lives. They watch the news to learn about tomorrow's school strike. They wait for the weather and traffic reports or the news from the stock market and watch other components of newscasts

simply because they are there (see Gantz, Fitzmaurice, & Fink, 1991). The theoretical mechanism of mood management (Zillmann, 1988) might offer yet an additional explanation as to why people watch news: Bored viewers are more likely to seek stimulating contents and might find them in news items that focus on controversy, conflict, or disaster.

Still others expose themselves to news to gratify their cognitive needs. They want to better understand the political world and to familiarize themselves with the arguments and counterarguments surrounding political issues. Just as others may enjoy solving riddles and puzzles, these people derive gratification from thinking and deliberating, from considering problems from different angles, and from trying to "solve" problems even when they are unrelated to them personally. For these people, the desire to think and to know (vs. the need for information for social or practical reasons) is the motivation for news exposure. Comparing information, learning different angles of the same stories, and arguing with texts is a gratifying experience for people with more cognitive motivations.

Many motivations underlying news consumption are unrelated to the trustworthiness of the source. If people watch news for mood management purposes, to fulfill integrative needs, or simply to pass time (Rubin, 1993), then it should come as no surprise that people watch news they do not trust. Obtaining accurate and objective information about the world is just one motivation for watching the news. When other motivations are present, trust in the media becomes less relevant. In other words, media skeptics probably follow mainstream news despite their skepticism to gratify other needs. To the extent that rationality is action in the pursuit of felt needs, then consuming information from distrusted sources is itself quite rational when other needs are fulfilled.

In sum, the motivations for news exposure are diverse. Most of us probably follow the news for multiple reasons. Yet, we also differ in the extent to which we have these motivations and the extent to which we use the news to fulfill them. According to uses and gratifications theory, these varying needs lead to varying exposure patterns. In this article, we focus on one of these needs—NFC—as a predictor of news exposure and as a factor moderating the role of skepticism in exposure to news communication.

NFC

NFC is defined as "a need to structure relevant situations in meaningful, integrated ways. It is a need to understand and make reasonable the experimental world" (Cohen, Scotland, & Wolfe, 1955, p. 291). Cohen et al. argued that NFC qualifies as a need because it directs behavior toward a goal and because tension is caused "when this goal is not attained" (p. 291). Cacioppo and Petty (1982) clarified that the term *need* is used in a "statistical (i.e., likelihood or tendency) rather than bio-

logical (i.e., tissue deprivation) sense" (p. 118) and defined *NFC* as "a tendency to engage in and enjoy thinking" (p. 116).

Other scholars have characterized people with NFC as people who "have fun" thinking, who are motivated by a quest for comprehension, and who feel frustrated when they are unable to understand (see the review by Cacioppo & Petty, 1982). Research has found that NFC predicts verbal ability and knowledge (Tidwell, Sadowski, & Pate, 2000), study skills and academic achievement (Guelgoez, 2001), and performance on various problem-solving tasks (Nair & Ramnarayan, 2000).

The NFC construct has been applied in experimental settings in persuasion research (Cacioppo, Petty, Kao, & Rodriguez, 1986; Zhang, 1996). This research found that people high on NFC process messages more carefully (Cacioppo, Petty, & Morris, 1983), are likely to be more influenced by issue-relevant information, are less influenced by simple inferences and heuristics (such as the attractiveness of the communicator; Haugtvedt, Petty, & Cacioppo, 1992), and recall more message arguments (Cacioppo et al., 1983) compared to people low on NFC. After persuasion has occurred, the attitudes of high-NFC participants are more persistent and more resistant to counterarguments than those of low-NFC participants. Thus, NFC is related to various aspects of message processing. Message selection—the first stage in processing messages in real life—is not treated in most experimental research, however, because it is the processing of stimuli by those high and low in NFC that has been primarily at issue, not whether to give cognitive processing resources to one set of stimuli rather than another.

Some studies have examined the role played by NFC in exposure to messages. As uses and gratifications research (Katz, Gurevitch, & Hass, 1973) predicted using the framework of "cognitive needs," NFC was found to be related with news viewing and attention to government news reports but not with attention to sports (Perse, 1992). Undergraduates who expressed a liking for heavy metal music ranked lower in NFC than nonfans (Hansen & Hansen, 1991). Tuten and Bosnjak (2001) found that NFC "was significantly and positively correlated with all Web activities involving cognitive thought" (p. 391). In sum, the concept NFC in various forms has been useful in understanding what types of content attract audiences based on their motivations to be stimulated cognitively.

NFC AS A MODERATOR IN THE ASSOCIATION BETWEEN MEDIA SKEPTICISM AND EXPOSURE

Audience members with high levels of NFC might be mistakenly thought to be those who care most about the validity of media reports and those most motivated to learn the "truth" about news stories compared to social-integrative or entertainment-motivated audiences. NFC is not all about information, however. Gratification research distinguishes between *orientational gratifications*, which are "message uses for information that provide for the reference and reassurance of self in relation to society," and *paraorientational gratifications*, which are "process uses that ritualistically reorient news content through play activity" (Wenner, 1985, p. 175). In no sense is the goal of this paraorientational activity merely information gain (Stephenson, 1967). Rather, the aim is to "play" with information and to receive gratification from ritualistic exposure to information, from trying to understand complex realities, and from thinking about these realities.

Uses and gratifications research claims that exposure to communication is guided by social and psychological needs, including NFC. Human needs interact with each other and with other factors, however, when people select media content. The referential function of news watching might interact with the drive to satisfy cognitive needs. Individual attitudes and predispositions such as trust in media sources may interact with gratifications sought when people shape their media diets. That is, people with stronger needs might be willing to pay higher costs to satisfy their needs—for example, to expose themselves to sources they do not trust. Hence, the urge to satisfy cognitive (or other) needs could result in decreased trust-based selective exposure to communication.

Selectivity in exposure to communication may be guided by complex interactions. When NFC is high, trust might be less relevant for audiences, and trust-based selective exposure might be weaker. In other words, people with cognitive needs might rely less on their trust or skepticism toward media when they select their news sources. They are willing to expose themselves to untrusted sources to satisfy their cognitive needs. On the other hand, when NFC is low, considerations of trust might dominate, such that people with less pronounced cognitive needs might rely on their trust in the news media more heavily when selecting their news diet.

Although the hypothesis regarding an interaction between news media skepticism and NFC on their joint effect on mainstream news exposure has not been hitherto examined, some psychological research has investigated the related interactive effects of NFC and the related construct of source credibility in determining message processing. In a series of experiments, Priester and Petty (1995) manipulated the credibility of the communicating source and examined its interaction with NFC in their effect on processing and persuasion. For example, their Experiment 1 participants were exposed to a message from either a credible or an untrustworthy source. Priester and Petty examined the correlation between message thoughts and postmessage attitudes (as an indicator of message processing) and found that the message processing of participants low on NFC was influenced by source credibility, but the processing of those high on NFC was not. The explanation offered for this finding was that people who enjoy thinking process messages regardless of their trustworthiness. The fact that NFC interacted with trustworthiness in early experimental research provides another justification for this exploration, which deals with message selection, rather than processing, in a naturalistic survey context.

HYPOTHESES

Prior research has found only a weak association between news media trust and exposure. Given these past findings, and given theories of selective exposure and the definition of trust, it is possible to hypothesize that

H1: Mainstream media skepticism will be associated with lower mainstream news exposure.

As mentioned previously, NFC was found to correlate with news watching in prior research (Perse, 1992). Given these results and the logic of gratification research, it seems plausible to expect that those who enjoy thinking and who like to think long and hard about problems will consume more news than those with lower cognitive needs. Hence,

H2: NFC will be positively associated with mainstream news exposure.

Trust in the media and NFC do not shape news exposure separately, but rather in conjunction with one another. When NFC is high (and the factors motivating news exposure are relatively unrelated to trust), the role played by media skepticism is weaker; when it is low, the role played by media skepticism as a determinant of exposure is stronger. Hence,

H3: News media skepticism will interact with NFC when affecting mainstream news media exposure. The effect of media skepticism will be weaker for those with high levels of NFC and stronger for those with low levels of NFC.

METHOD

Data

The Electronic Dialogue (ED) project is a unique Web-based research endeavor that involves a series of Internet surveys and electronic political discussions designed to investigate, among other things, the effects of participation in electronic deliberative forums on various opinions and attitudes. The participants of the ED project were part of a representative random sample of the American population whose households were offered WebTV units in return for weekly completion of Internet surveys. The recruitment and maintenance of this panel was executed by Knowledge Networks, a Web-based consumer research and opinion-polling company, which operates from Menlo Park, CA. A subsample of their panel was invited to join the ED project. Although the overall response rate was rather small (over 50% of the households accepted Knowledge Network's offer and joined their panel, and 50.7% of a subsample of this panel who were offered to participate specifically in the ED project have actually done so), the sampling design was reasonably successful in representing the U.S. population. The sample included 79.4% Whites (compared to 76.1% in the December 1999 Current Population Study census data), 54.2% men (compared to a population parameter of 48.0%), and 39.3% respondents with a high school education or less (compared to 47.5% in the population). Geographically, 17.4% of the sample was from the Northeast, 21.4% from the Midwest, 34.4% from the South, and 26.9% from the West (compared to population parameters of 19.7%, 23.6%, 34.8%, and 21.9%, respectively). Twenty percent of the sample were 18 to 29 years old, 35.0% were between 30 and 44, 27.4% were between 45 and 59, and 17.7% were 60 or older (the corresponding population figures are 21.4%, 31.8%, 25.0%, and 21.8%, respectively). In sum, although this is a Web-based survey, the incentive program offering WebTV units assured that the sample was fairly representative of the American population. These data offer us an opportunity to explore the hypotheses regarding the moderating role of NFC in the association between media skepticism and exposure.

Measures

Dependent Measure: News Media Exposure

ED respondents were asked to report the number of days of exposure to news media outlets in the previous week. The items were, "Watch national network news on television," "Watch cable news, such as CNN or MSNBC," "Watch local television news (Eyewitness or Action News)," and "Read a daily newspaper." Responses ranged between 0 to 7 days of exposure. Mainstream media exposure was calculated as the mean of these four survey items (M = 3.71, SD = 2.04, Cronbach's $\alpha = .72$).

Independent Measures

News media skepticism. The concept of mistrust in news media was measured in this investigation using a scale of news media skepticism developed and used in prior research as a measure of audience feelings of mistrust toward mainstream news media (Tsfati, 2003a, 2003b; Tsfati & Cappella, 2003).¹ It is composed of a series of questions relating to the various components of media skepticism, including four of Gaziano and McGrath's (1986) News Credibility Scale items (fair, accurate, tell the whole story, can be trusted), an item asking whether the media care more about being the first to report a story or about being accurate in reporting the story, and an item asking whether the media help society or get in the way of society solving its problems (used by Cappella & Jamieson, 1997). The news media skepticism measure also contains items about the degree to which they trust the media "to report the news fairly" (an item used by the National Election

Studies since 1996) and about the amount of "confidence" they have in the people running the institutions of the press. In prior research (e.g., Tsfati & Cappella, 2003, p. 506), it was argued that these separate items tap different components of the construct of media trust. All items were coded so that the skeptical answer would have the value of "1," and the most trusting category would have the value of "0." In an exploratory factor analysis conducted on the ED data, all nine items loaded on the same factor. Cronbach's alpha for these nine items was .90 (M = .56, SD = .19). Thus, as in past research on perceived media credibility (e.g., Gaziano & McGrath, 1986; West, 1994), various components of media trust loaded together very well. Temporal consistency of the skepticism items was examined by correlating two independent measurements (in August and December of 2000). The bivariate correlation between these two measurements was .63 (p < .001). The convergent and discriminant validity of the news media skepticism measure was demonstrated in previous research (e.g., Tsfati, 2003b, p. 73).²

NFC. The NFC measure used in the ED study was a shortened version of Cacioppo and Petty's (1982) NFC instrument (adapted from Thompson, 1995), consisting of nine statements: (a) I would prefer complex to simple problems; (b) It's enough for me that something gets the job done; I don't care how or why it works; (c) I usually end up deliberating about issues even when they do not affect me personally; (d) Thinking is not my idea of fun; (e) I really enjoy a task that involves coming up with new solutions to problems; (f) Learning new ways to think doesn't excite me very much; (g) I prefer my life to be filled with puzzles that I must solve; (h) I only think as hard as I have to; and (I) I find satisfaction deliberating long and hard for hours. Respondents were asked to rate how well each of these statements described themselves. Response categories were 1 (not at all like me), 2 (not too much like me), 3 (uncertain), 4 (somewhat like me), and 5 (a lot like me). The variables measuring reactions to statements b, d, f, and h were reverse coded. Reliability for the nine items was .76. To build a scale, the nine items were averaged. The resulting measure had a mean of 3.51, with a standard deviation of $.68.^3$ The bivariate correlation between the NFC measure and media skepticism was .09 (p = .069).

Covariates. Exposure decisions are not only a function of media skepticism and NFC. Prior research tells us that exposure to the media is also a function of other motivational, resource, and demographic variables. The association between media skepticism, NFC, and news exposure requires controlling for these other possible variables. Motivational controls include political interest, knowledge, and political extremity. Those more interested in politics tend to watch more news, and the models control for such political interest variables. Resource covariates include being employed, being a student, and other indicators regarding audience schedules. Those with less available time are expected to watch, read, and listen

to less news, simply because they do not have the time to spend on news consumption.

Exposure to communication is embedded in a given cultural and economic context. We consume what we have been socialized to consume and what we can afford to consume. Differences between sexes, races, and educational backgrounds determine, at least to some extent, our media habits. Such factors are controlled for in the analysis that follows to the degree possible.

Political party-ideology index. Participants were asked about their party identification and its strength. They were also asked about their overall ideological leanings on a continuum from strong liberal to strong conservative. The two components, which were highly correlated, were combined to form an 11-point scale with "strong liberals–strong Democrats" coded as "+5," "strong conservatives–strong Republicans" coded as "-5," and "moderates–independents" coded as "0" (M = -0.26, SD = 3.18).

Political extremity. Political extremity was simply the absolute value of the party-ideology index. Moderates were coded "0," and extremists—both liberal and conservative—were coded "5," with varying values in between. This variable had an average of 2.74, with a standard deviation of 1.64.

Political knowledge. Various dimensions of political knowledge were combined to form a single scale measure. Items included 10 general political and civics knowledge questions (e.g., who has the final responsibility to decide if a law is constitutional or not), 7 questions about the personal backgrounds of the presidential candidates (e.g., which one of the Democratic candidates was a professional basketball player, which one of the Republican candidates was a former prisoner of war), and an additional 7 questions about the issue positions of candidates in the Democratic and Republican presidential primaries (e.g., which of the Democratic candidates supported universal health care, which of the Republican candidates supported vouchers). All 24 items were scored "1" for correct answers and "0" for incorrect. The items were averaged to create a scale (Cronbach's $\alpha = .82$, M = .62, SD = .19).

Political interest. Question wording for the political interest item was "how often would you say you follow what is going on in government and public affairs?" Response categories varied between 0 (*hardly at all*) to 4 (*most of the time*; M = 2.98, SD = 1.06).

Schedule flexibility. The number of timeslots selected by respondents regarding their availability for discussions was canvassed and served as a measure of schedule flexibility. Busy participants who were available for fewer timeslots had lower values, whereas flexible participants, who said that they could participate in relatively many timeslots, had higher values. The flexibility scale ranged from 0 to 12 (M = 2.15, SD = 1.92).

Student and employment status. Respondents were asked about their employment status. Response categories included working full time, part time, "homemaker," "permanently disabled," and working and nonworking student. Answers were recoded to two variables: employed (full time or part time = 1, all other responses = 0) and student (working or not working = 1, all other answers = 0).

RESULTS

To test for H1 and H2, the mainstream news exposure scores were regressed on media skepticism, NFC, and the control variables. In the findings reported here, Wave 6 exposure measures were regressed on Wave 4 measures of skepticism and NFC measures.⁴ Thus, prior media skepticism and NFC are used to predict subsequent exposure. Results are presented in Table 1 as Model 1. The model

Variables	Model 1		Model 2	
	В	SE	В	SE
Media skepticism	-1.08**	.45	-7.65****	2.22
Political ideology	00	.03	00	.02
Political extremity	04	.05	04	.05
Political interest	.53****	.09	.52****	.08
Political knowledge	.58	.58	.60	.57
Student	48	.48	46	.48
Employed	45**	.18	44**	.19
Schedule flexibility	03	.04	04	.03
Age	.04****	.00	.04****	.00
Education (years)	00	.05	.01	.04
White $(= 1)$	37	.25	44*	.25
Men (= 1)	13	.17	14	.16
Need for cognition	18	.12	-1.23****	.37
Media Skepticism × Need for Cognition interaction			1.81***	.61
Constant	1.85		5.65	
R^2	.31		.33	
Ν	424		424	

TABLE 1 Ordinary Least Squares Models Predicting Mainstream News Exposure

Note. Table entries are unstandardized regression coefficients. Centering was used to reduce multicollinearity. Coefficients for the uncentered terms are presented.

p < .10. **p < .05. ***p < .01. ****p < .001.

shows that political interest was positively and significantly associated with mainstream news exposure: The higher the interest in politics, the higher the exposure. Age was also positively associated with mainstream news exposure. Employed respondents reported significantly less news consumption than their unemployed counterparts, perhaps because of time constraints. The rest of the covariates were not significantly associated with the dependent variable.

H1 predicted that media skepticism would be negatively associated with mainstream news exposure. As predicted by H1, media skepticism was negatively associated with mainstream exposure (B = -1.0, SE = .45), even after extensive controls. The higher the skepticism, the lower the reported mainstream news exposure (p < .05).

H2 predicted that NFC would be positively associated with mainstream news consumption. There was no evidence supporting this hypothesis in the ED data. Contrary to H2, the sign of the coefficient for the effect of NFC on news exposure was negative (B = -0.18, SE = .12), implying that those with higher cognitive needs consumed relatively less, not more, mainstream news. This association was not statistically significant, however (p = .15).

H3 predicted an NFC × Media Skepticism interaction in their joint effect on media exposure. To test for this hypothesis, an NFC × Media Skepticism interaction term was entered into the model. Results are presented in Table 1 as Model 2.⁵ As hypothesized by H3, NFC significantly interacted with media skepticism in their effect on mainstream news exposure (B = 1.81, SE = .61, p < .001).⁶

To interpret this significant interaction, we calculated from the regression equation the effect of news media skepticism on mainstream news exposure for different possible values of NFC (following a recommendation by Allison, 1999). Results are presented in Table 2. In addition, the predicted values of news media

NFC	Unstandardized Effect of News Media IFC Skepticism on Mainstream News Exposure (B) Cumulati		
1	-5.83	1	
1.5	-4.92	4	
2	-4.01	10	
2.5	-3.10	32	
3	-2.19	100	
3.5	-1.28	198	
4	-0.37	332	
4.5	0.54	394	
5	1.44	424	

TABLE 2 The Effect of News Media Skepticism on Mainstream News Exposure for Various Possible Values of NFC

Note. NFC = Need for cognition.

skepticism were calculated for hypothetical White, employed, nonstudent, woman respondents, with average values on all covariates but with different possible values on NFC and news media skepticism. Results are presented in Figure 1. Dashed weak lines are used for extremely high and low NFC, given that the number of cases with such NFC values was very low (see Table 2).

As Figure 1 shows, media skepticism had a strong and negative effect on mainstream news exposure for those with low NFC (e.g., B = -3.10 for respondents with a score of 2.5 on NFC). For those with extremely low cognitive needs, mistrust in the mainstream media reduced exposure to the mainstream news media. These people consumed the most mainstream news when they trusted the media and the least when they mistrusted the media. Thus, the effect of media skepticism on news exposure was strongest among people with relatively low cognitive needs. Exposure patterns for those who stated that they do not enjoy thinking and that "they only think as hard as they have to" were heavily influenced by their trust in or mistrust of news sources.

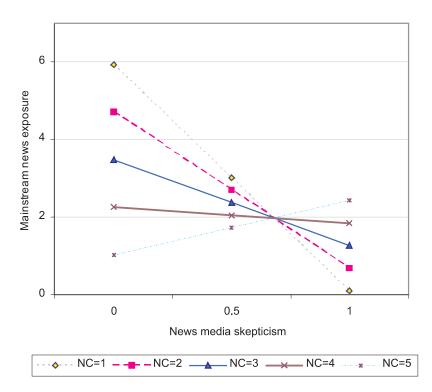


FIGURE 1 The association between media skepticism and mainstream news exposure by need for cognition. Predicted values for a hypothetical respondent, which were calculated from the Ordinary Least Squares Model 2 in Table 1, are plotted.

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The negative effect of media skepticism on mainstream news exposure decreased, however, as the level of NFC increased. The more people enjoyed deliberating and solving puzzles, the less the influence of mistrust of the media on their exposure to news as a source of social information. Still, even for those with moderate NFC scores, the effect of skepticism on exposure was negative (B = -2.19 when NFC = 3; B = -1.28 when NFC = 3.5). Despite the fact that they were less influenced by their mistrust of the media than the low-NFC respondents, people with moderate levels of NFC were still negatively affected by their mistrust when making media choices. The more they trusted mainstream news, the more they watched mainstream news, and vice versa for skeptics.⁷

As Figure 1 shows, as NFC becomes fairly high (NFC = 4), the effect of media skepticism on media exposure weakens even more (B = -.37). At this level of NFC, news exposure is rather constant across all levels of media skepticism.⁸ For those with the highest scores on the NFC scale (NFC = 5), however, the effect of skepticism on exposure was positive rather than negative (B = 1.44). For those people, skepticism toward the mainstream media was associated with more exposure to the mainstream news media. The more they trusted the media, the less likely they were to watch national television news. This latter finding should be interpreted cautiously, however, because people with such extreme scores on NFC were rather scarce in the ED data (only 5 respondents; just over 1% of the sample had a score of 5 on NFC, and only 30 respondents, comprising about 7% of the sample, had scores higher than 4.5 on the 1-5 NFC scale). To test for the significance difference of this sign reversal, the analysis was replicated only for cases with NFC scores higher than 3.7 (the 66th percentile in NFC). When limiting analysis to this subgroup (n = 168), there was no evidence for an NFC × Media Skepticism interaction (i.e., the coefficient for the interaction term was not significant: B = 1.67, p = .40)⁹; hence, it is impossible to conclude that the sign reversal discussed previously will be found in the extremely high NFC population.

The ED data allow for a more rigorous test of the hypotheses, given that the ED is a multiwave project. In the analysis reported previously, Wave 6 (late September) exposure measures were regressed on Wave 4 (late July) measures of skepticism and NFC measures. Given that the NFC scale was included only in Wave 4 of the ED project, a full cross-lagged analysis is not possible. The potential benefits of such a hypothetical cross-lagged analysis are probably not enormous, however, due to the fact that NFC is conceptualized in social psychology as a disposition (e.g., Cacioppo, Petty, & Morris, 1983) and thus is not expected to change considerably with the passing of a few months.

The ED data did include the very same mainstream news exposure measures, however, at the baseline (February 2000) and in Wave 4 (late July 2000). This allows us to control for prior mainstream news exposure in the models predicting later exposure using NFC and media skepticism. Thus, Model 2 in Table 1 was also examined, controlling for Wave 4 exposure. The patterns of results were

identical. Specifically, the findings revealed significant negative main effects for media skepticism (B = -4.57, SE = 1.75, p = .01) and NFC (B = -.78, SE = 29, p = .08) and a significant positive NFC × Media Skepticism interaction term (B = 1.16, SE = .47, p = .01).¹⁰ Naturally, adding the controls for prior exposure increased the explained variance in Wave 6 mainstream news exposure considerably (R^2 increased from .33 to .61). The down side was that the coefficients were more susceptible to multicollinearity. Although the lowest tolerance was far above the .40 threshold recommended by Allison (1999, p. 141), it was still rather low—in the .60 range—much higher than the tolerances in the analysis reported in Table 1 (which were around .90). This was probably due to the association between prior exposure and many of the involvement variables in the analysis. At any case, the Skepticism × NFC interaction held even while controlling for prior exposure (at baseline or Wave 4).

DISCUSSION

This study examined the way in which a motivational disposition—NFC—intervenes in the association between news media skepticism and media exposure. When people select media content, trust in the news media interacts with other needs influencing the amount of exposure to the mainstream news media.

This article began by asking why people follow the mainstream news media if they do not trust them. One answer, suggested by the results presented previously, is that people may consume mainstream news despite their media skepticism because they have a strong need for cognition: They enjoy listening to diverse points of view, they like to deliberate about problems, and they get satisfaction from thinking per se. Those with high levels of NFC are relatively unaffected by their trust in the news media. Those with extremely high levels of NFC in this data, in fact, consumed more mainstream news as their skepticism increases (although there was no significant evidence supporting the sign reversal for extremely high NFC respondents). This could be consumption for the sake of media criticism—that is, cognitive skeptics may simply want to argue with the media. Alternatively, the increased consumption of mainstream media materials by cognitively motivated skeptics could reflect their lack of functional alternatives to the mainstream media. They follow mainstream news, despite their mistrust, simply to be exposed to the politicians appearing in the media and to their different arguments. One additional possibility is that, for those with high levels of NFC, the causal direction of the association is reversed. Among this potentially critical group (skeptics with high levels of NFC), it could be that media exposure results in media skepticism and not the other way around.

For people with low or moderate cognitive needs, however, the association between skepticism and exposure is negative. Mistrusting audience members who were low on NFC had the lowest exposure to the mainstream news media: These people tune out and do not consume the mainstream media when they do not trust them. On the other hand, trusting but low-on-cognitive-needs audience members had the highest exposure to the mainstream news media. Thus, the negative effect of media skepticism on mainstream news exposure was strongest when NFC was at its lowest level. This negative effect decreased as NFC increased.

These findings demonstrate the manner in which different needs interact as they influence exposure to the media. The utilitarian, referential function of news consumption or the need to avoid dissonance (highlighted by the concept of consistency with which selective exposure is often explained) give way to NFC. In a sense, the NFC × Media Skepticism interaction could be viewed as an interaction between the consistency-motivated selective exposure to uses and gratifications research. Other such interactions between trust-based selective exposure and other needs (escapism, integrative, etc.) are possible. More research should be conducted to test for these possibilities.

The findings have important implications for psychologists, who so far focused on the role of NFC and its interaction with source credibility in explaining message processing but not selective exposure. As reviewed previously, Priester and Petty (1995) manipulated source credibility, measured NFC, and examined their impact on message processing and persuasion. Like this investigation, a key finding was that NFC interacted with trustworthiness when influencing message processing. Like these findings, those low on NFC were influenced by the trustworthiness of the source, but those high on NFC were not. That is, because those high on NFC enjoy thinking in general, the cognitive need made them process the message regardless of their mistrust of the source. For those low on NFC, message processing was influenced by the source trustworthiness manipulations. Of interest, and unlike these findings, those low on NFC processed the message more when the source was low in trustworthiness. Taken together, the findings of both studies suggest that people with low cognitive needs will generally avoid exposure (on a voluntary basis) to mistrusted sources, but if they are required to be exposed to such sources (as often happens in experiments), their skepticism regarding the source will increase processing.

Research in psychology demonstrates that, in general, the correspondence between attitudes and behaviors is stronger for people high on NFC compared to people low on NFC (e.g., Cacioppo et al., 1986). If news media skepticism is perceived as an attitude toward the mainstream news media (Tsfati, 2002), and mainstream news exposure is perceived as a behavior, then these findings diverge somewhat from this pattern. The attitude–behavior association in this exploration was weaker, and not stronger, for those high on cognitive needs. Arguably, information-seeking behavior is not as any other behavior when it comes to people with high cognitive needs. People who enjoy thinking and deliberating about different aspects of problems need raw materials for their cognitive activities. They need ample challenging, even conflicting information. This is probably why they expose themselves to all they can find, even though their other behaviors are consistent with their attitudes. An alternative interpretation of the findings is simply that a different attitude is driving the behavior of high-NFC respondents: Perhaps their attitude toward thinking influenced their behavior toward a thoughtful task—news exposure.

Methodologically, this study highlights the importance of statistical interaction in models predicting media exposure. It is important to note that H2—predicting a main effect of NFC on mainstream news exposure—was not confirmed by the data when the interaction term was lacking in the model. In other words, a model with a linear main effect does not reveal the important role played by NFC in the process of determining news exposure. Modeling for separate linear effects of different factors on news media exposure could potentially lead to false conclusions. Media theorists have long ago made the claim that many factors operate in conjunction to shape audience exposure selections. Complex specifications through the use of statistical interactions are probably the best method to conceptualize this theoretical claim in our statistical models.

Although demonstrating this point clearly, the models presented previously are probably not sufficiently complex. NFC and news media trust probably interact with other needs (e.g., entertainment), which were not measured in the ED project, in influencing news exposure. The fact that these interactions are not modeled in this research is probably the study's most important limitation.

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NOTES

¹News media skepticism is perceived here as the antonym of news media trust. The skepticism measure is used (rather than the reverse coded measure of trust) just to remain consistent with prior research using this scale.

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²Some prior research (e.g., Kiousis, 2001; Westley & Severin, 1964) found that, when asked to choose the most credible source from a list of media (television, newspaper, radio), respondents usually come up with an answer. Unlike these survey questions, focusing on what Kiousis called "channel credibility," the concept of news media skepticism assumes that people respond, react to, and form expectancies of news media institutions as a whole and not only given channels or messages. In other words, the concept of news media skepticism assumes that people have some mental schema for what "the news media" are, and that this construct operates whenever people confront this construct in survey (or any other) contexts. Though clearly a realistic assumption, it is not directly verifiable. Anecdotal and indirect evidence in support of this assumption, however, comes from survey data and analysis of electronic focus group discussion transcripts (see Tsfati, 2002, chap. 2). This analysis suggested that people have some conception of "the media," and that their understanding of the concept is probably not far from its use in this research. The transcripts show that people are able to engage in a discussion about the media in general without slipping to any particular level. This provides some evidence that most people have some mental schema for "the media" just as we scholars do.

³In much of the experimental research on NFC in social psychology (e.g., Cacioppo et al., 1983; Priester & Petty, 1995), NFC scores are recoded, and participants are classified as either high or low on NFC. Our relatively large sample size allows us to avoid the information loss caused by the reclassification of the NFC variable into a dichotomy in experimental research. Thus, results are reported for a continuous NFC variable. To remove any concern that readers might have, however, we conducted the analysis using dichotomous (high–low) and three-category (high, medium, low) NFC variables. Results replicated the patterns of results reported in Table 1. Specifically, there was evidence for a Media Skepticism × NFC interaction, so that the negative effect of media skepticism on mainstream news exposure decreased as NFC increased.

⁴Additional combinations of time lags, as well as a fully cross-sectional model, provided identical patterns of main effects and interactions to those reported in this article (Tsfati, 2002).

⁵Centering was used to reduce the multicollinearity between the interaction term and the main effects. The tolerances for the centered terms were -.87 for media skepticism and NFC and .94 for the interaction term, providing no indication of a problem. To facilitate interpretation, however, the coefficients for the uncentered terms are presented in Table 1. The centered and uncentered models provided identical patterns of results. Specifically, results for the model using centered terms were: The unstandardized coefficient for media skepticism was -1.29 (p = .004), the unstandardized coefficient for NFC was 3.22 (p = .085), and the unstandardized coefficient for the Media Skepticism × NFC interaction was 1.82 (p = .003).

⁶A reviewer wondered if the evidence supporting the main hypotheses would remain significant with less controls in the analysis. To remove this concern, the models reported in Table 1 were run without controlling for demographic variables; without controlling for the political variables (in a separate regression equation); and without any variable except for media skepticism, NFC, and the NFC × Media Skepticism interaction term. All these separate analyses provided an identical pattern of results: negative and significant main effects for media skepticism and a positive and significant interaction term. All the coefficients for these terms were highly significant (the highest p value was .006). Hence, the main effect and interactions reported in the analyses that follow hold with or without these controls.

⁷Reduced variance for high-NFC respondents on either media skepticism or news exposure might offer an alternative explanation for the attenuated correlations between the two key variables. Hence, Levene's tests for equality of variances were conducted to examine possible differences in variance on these variables for those high and low on NFC. The tests showed no significant differences in variances: for media skepticism, F(1, 424) = 1.51, p = .22; for news exposure, F(1, 424) = .22, p = .61.

⁸According to the regression equation, the effect of news media skepticism on exposure becomes null when NFC = 4.20.

⁹The interpretation of the insignificant interaction still contained a sign reversal. According to this analysis, when NFC = 4, the slope for media skepticism is negative (B = -.54). But when NFC = 5, the

slope for media skepticism is positive (B = +.64). Apparently, for the few cases in our sample with extremely high NFC scores, the association between mainstream media skepticism and exposure is positive, but this finding does not necessarily imply an association in the population, given the low number of respondents with extreme NFC values in our sample.

¹⁰Again, centering was used and yielded identical patterns of results. In addition, the analysis was repeated controlling for baseline, instead of Wave 4, measures of mainstream news exposure. Again, this analysis yielded identical patterns of result (most important, a significant NFC × Media Skepticism interaction).

REFERENCES

Allison, P. (1999). Multiple regression: A primer. Thousand Oaks, CA: Pine Forge Press.

- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. Journal of Personality and Social Psychology, 42, 116–131.
- Cacioppo, J. T., Petty, R. E., Kao, C., & Rodriguez, R. (1986). Central and peripheral routes to persuasion: An individual difference perspective. *Journal of Personality and Social Psychology*, 51, 1032–1043.
- Cacioppo, J. T., Petty, R. E., & Morris, K. J. (1983). Effects of need for cognition on message evaluation, recall, and persuasion. *Journal of Personality and Social Psychology*, 45, 805–818.
- Cappella, J. N., & Jamieson, K. H. (1997). Spiral of cynicism: The press and the public good. New York: Oxford University Press.
- Cohen, A. R., Scotland, E., & Wolfe, D. M. (1955). An experimental investigation of need for cognition. Journal of Abnormal and Social Psychology, 51, 291–294.
- Coleman, J. S. (1990). Foundations of social theory. Cambridge, MA: Belknap Press of Harvard University Press.
- Cutler, N. E., & Danowski, J. A. (1980). Process gratification in aging cohorts. *Journalism Quarterly*, 57, 269–277.
- Davies, H. T., & Rundall, T. G. (2000). Managing patient trust in managed care. *The Milbank Quarterly*, 78, 609–624.

Fukuyama, F. (1995). Trust: The social virtues and the creation of prosperity. New York: Free Press.

- Gantz, W. (1978). How uses and gratifications affect recall of television news. *Journalism Quarterly*, *55*, 664–672.
- Gantz, W., Fitzmaurice, M., & Fink, E. (1991). Assessing the active component of information seeking. *Journalism Quarterly*, 68, 630–637.
- Gaziano, C., & McGrath, K. (1986). Measuring the concept of credibility. *Journalism Quarterly, 63*, 451–462.
- Guelgoez, S. (2001). Need for cognition and cognitive performance from a cross-cultural perspective: Examples of academic success and solving anagrams. *Journal of Psychology*, *135*, 100–112.
- Hansen, C. H., & Hansen, R. D. (1991). Constructing personality and social reality through music: Individual differences among fans of punk and heavy metal music. *Journal of Broadcasting & Electronic Media*, 35, 335–350.
- Haugtvedt, C. P., Petty, R. E., & Cacioppo, J. T. (1992). Need for cognition and advertising: Understanding the role of personality variables in consumer behavior. *Journal of Consumer Psychology*, 1, 239–260.
- Hovland, C. I., Janis, I. L., & Kelly, H. H. (1953). *Communication and persuasion*. New Haven, CT: Yale University Press.
- Johnson, S. M., & Talitman, E. (1997). Predictors of success in emotionally focused marital therapy. Journal of Marital & Family Therapy, 23, 135–152.

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- Katz, E., Blumler, J. G., & Gurevitch, M. (1973–1974). Uses and gratifications research. Public Opinion Quarterly, 37, 509–523.
- Katz, E., Gurevitch, M., & Hass, H. (1973). On the use of the mass media for important things. American Sociological Review, 38, 164–181.
- Kiousis, S. (2001). Public trust or mistrust? Perceptions of media credibility in the information age. Mass Communication and Society, 4, 381–403.
- Levy, M. (1977). Experiencing television news. Journal of Communication, 27, 112–117.
- Liebes, T. (2000). Inside a news item: A dispute over framing. Political Communication, 17, 295–305.
- Lorenz, E. (1999). Trust, contract and economic cooperation. *Cambridge Journal of Economics*, 23, 301–315.
- Nair, K., & Ramnarayan, S. (2000). Individual differences in need for cognition and complex problem solving. *Journal of Research in Personality*, 34, 305–328.
- Orbell, J., & Dawes, R. M. (1991). A "cognitive miser" theory of cooperators' advantage. *The Ameri*can Political Science Review, 85, 515–528.
- Perse, E. M. (1992). Predicting attention to local television news: Need for cognition and motives for viewing. *Communication Reports*, 5, 40–49.
- Priester, J. R., & Petty, R. (1995). Source attributions and persuasion: Perceived honesty as a determinant of message scrutiny. *Personality & Social Psychology Bulletin*, 21, 637–654.
- Putnam, R. (1993). Making democracy work: Civic traditions in modern Italy. Princeton, NJ: Princeton University Press.
- Putnam, R. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.
- Rimmer, T., & Weaver, D. (1987). Different questions, different answers? Media use and media credibility. *Journalism Quarterly*, 64, 28–36.
- Rubin, A. M. (1984). Ritualized and instrumental television viewing. *Journal of Communication, 34*, 67–77.
- Rubin, A. M. (1993). Audience activity and media use. Communication Monographs, 60, 98-105.
- Schramm, W. (1949). The nature of news. Journalism Quarterly, 26, 259-269.
- Stephenson, W. (1967). The play theory of mass communication. Chicago: University of Chicago Press.
- Tidwell, P. S., Sadowski, C. J., & Pate, L. M. (2000). Relationships between need for cognition, knowledge, and verbal ability. *Journal of Psychology*, 134, 634–644.
- Thompson, M. E. (1995). The impact of need for cognition on thinking about free speech issues. *Journalism & Mass Communication Quarterly*, 72, 934–947.
- Tsfati, Y. (2002). The consequences of mistrust in the news media: Media skepticism as a moderator in media effects and as a factor influencing news media exposure. Doctoral dissertation, Annenberg School for Communication, University of Pennsylvania, Philadelphia.
- Tsfati, Y. (2003a). Does audience skepticism of the media matter in agenda setting? *Journal of Broadcasting & Electronic Media*, 47, 157–176.
- Tsfati, Y. (2003b). Media skepticism and climate of opinion perception. *International Journal of Public Opinion Research*, *15*, 65–82.
- Tsfati, Y., & Cappella, J. N. (2003). Do people watch what they do not trust? Exploring the association between news media skepticism and exposure. *Communication Research*, *30*, 504–529.
- Tuten, T. L., & Bosnjak, M. (2001). Understanding differences in web usage: The role of need for cognition and the five factor model of personality. *Social Behavior & Personality*, 29, 391–398.
- Uslaner, E. M. (2002). The moral foundations of trust. Cambridge, England: Cambridge University Press.
- Wenner, L. A. (1985). The nature of news gratification. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen (Eds.), *Media gratification research* (pp. 171–193). Beverly Hills, CA: Sage.
- West, M. D. (1994). Validating a scale for the measurement of credibility: A covariance structure modeling approach. *Journalism and Mass Communication Quarterly*, 71, 159–168.

- Westley, B. H., & Severin, W. J. (1964). Some correlates of media credibility. *Journalism Quarterly*, 41, 325–335.
- Wright, C. R. (1960). Functional analysis and mass communication. *Public Opinion Quarterly*, 24, 605–620.
- Zhang, Y. (1996). Responses to humorous advertising: The moderating effect of need for cognition. *Journal of Advertising*, 25, 15–32.
- Zillmann, D. (1988). Mood management through communication choices. *American Behavioral Scientist*, *31*, 327–340.