Effects of Priming Social Goals on Personal Interest in Television News

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Research indicates that personal interests drive news consumption, such that individuals neglect news items that are not of obvious personal relevance. This study tested whether an extrinsic social goal might increase personal interest in news through increased acquisition of, and perceived attention to news information, irrespective of pre-existing interest in the given topic. Results showed the prime increased information acquisition, as well as perceived attention to news. The prime also worked directly and indirectly through perceived attention to influence news interest in the predicted direction. Applications of findings for news teases and other promotional messages are considered.

Because the number of media choices has markedly increased since the days of the big three television networks, consumers are less restricted by news source availability in choosing news that most interests them. Perhaps because of the increase in choices, consumers are now more likely to select news that is of personal interest rather than stories in the news agenda that traditional gatekeepers determine to be important (Althaus & Tewksbury, 2002; Tewksbury, 2003; McCombs & Shaw, 1972 for agenda setting). This trend implies that consumers might avoid news that is not of obvious personal relevance.

As Tewksbury (2003) suggests, selection of news based primarily on personal significance might impact the nation’s democratic health, in that individuals might become ill-informed about issues of public importance. Therefore, media selectivity research is paramount to understanding how an individual’s motivations to attend to certain news stories are shaped by internal, as well as external forces. This investigation tests how well an outside force—an extrinsic epistemic motivation—can influence interest in a news story and trigger information-gathering behavior in an otherwise personally irrelevant topic.
Epistemic Motivations

Kruglanski (1989, 1996) describes epistemic activity, or the gathering of knowledge, as a basic information-gathering process that, at its foundation, involves uncertainty and the reduction of that uncertainty. Uncertainty can be any level of curiosity about an object, event or issue. When uncertainty occurs, a lay hypothesis is often formed and information is gathered to evaluate the hypothesis. When an acceptable degree of confidence is reached that the hypothesis has been adequately addressed, the uncertainty is reduced and information gathering will cease.

Typically, the most stable and consistent informational needs arise from uncertainties of an intrinsic nature (Chance, 1992; Deci & Ryan, 1980; Miller et al., 2001; Pederson, 2003, see also Berlyne, 1960). These intrinsic uncertainties spark information seeking to make decisions about some intrapersonal issue (Kruglanski, 1989). For example, individuals often seek information to relieve personal uncertainties such as monitoring threats that might spell personal injury for them in the near future. To the extent these individuals turn to media to monitor these threats, they engage in what Lasswell (1948) called environmental surveillance—a fundamental need fulfilled by mass media. Intrinsically driven curiosity can also stem from a need to manage self-confidence, which might lead to consumption of current affairs news in order to feel like they’re “in the know.” Likewise, a need to prolong one’s lifespan might lead to consumption of health news.

Intrinsically motivated individuals tend to demonstrate great interest in personally relevant information (Renninger, 2000), and are active in their exploration of this information (Shah & Kruglanski, 2000). More important, intrinsically motivated individuals tend to behave, i.e., seek information, in a manner highly committed to and congruent with their goals, due to a strong connection between their behavior, their intrinsic goal, and their commitment to that goal (Kruglanski et al., 2002). This profile fits well with the selective behavior seen with today’s media users (e.g., Althaus & Tewksbury, 2002). Unfortunately, there is little news content creators can do to attract this type of user, save making their stories sensational, or spinning the stories to appear more personally relevant and useful to the individual (“news you can use”).

Fortunately, intrinsic motivations are not the only kind of motivations that influence information seeking. Informational needs can also be driven by extrinsic forces (e.g., Brief & Aldag, 1977; Kruglanski, 1996). Extrinsic motivations arise from a source external to the individual, such that the individual engages in a task for reasons beyond personal fulfillment (Kruglanski, 1996). Common extrinsic motivations deal with external rewards that motivate individuals to perform information-seeking activities, such as a monetary reward for passing an exam (see Ryan & Deci, 2000 for additional examples). To offer another example, a mayor about to be interviewed about the city water plant might feel a need to learn about the water treatment process—a need that originated from a social goal, rather than a fascination with water treatment.
As with intrinsic goals, any information that is believed to help achieve extrinsic goals will be actively sought (Kruglanski, 1989). In contrast to an intrinsic motivation however, an extrinsically-derived motivation typically exists to fulfill the defined external goal (i.e., finishing the interview about the water plant), and so, once that goal is met, the extrinsic motivation dies. For this reason, extrinsic motivations are viewed as less permanent, less effective, and therefore less appealing than their intrinsic counterparts in affecting information gain (Brief & Aldag, 1977; Chance, 1992; Deci & Ryan, 1980; Miller et al., 2001; Pederson, 2003). That said, external motivators can be useful in attracting attention to situations where pre-existing interest is low (e.g., Chance, 1992; Dillman Carpentier, 2000, 2001). One way external motivators might increase interest in personally irrelevant information is through priming existing knowledge about a topic via the introduction of an extrinsic goal.

**Priming**

Priming, as it is applied in media psychology (Roskos-Ewoldsen, Roskos-Ewoldsen, & Dillman Carpentier, 2008), is based on network models of semantic memory. Influenced by artificial intelligence work (e.g., Quillian, 1968), early theorizers created models of how humans store, retrieve and use knowledge similar to the way machines process information. The earliest of these models was based on the idea that information is stored as concepts that are linked to each other in some way as to create a network of related concepts (Collins & Quillian, 1969). Later studies expanded upon and refined this model to account for differing strengths of association between concepts, different ways of categorizing and interpreting new information, and differing ways of retrieving old information (e.g., Collins & Loftus, 1975; Neely, 1977). The current model depicts a complex network with many connections between concepts in memory. Visually, these concepts are represented as nodes, connected with lines that represent the relation between each node. The length of the line between two nodes represents the relative strength of association between the concepts. The closer the nodes are drawn, the stronger their association.

Central to network models is the idea that each node has an activation threshold. If the node’s level of activation exceeds its threshold, the node fires. When a node fires, its activation spreads through its network, influencing the activation levels of its associated nodes. The result is that active nodes are more easily retrieved from memory. This spreading activation is, in essence, the priming effect. In other words, activating or “priming” one concept in memory results in increased activation of other related concepts, making those related concepts more accessible for use in later information processing.

Social psychologists began using priming in the 1970s to explore how outside influences affect our judgment formation. For example, a classic priming experiment by Srull and Wyer (1979) used sentence construction with aggressive concepts to prime participants. Participants were asked to construct a sentence using three of four words (“he,” “Sally,” “hit,” and “kicked”). Only two sentences can be
constructed from the four words (“He hit Sally,” “He kicked Sally”), both of which are aggressive. After completing the priming task, participants engaged in what they thought was a second, unrelated study in which they judged an ambiguously described person. The resulting judgments were skewed towards hostile interpretations, due to the increased salience of aggressive concepts in their memory. This is one example of research that uses just a few words to create a priming effect (e.g., Srull & Wyer, 1980).

In media studies, exposure to images or repeated themes within entertainment or news content have been shown to prime concepts of ethics, hostility, sexuality, racial or gender stereotypes (e.g., Berkowitz, 1984; Dillman Carpentier, Knobloch-Westervick, & Blumhoff, 2007; Donke, 2001; Valentino, Hutchings, & White, 2002). As a result of these primes, subsequent behaviors were skewed towards the activated concept (e.g., behavior was more hostile), and subsequent judgments were based more heavily on the activated concept (e.g., first impressions of an individual adhered to racial stereotypes). In addition, extensive research has shown that repeated exposure to certain issues in news (e.g., defense preparedness) can trigger related concepts (national defense) in memory. Subsequent evaluations of political leaders are thus highly influenced by criteria (e.g., performance on defense issues) related to the trigger (e.g., Iyengar & Kinder, 1987; Krosnick & Kinder, 1990; Pan & Kosicki, 1997).

These media studies follow the social psychology tradition of examining priming effects on judgment formation, focusing on the activation of abstract concepts (e.g., economy, sexuality). However, other goals besides those dealing with evaluation can be primed, thus activating related concepts in memory (e.g., Bargh, 1997; Chartrand & Bargh, 1996). For example, Shah and Kruglanski (2003) were able to prime an informational goal, which provided an extrinsic motivation to gather information. They found that “[t]he longer participants pursued a goal through a given means, the higher the likelihood that these attainment behaviors primed the goal they were pursuing” (p. 1120). Here, goals are seen as knowledge structures, or cognitive representations of some concept or entity stored like any other “node” in memory (Kruglanski, 1996). This idea that goals are linked in memory to behaviors commonly used to attain the goals suggests that (1) goals can activate related behaviors in a “top-down” fashion, and (2) behaviors can activate the goals associated with those behaviors in a “bottom-up” direction (Shah & Kruglanski, 2003). As substantial evidence exists that intrinsic motivators have strong ties to information gathering behavior about the topic of interest (e.g., Renninger, 2000; Shah & Kruglanski, 2000), it is conceivable that triggering information seeking behaviors via an external goal can result in the activation of interest in the information being sought.

**Purpose of Study**

As public affairs news is being consumed less because of low personal interest (e.g., Tewksbury, 2003), this study explores how news stories can become more per-
sonally interesting using tactics that might be applied in news promotion to increase audience attention, and thus profitability, for any segment of news (see Eastman, 2000). Uses and gratifications research provides evidence of various intrapersonal and interpersonal reasons that drive media choices (e.g., Rosengren, Wenner, & Palmgreen, 1985; Rubin, 2002). This investigation proposes that one mechanism that might underlie this reasoning lies in the priming of an extrinsic goal.

One can expect that if an extrinsic goal is primed, the resulting extrinsic motivation should at least increase one’s gathering of relevant information (Shah & Kruglanski, 2003). This is because priming an extrinsic goal, such as discussion about the water plant, should activate the goal in memory, making that goal more salient. The activation of this goal should spread to associated concepts, including topics pertinent to the goal (e.g., water treatment), facts and attitudes about the topics, and enactable behaviors to reach the goal, such as information gathering behaviors. Via this activation, information gathering should increase. Evidence of this social-goal priming effect can be found in studies that find information acquired from mass media increases because of anticipated discussion (e.g., Atkin, 1972; Douglas, 1985).

Furthermore, if priming a goal can trigger goal-directed activity, this activation of goal-directed activity should contribute to the activation of another related concept—interest. Previous studies have shown that interest relates to information gathering behavior. If the “bottom-up” priming trail is followed, an extrinsic goal to first trigger information-seeking activity from media can be expected. This activation would be manifested as increased information acquired from goal-relevant news, and (upon noticing this increased acquisition) increased perceived attention to the news. This activity should, in turn, trigger the idea of intrinsic interest, as interest is often related to information-seeking activity. In this way, an extrinsic goal can increase intrinsic interest in news via information gain.

Therefore, this study offers a simple, straightforward test of the “bottom-up” priming trail using television news, as television remains the largest news source among Americans (Pew, 2004). The following hypotheses are offered:

\( H_{1a} \): Priming an extrinsically based interest in a topic will increase information acquired from a news story related to the triggered topic.

\( H_{1b} \): This priming will also increase perceived attention to the relevant news story.

\( H_2 \): Information acquisition and perceived attention will mediate the influence of the prime on intrinsic interest in the story itself, such that the prime will work through the increased acquisition and attention to increase intrinsic interest in that story.

These findings are expected to be robust, irrespective of the individual’s level of pre-existing interest in the general news topic. They should also be robust after accounting for demographics and perceived utility of the news, which have been extensively shown to influence news interest (see Zillmann & Bryant, 1985).
Method

Overview

College-aged adults participated in a 2 (prime) × 2 (gender) × 6 (order) mixed-measures experiment that involved viewing a news segment with six stories on different topics. Participants were administered a prime to induce a socially based, extrinsically generated goal having to do with three of a possible six topics. The three topics were randomly selected before each research session. A short time after being primed for three topics, respondents viewed part of a 24-hour news channel, the portion of which contained six news packages. Three of the six packages related to the primed topics. After completing tasks designed to mask the study’s intent, respondents completed a questionnaire assessing their memory and interest for all six news stories.

Respondents

About 134 undergraduates at a southeastern university were recruited from large communication and psychology courses to participate in the study in exchange for course credit. The respondents’ median age was 19 (M = 19.8, range = 18 to 29). Average GPA was 3.05 (range = 1.00 to 4.00), and three-fourths of the respondents (n = 100) were female.

Procedure

Up to 15 respondents attended 1 of 15 research sessions conducted within 3 consecutive days. Sessions began in a computer laboratory. Upon entry, respondents were told they would be participating in several short research projects. Respondents then sat at a computer and completed a preliminary questionnaire assessing general interest in various topics, demographics, and other buffer information. Next, the priming event was administered. Respondents were told they would be evaluating different media services the school was proposing to launch the next year, including an online dating service, new music, and a newsmagazine interview show for campus cable. When explaining the interview show, the facilitator primed the group, naming three topics of interest to the students (unnamed) planning the show.

Respondents then performed tasks that included listening to music, and browsing an online dating site. Once finished, the facilitator asked respondents to enter a waiting room down the hall for the next part of the session. In this room, the Fox News Channel was playing on a widescreen monitor. In reality, a pre-edited videotape of Fox News had been started by a confederate. As respondents took their seats, they were exposed to 12 minutes of news, including commercials. The facilitator then returned and redirected the participants toward completion of more
buffer questionnaires and a final questionnaire that included information acquisition, perceived attention, and interest items for each news story.

**Priming the Extrinsic Goal**

Inspired by the simplicity of using lexical tasks as primes (e.g., Srull & Wyer, 1979, 1980), as well as research indicating that primes work best when participants are unaware of the intent of the prime (Stapel & Koomen, 2001), this study’s priming event was the mention that a particular topic was of interest to an unseen peer. For example, the facilitator might say,

... and the students planning the interview show want to feature the kinds of issues everyone’s talking about. I mean, these guys like to talk about a lot of different stuff, like education cuts, or ecoterrorists, or students committing crimes, or I don’t know. But they want to make the show good ...

It was hoped this type of prime would effectively trigger a motivation to seek information—motivations of an extrinsic nature that might similarly arise from hearing news teases and the like. Because this prime occurred after completing the pretest, these primed topics were expected to carry more weight in the posttest than topics in the pretest. In addition, as everyone received the same pretest, any triggering from the pretest would be controlled across all participants.

Topics eligible for the prime, which corresponded with six stories in the newscast, were as follows: education cuts, identity theft, ecoterrorism, retirement, student crimes, and scientific inventions. Topics were randomly selected for each participant group. As a result, each news topic was primed for between 63 and 71 participants.

**Broadcast News Stimulus**

Six target news stories were selected from the Fox News channel. These segments were all stand-alone news packages. Buffer stories were selected from a newscast featuring the same news anchor in the same clothing. The resulting newscast consisted of four 30-second opening commercials, a 1-minute buffer story segment, the six target news items, another 1-minute buffer story segment, and five ending commercials.

Each of the six target news packages lasted approximately 1 minute and 20 seconds. The first target package featured a male journalist reporting that elementary school weeks for two Minnesota school districts would be shortened to 4 days in order to save money, to the chagrin of working parents. The second package had a female reporter reveal personal check and money order counterfeiting as rising identity theft crimes. In a third target package, a male reported the activities of the eco-terrorist organization, Earth Liberation Front. The fourth package featured a female reporting from Wall Street on recent 401-K retirement plan losses and
the politics behind the plight. The fifth target package had a male report about a
Saudi Arabian princess attending a Florida college who was arrested in Florida for
assaulting her maid. The last report featured a female reporter telling the story of a
gooey scientific invention contracted for the military.

Measures

Pretest (Pre-Existing) Intrinsic Interest in General Topics. General intrinsic interest
in broad issues were presented in the first questionnaire prior to demographics and
buffer items. Respondents were asked, “How interested are you in . . .”, and “How
concerned are you about . . .” ten general issues, “How important is <issue> to
you,” and “How much do you think <issue> has directly affected you.” The list
of issues included six topics reflecting the target stories: public school funding,
financial fraud, acts by organizations such as Greenpeace, diplomatic immunity,
military technologies, and long-term investing. Responses were on 11-point scale
ranging from 0 (not at all) to 10 (extremely).

Only those assessments addressing the six topics presented in the newscast were
analyzed. For each issue, the four items assessing personal interest, concern, im-
portance, and direct impact were found to be reliable (as = .90 to .93, grand α = .78) and unidimensional via a Principal Component analysis with Varimax rotation
eigenvalues = 3.1 to 3.3; variance explained = 77.8% to 83.0%). Items for each
topic were thus added to create a composite score (grand M = 20.8, grand SD = 7.3). These measures served as controls to evaluate whether the hypotheses held,
irrespective of pre-existing interest in the general topic.

Demographic Information. Respondents reported their gender, age, year in school
(e.g., freshman, sophomore), and overall grade point average (GPA). Respondents
were also asked, “Do you feel you get what you need out of the news?” Responses
were on an 11-point scale ranging from 0 (not at all) to 10 (absolutely). This item
(M = 6.7, SD = 1.8) was included to assess perceived news utility in lieu of
measuring amount of news consumption.

Information Acquisition. The final questionnaire first assessed information acqui-
sition. For each news package, eight true/false items asked for accurate recognition
of four visual and four auditory elements as being present or absent in the story. For
example, one auditory item was, “In this feature, school weeks are being shortened
to 3 days,” and one visual item was, “Senior high school classes are shown in this
package.” Half of the elements indicated were present in the newscast. Responses
were scored as correct (1) or incorrect (0).

Items for each story were scored and summed into a single score. For the six
stories, correct recognition spanned the full range from 0 to 8 (grand M = 5.9,
grand SD = .85). These measures were used as one indicator of greater information
seeking from the news stories, which was hypothesized to mediate the relation
between activation of an extrinsic goal pertaining to a certain topic and intrinsic interest in a relevant news story about the topic.

Perceived Attention. Immediately following the information acquisition items, respondents were asked to estimate how much attention they believed they paid to each story. Respondents were specifically asked, “How clearly do you remember <story>,” “What percentage of <story> did you listen to,” “How carefully did you listen to <story>,” and “How thoroughly did you listen to <story>?”. These items were rated on an 11-point scale from 0 (0% or not at all) to 10 (100% or extremely). For each target news story, the four items were found to be reliable (αs = .92 to .96, grand α = .84) and unidimensional (eigenvalues = 3.3 to 3.6; variance explained = 82.3% to 88.7%). Thus, the items were summed into a single score for each story (grand M = 24.3, grand SD = 7.0). These measures were used as an additional indicator of information seeking, emphasizing attention rather than memory.

Information acquisition and perceived attention were significantly, though somewhat weakly, related for all stories (rs = .18 to .51, ps < .05).

Posttest Intrinsic Interest in News Story. Finally, respondents evaluated their own interest in each news segment. For each news package, respondents were asked, “How interested were you in <story>,” “How concerned did you feel about <issue> portrayed in <story>,” “How important is <issue> to you,” and “How directly do you think the information provided in <story> affects you, personally?”. Items were rated on an 11-point scale from 0 (not at all) to 10 (extremely).

These items (consisting of interest, concern, importance, and direct personal impact of each issue) were found to be reliable (αs = .82 to .92, grand α = .76) and unidimensional for each story (eigenvalues = 2.6 to 3.3; variance explained = 66.0% to 82.2%). Therefore, the items were summed into a single score for each story (grand M = 20.7, grand SD = 6.9). These post-stimulus measures served as the primary dependent variables.

Posttest intrinsic interest had a weak-to-moderate correlation with perceived attention (rs = .33 to .58, ps < .05) for each story. Posttest interest did not necessarily correlate with information acquisition (rs = .00 to .26, p < .05 for the two stories with r = .26, all others ns).

Results

Hypothesis 1

The main hypothesis (H2) was presented under the assumption (H1) that topics primed to activate an extrinsic goal about relevant news stories would, in fact, increase attentiveness to those stories. Thus, a mixed-measures MANOVA was used
Table 1
Extrinsic Goal Priming Effects on Information Seeking Activity
and Posttest Intrinsic Interest

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Priming Status of News Story</th>
<th>F(1,133)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information acquisition</td>
<td>Not Primed</td>
<td>10.8 (η² = .08)</td>
</tr>
<tr>
<td></td>
<td>Primed</td>
<td>10.8 (η² = .08)</td>
</tr>
<tr>
<td>Perceived attention</td>
<td>Not Primed</td>
<td>5.5 (η² = .04)</td>
</tr>
<tr>
<td></td>
<td>Primed</td>
<td>5.5 (η² = .04)</td>
</tr>
<tr>
<td>Posttest intrinsic interest</td>
<td>Not Primed</td>
<td>22.0 (η² = .14)</td>
</tr>
<tr>
<td>in news story*</td>
<td>Primed</td>
<td>22.0 (η² = .14)</td>
</tr>
</tbody>
</table>

Note. Cell values are means for each group of primed versus unmentioned stories (standard deviations in parentheses). For each dependent variable, priming status (absent, present) is the independent variable.

*df = 1,130 for manipulation check ANOVA.
**Group means for MANOVA (within row comparisons only) differ significantly at p < .05.

to test whether this priming event would increase information acquisition (H₁a) from and perceived attention (H₁b) to a relevant news story. As a preliminary test of H₂, posttest intrinsic interest in the story was also included as a dependent variable. The prime (present, absent) was entered as a within-subjects factor. Gender and presentation order were entered as between-subject factors. Information acquired from the story, perceived attention, and personal interest in the news packages were each used as a dependent variable.

Results showed that the prime had a significant main effect on both information acquisition and perceived attention (see Table 1), in support of H₁a and H₁b. Respondents remembered story elements better for primed topics than for unmentioned topics, and respondents reportedly paid more attention to stories when the stories were primed, as opposed to not mentioned. A main effect also emerged for posttest intrinsic interest in the news story, wherein primed stories were more personally interesting to respondents than were unmentioned topics. An additional ANOVA showed that the prime did not relate to pre-existing (pretest) general topic interest (F < 1). No other effects were found (Fs < 1).

Hypothesis 2

A hierarchical regression was used to evaluate the main hypothesis (H₂), that priming an extrinsic goal leads to increased information acquired from, and perceived attention to news stories about the primed topic, which in turn increases personal interest in the relevant story (see Baron & Kenny, 1986, on using regression to test mediation effects). Gender (dummy-coded 0 = male, 1 = female), age, GPA, and year in school (1 = freshman . . . 4 = senior) were entered into the first block
to control for these demographics. Pretest general topic interest was included in the second block to control for pre-existing interest a respondent might have in the news topic, so that a priming effect that transcended pre-existing interest level could be detected. News utility was also included here because, unlike the other demographics, this item relied on perceptions (as does pretest interest), and was necessary to control for news usefulness, which might also influence interest in a story.

The prime (0 = absent, 1 = present) was entered into the third block to evaluate its influence on posttest intrinsic interest in the story. Information acquisition was entered into the fourth block to evaluate whether this variable mediated the influence of the prime on posttest intrinsic interest. Finally, perceived attention to the news story was entered in the fifth and final block to evaluate whether perceived attention contributed to the mediation beyond information acquisition. Information acquisition and perceived attention were entered in this order to test the bottom-up priming trail described in the literature, as well as acknowledge research (e.g., Wood & Kallgren, 1988) that suggests greater elaboration on a topic (i.e., information acquisition) leads to increased perceived knowledge, which relates closely to perceived attention.

Results (see Table 2) show that demographics did not contribute to the prediction of posttest intrinsic interest in news stories. However, after controlling for demographics, news utility and pretest interest, the prime had appreciable predictive power in the model. Stories whose topics were primed were more intrinsically interesting than stories whose topics were not primed, regardless of pre-existing interest in the general topics. Information acquisition significantly improved upon the model in the predicted direction, as seen in the positive $B$-value and significant $F$-change score from Model 3 to Model 4. This result indicates some mediation, although the fact that the prime remains a significant predictor in Model 4 indicates that information acquisition only partially mediates the influence of the prime (see Baron & Kenny, 1986). In the final model, the effectiveness of information acquisition disappears once perceived attention is entered, as does news utility. Thus, the final model ($\text{Adj } R^2 = .41$, $F(9,258) = 22.0$, $p < .01$) indicates that perceived attention, rather than actual information acquisition of story elements, partially mediates the relation between priming of the extrinsic goal and resulting interest in a specific news story.

**Discussion**

Research indicates that personal interest is driving news consumption such that important items that are not personally intriguing are being neglected (e.g., Tewksbury, 2003). In response to this evidence, this study offered a simple test of whether an extrinsic epistemic goal might increase intrinsic interest in news through an increase in relevant information-seeking activity, as instigated by the extrinsic goal. It was hypothesized that, irrespective of pre-existing interest in a topic, priming a
Table 2
Extrinsic Goal Priming Effects on Posttest Intrinsic Interest in a News Story, Mediated by Information Acquisition and Perceived Attention (Hierarchical Regression)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1</td>
<td>B (SE B)</td>
<td>B (SE B)</td>
<td>B (SE B)</td>
<td>B (SE B)</td>
<td>B (SE B)</td>
</tr>
<tr>
<td>Participant age</td>
<td>.19(.33)</td>
<td>.09(.30)</td>
<td>.09(.29)</td>
<td>.06(.29)</td>
<td>.13(.26)</td>
</tr>
<tr>
<td>Gender</td>
<td>.52(1.0)</td>
<td>.02(.93)</td>
<td>.03(.91)</td>
<td>.16(.90)</td>
<td>1.1(.81)</td>
</tr>
<tr>
<td>Year in school</td>
<td>.70(.63)</td>
<td>.09(.56)</td>
<td>.30(.55)</td>
<td>.28(.55)</td>
<td>.16(.49)</td>
</tr>
<tr>
<td>GPA</td>
<td>-.34(.77)</td>
<td>-.69(.69)</td>
<td>-.69(.68)</td>
<td>-.89(.68)</td>
<td>-.65(.60)</td>
</tr>
<tr>
<td>Block 2</td>
<td></td>
<td>B (SE B)</td>
<td>B (SE B)</td>
<td>B (SE B)</td>
<td>B (SE B)</td>
</tr>
<tr>
<td>Perceived news utility</td>
<td>.68(.21)</td>
<td>.18*</td>
<td>.68(.21)</td>
<td>.18*</td>
<td>.29(.19)</td>
</tr>
<tr>
<td>Pre-existing interest</td>
<td>.39(.05)</td>
<td>.42*</td>
<td>.40(.05)</td>
<td>.43*</td>
<td>.38(.05)</td>
</tr>
<tr>
<td>Block 3</td>
<td></td>
<td>B (SE B)</td>
<td>B (SE B)</td>
<td>B (SE B)</td>
<td>B (SE B)</td>
</tr>
<tr>
<td>Prime (extrinsic goal)</td>
<td>2.6(.73)</td>
<td>.20*</td>
<td>2.3(.73)</td>
<td>.14*</td>
<td>2.1(.65)</td>
</tr>
<tr>
<td>Block 4</td>
<td></td>
<td></td>
<td>B (SE B)</td>
<td>B (SE B)</td>
<td>B (SE B)</td>
</tr>
<tr>
<td>Information acquisition</td>
<td>1.1(.44)</td>
<td>.13*</td>
<td>-1.7(.42)</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>Block 5</td>
<td></td>
<td></td>
<td></td>
<td>B (SE B)</td>
<td>B (SE B)</td>
</tr>
<tr>
<td>Perceived attention</td>
<td></td>
<td></td>
<td></td>
<td>.43(.05)</td>
<td>.44*</td>
</tr>
</tbody>
</table>

Adj$R^2 = .01$, $\Delta R^2 = .21$, $\Delta R^2 = .03$, $\Delta R^2 = .02$, $\Delta R^2 = .15$

Note. Coding as follows: gender (0 = male, 1 = female), year in school (1 = freshman ... 4 = senior), prime (0 = absent, 1 = present). Block 1 controls for demographics. Block 2 controls for pre-existing (pretest) general topic interest and perceived news utility. Dependent variable is posttest intrinsic interest in a specific news story.

* $p < .05$. 

$^{311}$
socially based goal about that topic will increase information acquired from and perceived attention to a television news story about the topic, which will, in turn, increase intrinsic interest in that news story.

First, analyses confirmed that priming topics increase information acquisition from, and perceived attention paid to relevant news stories. Second, consistent with the literature, analyses provided evidence that increased information seeking activity partially mediates the relation between extrinsic goals and intrinsic interest. This was found after controlling for pre-existing (pretest) general topic interest. Thus, it appears that introducing the idea of discussion about a topic successfully activated an extrinsic epistemic goal, which made the need for information seeking pertinent to achieving that goal more salient to the individual. Furthermore, as information seeking activity intensified, personal interest in the relevant story increased.

However, information seeking activity did not fully mediate the relation between the extrinsic goal and resulting intrinsic interest, and the contribution of information acquisition was completely subsumed by the effects of perceived attention in predicting interest in the news story. One explanation for these results is that hypothesizing a direction of activation, such as that suggested by a strict interpretation of bottom-up priming, is too simplistic (e.g., Shah & Kruglanski, 2003). Rather, the findings suggest that individuals have a direct link between their extrinsic and intrinsic goals, such that the intrinsic interest is activated concurrently with the activation of the common information seeking behaviors associated with the primed goal. Thus, whereas contribution of the prime lessened with the inclusion of information acquisition, its contribution did not lessen further with the additional inclusion of perceived attention.

Another explanation for this finding lies in the power of perception, namely, that it is not what one knows, but what one thinks one knows that most impacts one’s attitudes and behaviors. Wood (1982) has observed that the more accessible topical knowledge is in memory, the higher the individuals rate their perceived knowledge about that topic. This increase in perceived knowledge typically results in greater elaboration in the topic at hand (Wood & Kallgren, 1988), but the actual knowledge gained might or might not reach the levels of what the individual perceives. The data collection employed in this study had participants accessing newly acquired information to answer information acquisition and perceived attention items. This very act of responding to items might have bolstered respondents’ perceived knowledgeability in the story topics due to an increased focus on the information availability. Therefore, even though acquisition of story elements increased, participants’ perceptions of their own knowledgeability might have surpassed the actual knowledge gained from the newscast. Results suggest this might be occurring, assuming individuals’ perceptions of how thoroughly, clearly, and carefully they listened to each story is, indeed, a viable correlate of their perceived knowledge gained (e.g., Atkin, 1985; Knobloch, Carpentier, & Zillmann, 2003; Viswanath & Finnegan, 1996). In any case, taking into account demographics, perceived news utility, pre-existing topic interest, extrinsic goal activation, and the increased information seeking activity resulting from that activation, this study
yielded a model that explained over 40% of the variance in intrinsic interest levels in a televised news story.

Despite its successes, this study has several limitations. First, the study used university students as respondents. On one hand, college age is a valuable time to assess news consumption, as individuals develop their news habits during this period (e.g., Diddi & LaRose, 2006). Furthermore, students in this age group tend to sample or “graze” the news offerings, briefly surveying what is out there rather than dedicating a set time to receive news (Pew, 2004), which is the type of consumption most relevant for studies examining how to capture attention. However, college students tend to consume less news than do older individuals (Diddi & LaRose, 2006), and so news use and demographics not accounted for, such as ethnicity or socioeconomic status, would likely impact interest in certain news topics and news, in general. Second, the study relied on a within-subjects priming variable, wherein respondents served as their own control based on which topics they were “primed for” and which topics they were not. This design introduces the possibility that other elements in the study, such as the introduction of pretest topics, might have influenced the priming effect on the individual. Administering the pretest to all individuals prior to the priming event helps control for these potential effects, as does the dissipation time between display of the pretest topics and the prime (e.g., completion of demographics). However, use of a control group would strengthen future research designs.

Third, this study is a first step in this line of research on using external means to increase interest in news, and so the study offers its basic test of the hypotheses in a manufactured setting. Whereas care was taken to ensure the prime was akin to an “everyone is watching” message that might be aired on television, this care does not eliminate potential effects caused by the prime being delivered interpersonally by a facilitator in the context of a research session. A suspicion test administered at the end of each research session did confirm that no participant tied the prime with its true intent, which provides some evidence that participants weren’t simply consuming news they were urged to consume. However, a social prime delivered via a news tease would likely be obvious in its intent, and thus it is unclear how well the results of this study will generalize to more ecologically valid primes. Rather, because this study used a prime that ostensibly originated from peers as opposed to a news anchor, emphasizing what the peers liked to talk about, these findings might apply more to social media such as blogs, Digg, or other online news sites where users rate news stories.

Nonetheless, this investigation contributes to the understanding of how certain message elements might attract greater selection of the messages. Whereas previous studies have shown extrinsic goals to increase either attention to, or interest in information (e.g., Chance, 1992; Douglas, 1985), the present study links extrinsic goals to both information acquisition and intrinsic interest. Relevant to news applications, this study’s findings suggest that highlighting external rewards in a headline or news tease can attract news consumers just as effectively as a focus on intrinsic issues of personal health or safety (e.g., Knobloch-Westerwick, Carpentier, Blumhoff, &
Nickel, 2005). The findings also provide insight into why “people will be talking about it” messages might succeed in getting individuals to engage in further information-seeking. An example of this type of message is the “ask your doctor” pharmaceutical ad, which attempts to get doctors to learn about a medication in the event that future patients might inquire about the drug (Martinez, 2007). Similarly, news outfits might create promotional messages, suggesting that “everyone will be talking about” an upcoming story and spreading their messages through a peer network rather than through direct advertising. In this way, established and budding news organizations could use extrinsic messages to take advantage of the social media model in promoting each of their news segments, which should increase their audience share, and therefore, profits (e.g., Eastman, 2000). Finally, research on the interplay between extrinsic and intrinsic interest might prove useful in examining how news is processed over time, as well as how this interplay might be applied to message design to make issues of public importance more attractive to the individual. As television news remains the most consumed news source (Pew, 2004), it is important that this medium continues to report on such publicly important issues and promote these reports to a nation that is increasingly skeptical of the news (Pew, 2004; Robins, 2006).

References


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