Third-Person Effects and the Environment: Social Distance, Social Desirability, and Presumed Behavior

By Jakob D. Jensen and Ryan J. Hurley

Previous research has documented third-person effects (persons presuming that others will be more susceptible to media effects than they themselves are) and explored moderators such as social desirability (the effect reverses when the media effects are undesirable) and social distance (the effect increases as the social distance from the self increases). In a study of environmental news coverage, the authors observed the general third-person effect and the moderating role of social desirability; however, they also found that social distance affected presumed influence in complex ways reflecting varying perceptions of issue relevance for the comparison groups. A new variable, presumed behavior (the presumed effect of media coverage on others' behavior), was found to be independent of presumed influence and to offer improved prediction of perceivers' behavioral intentions.

Gunther and Storey (2003) recently proposed a simple indirect-effects model: People perceive some influence of a message on others and then react to that perception (p. 201). Derived from third-person effect research, the aptly named presumed influence model both challenges scholars to explore the third-person effect in new domains and raises important questions about the nature of influence itself. In this study, we take up these challenges.

First, we expanded third-person effect research into a new domain: the environment. Previous research has shown that environmental issues are prototypically unobtrusive, meaning they are outside most people's immediate frame of reference, making them highly reliant on and susceptible to media coverage of the issue (Eyal, Winter, & DeGeorge, 1981). In other words, most individuals have little or no personal interaction with environmental issues and rely almost exclusively on the media for information. Understanding how people perceive this

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coverage and what effect, if any, it has on others is a very important practical question for researchers, journalists, and public officials interested in environmental health.

Second, we explored the nature of influence itself by testing the predictive power of two different measures of influence, presumed behavior and presumed influence. Our goal was to answer key questions about perceived influence and how it functions. For example, does it matter what sort of influence a message is thought to have on others or is general influence enough to elicit a reaction? More to the point, is either the former or the latter a consistent predictor of behavior?

Third-Person Effect Research

Davison (1983) was the first scholar to recognize that individuals presume that others will be more susceptible to media effects than they themselves are. This self–other discrepancy is now referred to as the perceptual hypothesis within third-person effect research. More recently, research has explored whether perception of influence on others positively predicts behavioral intentions of the perceiver, typically referred to as the behavioral hypothesis.

The Perceptual Hypothesis
The perceptual hypothesis has received considerable scholarly attention (for a review, see Perloff, 2002) and strong meta-analytic confirmation (Paul, Salwen, & Dupagne, 2000). In addition to confirming the perceptual hypothesis, research has identified several important moderator variables. Of those, two—social desirability and social distance—seem especially relevant to environmental coverage.

Social desirability. The third-person effect has been found to increase with socially undesirable messages and decrease with socially desirable messages (Henriksen & Flora, 1999). This phenomenon is thought to be an example of self-image protection (Perloff, 2002). Self-image protection theories assert, among other things, that individuals filter communication effects based on how they are thought to reflect on the self. Henriksen and Flora (1999), for example, found that children from grades 4, 6, and 8 believe that cigarette ads (socially undesirable) had a greater influence on others than on themselves and that antismoking PSAs (socially desirable) had a greater influence on themselves than on others.

Social distance. The third-person effect has been found to increase as others become more socially distant from the perceiver (Cohen, Mutz, Price, & Gunther, 1988). Social distance is typically defined as the degree of similarity between the self and others (Eveland, Nathanson, Detenber, & McLeod, 1999). For example, third-person effect increases as others become increasingly general (e.g., people in this classroom, people in this town, people in this state) and hence more socially distant (Cohen et al., 1988).

The Behavioral Hypothesis
Exploring the behavioral hypothesis is now the central focus of third-person effect research. Early third-person effect research did consider the link between percep-

tion and behavior, but almost exclusively in the context of censorship (McLeod, Eveland, & Nathanson, 1997; Rojas, Shah, & Faber, 1996; Salwen & Dupagne, 1999; Shah, Faber, & Youn, 1999). This research identified a strong link between perceived message influence on others and desire for censorship, except in the case of news content (Salwen & Driscoll, 1997).

Outside of censorship literature, research on the behavioral hypothesis has been decidedly mixed. Researchers have found no links (Gunther, 1991; Price, Tewksbury, & Huang, 1998), partial links (Atwood, 1994; Tewksbury, Moy, & Weis, 2004), and strong links (Gunther & Storey, 2003; Tsfati & Cohen, 2003) between perception and behavior.

There are at least three possible explanations for these mixed findings. First, censorship might be a unique behavior with a framework favorable to the behavioral hypothesis (see Tewksbury, Moy, & Weiss, 2004). Second, and somewhat related to the first, the behavioral hypothesis might be true only for certain behaviors or in certain contexts. Finally, it is possible that current third-person effect research practices are, in some way, inadequate. At present, the last explanation seems most plausible and practical because past research has suggested third-person effect measurements have potential weaknesses and pursuing this explanation affords researchers the opportunity to collect data relevant to the first two as well.

One potential shortcoming in third-person effect research is the measurement of the predictor variable. Salwen and Dupagne (1999) argued that third-person effect predictor variables have been overly vague, stating that "researchers have not adequately explicated the effects construct . . . most studies have operationally measured effects in terms of the media's general influence" on others (p. 523). Salwen and Dupagne felt this general measure was insufficient and needed to be refined. Neuwirth and Frederick (2002) recently echoed this criticism, describing third-person effect predictor variables as "unnecessarily abstract" (p. 115).

Shortcomings in the predictor variable could explain previous findings concerning the behavioral hypothesis. One potential problem with general measures of perceived influence is that they reveal very little of what the receiver actually thinks. For example, a group of people might see a mob of victorious football fans heading into a bar with a sign urging patrons to drink one beer for every touchdown scored in the game. If questioned, the group of people would likely say that the football fans are more influenced by the bar sign than they are, but the group is also likely to express no desire to act on this perception. Indeed, why would someone react to this perception? It could be that the decision to act in this hypothetical situation hinges on a more specific perception than general influence of the sign on the fans. Perhaps if the group perceived that the influence would do something, like cause the fans to drink mass quantities of alcohol and then riot, then they may well be tempted to engage in some sort of response behavior (e.g., calling the police). Unfortunately, general measures of perceived influence are insensitive to subtle differences in perception and treat all perceptions of influence as equally likely to elicit behavioral response.

Tewksbury, Moy, and Weis (2004) recently hinted at a different measurement technique, arguing that "how one responds to a message depends largely on what

the message is thought to do to [others]" (p. 140). For them, exploring what receivers think others will do, and not just if they are perceived to be influenced, is a more useful measure for researchers attempting to link perception and action. Building on this research, we propose a new measurement for third-person effect predictor variables, *presumed behavior,* with the intention of capturing what is currently missing from general presumed influence measures. General measures of perceived influence reveal whether the receiver thinks others are influenced by a message; presumed behavior measures will focus on "what receivers think others will do." Tewksbury et al. hinted at the need for more specific predictor variables in their justification of their own presumed behavior measure. We extend their research by comparing the predictive power of general presumed influence measures with presumed behavior measures.

Hypotheses

Third-person effect research has consistently upheld the perceptual hypothesis. Additionally, several moderating variables have been identified as important.

> H1: Participants will perceive media messages as having a greater influence on others than on themselves.

> H2: Participants who perceive the message as socially desirable will perceive greater media message influence on self than on others.

> H3: Participants will perceive greater media message influence on others as social distance of others increases.

Support for the behavioral hypothesis has been mixed. One possible explanation for these mixed findings is a lack of clarity in the predictor variable. Previous research has suggested that a more behavior-specific measure, presumed behavior, will be a better predictor of receivers' behavioral intentions; however, it still seems early to pose this assertion as a hypothesis. Therefore, we propose the following research questions:

> RQ1: Do presumed influence and presumed behavior measures represent significantly different constructs?

> RQ2: If presumed influence and presumed behavior measures do represent different constructs, which measure is a better predictor of receiver behavioral intention?

Method

Procedure
The authors conducted the experiment in the fall of 2003. At the start of a class period, the instructor introduced the researchers and invited participants to volun-

tarily participate in a study in which they would be reading newspaper articles and filling out a survey. Participants were given one of two packets (two message conditions) containing a pretest, two newspaper articles, and a posttest. The use of two newspaper articles was due to the presence of a different study not discussed in this article. Each packet contained newspaper articles about one of the two topics. Packets were randomly distributed across class section and individual participant. As the packets were handed out, participants were asked not to review previous pages. Once all participants were finished, surveys were collected, and the participants were debriefed.

Participants

Students enrolled in an introductory communication course at a large university in the United States were offered extra credit by their instructor to participate in this study. A total of 243 students voluntarily completed the study (no student refused to participate). Slightly more females (56%) participated than males. The sample was fairly diverse: 66.3% were Caucasian, 11.1% were African American, 9.9% were Asian, 5.8% were Hispanic, and 7.9% described themselves as "other." Political ideology was also well distributed: 28% described themselves as conservative, 34.2% were liberal, 6.2% were independent, and 31.7% did not know their political ideology. The mean age of the sample was 18.4.

Stimulus Materials

Participants received two reproductions of actual newspaper articles. To avoid confounds, only the headline and body of the articles were shown to participants. Articles appeared on separate pages and each article fit neatly on a single page. Participants were told that all articles appeared in major U.S. newspapers in 2003. Because most environmental coverage focuses on conflict (Liebler & Bendix, 1996), participants were exposed to articles concerning one of two different environmental conflicts from 2003. Each topic is explained briefly below.

Dioxin regulation. The chemical dioxin has been a topic of discussion in the media for several decades (Friedman, 1999). Dioxin, a possible carcinogen, once again caught the attention of the media in 2003 following the Environmental Protection Agency's decision to not regulate it in sewer sludge used as fertilizer by farmers across the United States. Announced in the fall, this decision immediately drew criticism from most environmentalists and praise from most farmers involved with sewer sludge management (Pianin, 2003).

Wolf reintroduction. Extinct in many regions for decades, the gray wolf was reintroduced to the Northwest in 1995–1996, which met with criticism from many ranchers and praise from many environmentalists. In 2003, wolf reintroduction caught the attention of the media for a second time when the U.S. Department of Fish, Wildlife, and Parks announced the gray wolf would soon be taken off the endangered species list. This decision, seemingly harmless, forced all states with a wolf population, primarily states in the Northwest, to create their own wolf management plans. Previously a federal issue, returning control to the states rekindled the wolf reintroduction debate, resulting in another heated conflict (Bunch, 2003).

Measures

Apart from basic demographic information, we used single-item measures to assess media use (for newspaper, television, talk radio, and Internet), prior knowledge of the topics under study, story recall, parents' occupation, and, at the end of the survey, interest/attention to the study itself. None of these measures significantly affected the relationships under study, so all were omitted from the final analysis.

Presumed influence. General presumed influence, a measure of how likely the receiver thought the articles were to influence a person/group (1 = *likely* to 7 = *not likely*), was assessed for self, classmates, local residents (of the participant's community), state residents of Illinois (for the dioxin articles) or Montana (for the wolf articles), environmentalists, and legislators. Because dioxin regulation is a national issue affecting all states, any state could serve as a reference state; Illinois was chosen because participants lived in Illinois. Wolf regulation is a regional issue; Montana was selected because it is an affected state and was mentioned in both wolf regulation articles. Thus these questions provided parallel assessments of relevant state-level perceived influence, even though different states were mentioned.

Presumed behavior. Presumed behavior, a measure of how likely receivers thought others were to do something (1 = *likely* to 7 = *not likely*), was assessed for seven different reactions: nothing will happen, local residents (of the participant's community)/environmentalists/legislators will talk about this issue, and local residents (of the participant's community)/environmentalists/legislators will act on this issue.

Receiver behavioral intention. Receiver behavioral intention was assessed using a scale measuring likelihood of action (1 = *likely* to 7 = *not likely*). To aid in interpretation of behavioral intention scores, we also measured perceived capability of action (1 = *capable* to 7 = *not capable*).

Social desirability. Social desirability of the message was assessed using a scale measuring how helpful receivers thought the articles were (1 = *helpful* to 7 = *not helpful*).

Results

Message Differences

To test for significant differences by message, we ran a full factorial MANOVA. The results of this analysis revealed a significant multivariate main effect for message, Wilkes's λ = .362; $F(18, 209)$ = 20.427, $p < .001$, r = .28, accompanied by significant univariate effects on all presumed influence, presumed behavior, social desirability, and behavioral intention variables except two. Two presumed behavior variables were not significantly different by message: the likelihood that environmentalists would talk about the issue, $F(2, 241)$ = .123, p = .726, or act on the issue, $F(2, 241)$ = .004, p = .948. In light of this, all subsequent analysis had to be separated by message.

Table 1. Presumed Influence (1 = *Not at all influenced*; 7 = *Completely influenced*)

	Dioxin Mean (*SD*)	Wolf Mean (*SD*)
Self	3.58 (1.45)	3.11 (1.39)
Classmates	3.58 (1.34)	3.06 (1.18)
Local residents	4.49* (1.43)	2.95* (1.30)
State residents	4.78* (1.19)	5.87* (1.32)
Environmentalists	6.20* (0.96)	5.83* (1.19)
Legislators	4.16* (1.42)	4.56* (1.30)
N	122	121

*Significantly different than presumed influence on self, *p* < .001, two-tailed.

Greater Presumed Influence (H1)

Hypothesis 1 stated that participants would perceive media messages as having a greater influence on others than on themselves. Two-tailed *t*-tests, comparing mean presumed influence on self with all other presumed influence means, were used to test whether participants perceived media messages as being more influential for others (see Table 1). An a priori power analysis of this test, using an alpha level of .05 and the most conservative sample possible, revealed limited power to detect small effects (power = .34) and strong power to detect medium effects (power = .97).

For those exposed to dioxin articles, classmates, $t(121) = .00$, $p = 1.00$, $r = .00$, were not perceived as being more influenced than self, but local residents, $t(120) = -6.67$, $p < .001$, $r = -.29$; state residents, $t(120) = -9.12$, $p < .001$, $r = -.38$; environmentalists, $t(119) = -17.69$, $p < .001$, $r = -.63$; and legislators, $t(121) = -3.61$, $p < .001$, $r = -.16$, were perceived as being significantly more influenced than self.

For those exposed to wolf articles, classmates, $t(118) = .55$, $p = .580$, $r = .03$, and local residents, $t(118) = 1.26$, $p = .209$, $r = .06$, were not perceived as being more influenced than self, but state residents, $t(118) = -17.61$, $p < .001$, $r = -.63$; environmentalists, $t(118) = -17.38$, $p < .001$, $r = -.62$; and legislators, $t(116) = -8.84$, $p < .001$, $r = -.38$, were perceived as being significantly more influenced than self. In sum, Hypothesis 1 was supported.

Social Desirability (H2)

Hypothesis 2 stated that participants who perceived the message as socially desirable would perceive greater media message influence on self than on others. For the purpose of analyzing the data, mean scores on the social desirability scale for those exposed to dioxin (*M* = 3.55, *SD* = 1.43) and wolf articles (*M* = 3.39, *SD* = 1.11) were used to dichotomize the data. Two-tailed *t*-tests, comparing mean presumed influence on self for those who thought the message was helpful or unhelpful, were used to test whether social desirability of the message led to greater perceived influence on self. An a priori power analysis of this test revealed limited power to detect small effects (power = .34) and strong power to detect medium effects (power = .97).

For those exposed to dioxin articles, a significant difference was found, $t(120)$ = 5.19, $p < .001$, $r = -.23$. On average, those who viewed the message as helpful perceived greater effect of the message on self (helpful: $M = 4.17$, $SD = 1.34$; not helpful: $M = 2.93$, $SD = 1.30$).

For those exposed to wolf articles, a significant difference was found, $t(117)$ = 3.58, $p = .001$, $r = .16$. On average, those who viewed the message as helpful perceived greater effect of the message on self (helpful: $M = 3.49$, $SD = 1.44$; not helpful: $M = 2.61$, $SD = 1.15$). In sum, Hypothesis 2 was supported.

Social Distance (H3)

Hypothesis 3 proposed that participants would perceive greater media message influence on others as social distance of others increased. Tests of within-subjects contrasts, testing differences between self and classmates, classmates and local residents, and local residents and state residents, were used to determine whether presumed influence increased as social distance increased (see Table 1 for all means and standard deviations). Because it is unclear where environmentalists and legislators stand as social groups compared to the self, they were excluded from this analysis. As a reminder, an a priori power analysis of this test revealed limited power to detect small effects (power = .34) and strong power to detect medium effects (power = .97).

For those exposed to dioxin articles, there was no significant difference between self and classmates, $t(121) = .00$, $p = 1.00$, $r = .00$, but there were significant differences between classmates and local residents, $t(119) = 7.55$, $p < .001$, $r = .33$, and local residents and state residents, $t(119) = 2.28$, $p = .024$, $r = .10$.

For those exposed to wolf articles, there were no significant differences between self and classmates, $t(118) = 1.26$, $p = .209$, $r = .06$, and classmates and local residents, $t(118) = 1.04$, $p = .30$, $r = .05$, but there were significant differences between local residents and state residents, $t(118) = 17.65$, $p < .001$, $r = .63$.

In sum, H3 was not supported. In fact, we observed a number of contradictory findings. Across both messages, presumed influence did not statistically differ for self and classmates. In addition, local residents were perceived as more influenced than self for those exposed to dioxin articles and less influenced than self for those exposed to wolf articles. Because classmates and local residents should both be more socially distant than self, neither finding fit with our expectations.

Presumed Influence Compared to Presumed Behavior (RQ1)

RQ1 investigated whether presumed influence and presumed behavior measures represented significantly different constructs. To answer this question, separate exploratory factor analyses were run for each message (dioxin and wolf) and group (local residents, environmentalists, and legislators) to test whether presumed influence and presumed behavior measures loaded on different factors. Presumed behavior data were not collected for state residents, so that comparison group was not included in this analysis.

For both local residents and environmentalists, presumed influence and presumed behavior measures failed to load on separate factors for either message. In other words, the measures were not statistically different for those groups.

Perceptions of legislators, however, revealed significant differences across both messages. For those exposed to dioxin articles, presumed influence on legislators loaded on factor one (explaining 62% of the variance), and both presumed behavior variables, talk and act, loaded on factor two (explaining 26% of the variance). For those exposed to wolf articles, presumed influence on legislators loaded on factor one (explaining 56% of the variance), and both presumed behavior variables, talk and act, loaded on factor two (explaining 25% of the variance).

In sum, a principle components factor analysis revealed that presumed influence and presumed behavior measures can load on separate factors.

Presumed Influence Versus Presumed Behavior (RQ2)
RQ2 investigated whether either measure, presumed influence or presumed behavior, was a better predictor of receiver behavioral intention. To answer this question, we ran a series of hierarchical multiple regressions to test whether presumed influence and presumed behavior predicted receiver behavioral intention and, if so, which of the variables was the best predictor. For each regression, presumed influence on self, presumed influence on the relevant comparison group, and both presumed behavior variables for that comparison group were entered simultaneously (see Table 2 for results). An a priori power analysis of this test revealed limited power to detect small effects (power = .19) and strong power to detect medium effects (power = .92).

For those exposed to dioxin articles, all three models were significant. For local residents, the model was significant, $F(4, 115) = 8.04$, $R^2 = .22$, $p < .001$, and in terms of individual relationships within that model, presumed influence on self was significant, $t = 4.26$, $p < .001$, $r = .19$, and the perception that local residents would act approached significance, $t = 1.78$, $p = .078$, $r = .08$. For environmentalists, the model was significant, $F(4, 114) = 7.30$, $R^2 = .20$, $p < .001$, and in terms of individual relationships within that model, presumed influence on self was significant, $t = 4.67$, $p < .001$, $r = .21$, and presumed influence on environmentalists approached significance, $t = 1.76$, $p = .081$, $r = .08$. For legislators, the model was significant, $F(4, 116) = 8.26$, $R^2 = .22$, $p < .001$, and, in terms of individual relationships within that model, only presumed influence on self was significant, $t = 4.80$, $p < .001$, $r = .21$.

For those exposed to wolf articles, all three models were significant. For local residents, the model was significant, $F(4, 114) = 4.99$, $R^2 = .15$, $p = .001$, and in terms of individual relationships within that model, only presumed influence on self was significant, $t = 2.90$, $p = .005$, $r = .13$. For environmentalists, the model was significant, $F(4, 114) = 5.05$, $R^2 = .15$, $p = .001$, and in terms of individual relationships within that model, only presumed influence on self was significant, $t = 4.16$, $p < .001$, $r = .19$. For legislators, the model was significant, $F(4, 112) = 4.81$, $R^2 = .15$, $p = .001$, and in terms of individual relationships within that model, only presumed influence on self was significant, $t = 3.93$, $p < .001$, $r = .18$.

In sum, presumed influence and presumed behavior were not very effective at predicting behavioral intention; however, further analysis of the data revealed uniformly low behavioral intention scores for the sample. Fully 80% of the participants described themselves as unlikely to act, a finding that made us question the

Table 2. Presumed Influence Versus Presumed Behavior

	Behavioral intention		Capability of action	
	Dioxin B (SE)	Wolf B (SE)	Dioxin B (SE)	Wolf B (SE)
Local residents				
PS	.31 (.07)***	.23 (.08)**	.13 (.11)	.09 (.12)
PI	-.01 (.08)	.13 (.09)	-.03 (.12)	.07 (.13)
PB-Talk	.05 (.07)	-.06 (.08)	-.07 (.11)	-.11 (.12)
PB-Act	.15 (.09)†	.03 (.08)	.26 (.13)†	.26 (.12)*
R^2	.22***	.15**	.06	.06
N	120	119	120	119
Environmentalists				
PS	.30 (.07)***	.29 (.07)***	.12 (.10)	.14 (.11)
PI	.18 (.10)	-.14 (.08)	.31 (.15)*	-.10 (.13)
PB-Talk	.06 (.09)	.03 (.10)	.35 (.13)**	.09 (.15)
PB-Act	-.06 (.09)	.06 (.11)	-.12 (.13)	.15 (.16)
R^2	.20***	.15**	.15**	.06
N	119	119	119	119
Legislators				
PS	.31 (.07)***	.27 (.07)***	.17 (.10)	.17 (.10)
PI	.12 (.08)	.06 (.08)	.15 (.12)	-.23 (.12)†
PB-Talk	.02 (.09)	.03 (.08)	.06 (.14)	.23 (.13)†
PB-Act	-.01 (.10)	.06 (.09)	-.06 (.15)	.08 (.14)
R^2	.22***	.15**	.05	.08*
N	121	119	121	117

Note. Table entries are unstandardized coefficients with standard errors in parentheses. PS = presumed influence on self. PI = presumed influence. PB = presumed behavior.

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

behavioral efficacy of the participants in this study. Subsequent analysis confirmed our assumption, as roughly 60% of the total sample described themselves as incapable of action.

Because capability of action is a key factor in behavioral intention, we decided to explore the relationship between presumed influence, presumed behavior, and perceptions of capability. We ran a series of hierarchical multiple regressions to test whether presumed influence and presumed behavior predicted receiver capability and, if so, which of the variables was the best predictor (see Table 2 for results).

For those exposed to dioxin articles, regression analysis revealed that only one model, perceptions about environmentalists, was significant, $F(4, 114) = 4.92$, $R^2 = .15$, $p = .001$. In terms of individual relationships within that model, the perception that environmentalists were influenced, $t = 2.09$, $p = .039$, $r = .10$, and that environmentalists would talk about the issue, $t = 2.81$, $p = .006$, $r = .13$, were both significant predictors. For local residents, the model was not significant, $F(4, 115) = 4.49$, $R^2 = .06$, $p = .130$, but one individual relationship within that model, the perception that local residents would act, approached significance, $t = 1.91$, $p =$

.058, $r = .09$. For legislators, the model was not significant, $F(4, 116) = 4.49$, $R^2 = .06$, $p = .130$, and no individual relationships were significant.

For those exposed to wolf articles, regression analysis revealed that only one model, perceptions about legislators, was significant, $F(4, 112) = 2.56$, $R^2 = .08$, $p = .043$. In terms of individual relationships within that model, the perception that legislators were influenced, $t = -1.94$, $p = .055$, $r = .09$, and that legislators would talk, $t = 1.83$, $p = .071$, $r = .09$, both approached significance. For local residents, the model was not significant, $F(4, 114) = 1.81$, $R^2 = .06$, $p = .132$, but one individual relationship within that model, the perception that local residents would act, was significant, $t = 2.13$, $p = .035$, $r = .10$. For environmentalists, the model was not significant, $F(4, 114) = 1.69$, $R^2 = .06$, $p = .157$, and no individual relationships were significant.

In sum, presumed influence and presumed behavior were found to be significant predictors of receiver capability. Of the two, presumed behavior appears to be a slightly better predictor. Presumed behavior variables were significant predictors in two of the models and approached significance in two others. Presumed influence, on the other hand, was a significant predictor in just one model and approached significance in another. Even though both variables predicted receiver capability, presumed behavior was more effective overall.

Discussion

What receivers think messages do to others is a provocative question. The current study engaged that question in a number of ways. Some of our findings mirrored those of prior research whereas others challenged current understandings of third-person effects.

Consistent with many previous studies, the results here confirm the general perceptual bias of a third-person effect. Participants in the study presumed that others were more susceptible to media effects than they themselves were. In addition, social desirability of the message once again proved to be a significant moderator of perceptions of influence on self. In other words, participants who viewed the message as more helpful expressed higher presumed influence on self than those who viewed the message as unhelpful. Both replications held across multiple messages providing further evidence that these two phenomena are real.

Other findings challenged, rather than confirmed, prior third-person effect research. For example, the present results indicate some caution in too easily accepting any particular conception of the relationship between social distance and third-person effects. The original conception of third-person effects—and indeed the very label—suggested that the perceived impact of media contents on others would systematically vary depending on the social distance between the perceiver and the other. The expectation was that as the other become more distant, media contents would be presumed to have greater effects: I (first person) am not affected at all, you (second person) are affected a little, and they (third person) are affected quite a bit (Davison, 1983, p. 3).

The results of the current investigation are not entirely consistent with this neat picture. As an example, the relationship between social distance and third-person effects differed across messages. Finding significant differences by message did not surprise us. Indeed, the logic behind a multiple message approach (Jackson, 1992) is that message content is not static and therefore different messages can and do elicit different responses.

The nature of the specific variation between the messages was initially puzzling to us, but a careful examination of our survey instrument revealed a possible explanation. For local residents, participants were asked to assess how the message influenced or would influence "residents of your community." As a result, participants were asked to estimate the effect of the message on members of their community and not the community pertinent to the environmental conflict. Because participants in this study were not in the Northwest, the primary location of the wolf reintroduction conflict, they may have perceived the issue as not relevant to members of their own community. Dioxin regulation, on the other hand, is a national issue affecting U.S. citizens in all states, so it may have seemed "closer to home" than a story about wolf trouble outside local residents' perceived frame of reference.

If this explanation is correct, then perceived issue relevance for comparison groups may moderate the impact social distance has on presumed influence. Put another way, the perceived influence of a message on others may be affected by how relevant the message is perceived to be for that group. This finding makes sense in that relevant messages are more likely to be of interest to people and therefore more likely to be influential.

The fact that influence scores return to normal with perceptions of state residents also can be attributed to our survey questions. We asked participants to estimate the effect of the articles on "Illinois residents" for the dioxin articles and "Montana residents" for the wolf articles. The strategy to use different states for the two issues was actually intended to make the response options similar. Because the findings are similar for the state residents question, where the states are different to maintain consistent relevance, and different for the local residents question, where the locality is identical and hence not equally relevant, our initial assumptions seem to be correct. This finding is reminiscent of an observation made by Chaffee (1991), "A condition that remains stable even when it could, and perhaps should, change suggests to some theorists that it is of the highest importance" (p. 10). Indeed, the stability of state-level perceptions, maybe more than the instability of local-level perceptions, suggests that issue relevance is important to presumed influence research.

One implication of this finding is that the nature of third-person effects, and hence the theoretical mechanism for explaining such effects, is perhaps more complicated than commonly supposed. For example, it might be attractive to think that third-person effects are just a matter of self-image protection (see, e.g., Perloff, 2002). That picture is certainly consistent with, for example, the observed role of social desirability as a moderator, but a self-image protection explanation surely leads to the expectation that social distance should straightforwardly be related to the strength of the effect. In other words, people should be most con-

cerned about having a positive image of self, somewhat less concerned about having a positive image of (for example) peers or friends, still less concerned about those in their community at large, and so forth. These data, however, do not underwrite such a theoretical account.[1]

The present results also point to an important conceptual refinement concerning third-person effects. Previous research has commonly treated the presumed influence of mass media as an undifferentiated idea; research participants are asked about how much some particular group will be "influenced" or "affected" by the media. The present study, however, shows that people are capable of distinguishing between different sorts of influence. More importantly, these subtle perceptual differences seem to be meaningful. For instance, even though presumed influence and presumed behavior were not very effective at predicting receiver's behavioral intentions, both did significantly predict whether receivers felt capable of acting. Indeed, participants in the study seemed to fall into one of two camps: capable or incapable. On one hand, capable participants expressed strong self-efficacy (I can act), low behavioral intention (I will not act), and strong presumed influence/behavior (others are influenced/will act). Incapable participants, on the other hand, expressed low self-efficacy, low behavioral intention, and low presumed influence/behavior (I cannot act, I will not act, and neither will they). One implication of this finding is that individual's third-person perceptions are more nuanced than previously documented, a finding that suggests more sensitive measures may be needed in future research.

This, in turn, implies that correspondingly more complex theoretical accounts will be needed in order to explain third-person effects. One possibility is that third-person perceptions are more rational than previously expected. In social judgment literature, individuals are often portrayed as motivated tacticians with "multiple information processing strategies" and as acting on "goals, motives, needs, and forces in the environment" (Taylor, 1998, p. 75). In other words, people are pragmatic in their decision making and govern their energy expense using some sort of cost-benefit analysis. In the field of political science, Downs (1957) had a similar, though somewhat more pessimistic, view of decision making. He argued that citizens were in a constant struggle to maximize gains and reduce costs. As such, he concluded that rational citizens did not need to gather information, stay informed, or influence government decision making because such efforts yielded few gains and required large costs. Moreover, rational citizens quickly realize that others will act in their place. Not only was it logical for rational citizens to avoid the basic costs of democratic citizenry, but it also was rational for them to assume that others would act in their stead. By following this basic model, Downs be-

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[1] Another important finding within the social distance data is that receivers perceived classmates as no more influenced than themselves by the messages. This finding may be attributable to the lack of social distance between self and classmates when thinking about environmental conflicts. Classmates are more socially distant than self, and previous studies have found perceptual differences between these two categories (Cohen et al., 1988), but the social distance between the two groups may have seemed insignificant or irrelevant when thinking about complex environmental issues. Our data allow us only to speculate about this unexpected result.

lieved that rational citizens reduced their costs (i.e., they did not have to act) while maximizing their gains (i.e., others act and produce the required gains for everyone).

In our study, participants seemed to be acting rationally. Whether they felt capable of action or not, participants expressed little intention to act. Those who felt capable of acting, however, also perceived that others would act on the issue. This is a very Downsian approach to decision making: Others will act on this issue, so I do not need to act. It is also very sensible because environmental issues are typically viewed as unobtrusive. Issues outside a receiver's immediate frame of reference that are being handled by other citizens should not, in a Downsian sense, elicit action from rational individuals. It is impossible to confirm this theory with the data in hand, but it is certainly something to consider in future third-person effect research.

References

Atwood, L. E. (1994). Illusions of media power: The third-person effect. *Journalism Quarterly*, *71*, 269–281.

Bunch, J. (2003, October 2). Wolf rule prompts suit; 17 groups seek to restore gray wolves' endangered status. *Denver Post*, p. A10.

Chaffee, S. H. (1991). *Explication*. Newbury Park, CA: Sage.

Cohen, J., Mutz, D., Price, V., & Gunther, A. (1988). Perceived impact of defamation: An experiment on third-person effects. *Public Opinion Quarterly*, *52*, 161–173.

Davison, W. P. (1983). The third-person effect in communication. *Public Opinion Quarterly*, *47*, 1–15.

Downs, A. (1957). *An economic theory of democracy*. New York: HarperCollins.

Eveland, W. P., Nathanson, A. I., Detenber, B. H., & McLeod, D. M. (1999). Rethinking the social distance corollary: Perceived likelihood of exposure and the third-person perception. *Communication Research*, *26*, 275–302.

Eyal, C. H., Winter, J. P., & DeGeorge, W. F. (1981). The concept of time frame in agenda-setting. In G. C. Wilhoit (Ed.), *Mass communication yearbook, 2* (pp. 212–218). Beverly Hills, CA: Sage.

Friedman, S. M. (1999). The never-ending story of dioxin. In S. Friedman, S. Dunwoody, & C. Rogers (Eds.), *Communicating uncertainty: Media coverage of new and controversial science* (pp. 113–136). Mahwah, NJ: Erlbaum.

Gunther, A. C. (1991). What we think others think: Cause and consequence in the third-person effect. *Communication Research*, *18*, 355–372.

Gunther, A. C., & Storey, J. D. (2003). The influence of presumed influence. *Journal of Communication*, *53*, 199–215.

Henriksen, L., & Flora, J. A. (1999). Third-person perception and children: Perceived impact of pro- and anti-smoking ads. *Communication Research*, *26*, 643–665.

Jackson, S. (1992). *Message effects research: Principles of design and analysis*. New York: Guilford.

Liebler, C. M., & Bendix, J. (1996). Old-growth forests on network news: News sources and the framing of an environmental controversy. *Journalism & Mass Communication Quarterly*, *73*, 53–65.

McLeod, D. M., Eveland, W. P., & Nathanson, A. I. (1997). Support for censorship of violent and misogynic rap lyrics. *Communication Research*, *24*, 153–174.

Neuwirth, K., & Frederick, E. (2002). Extending the framework of third-, first-, and second-person effects. *Mass Communication and Society*, *5*, 113–140.

Paul, B., Salwen, M. B., & Dupagne, M. (2000). Third-person effect: A meta-analysis of the perceptual hypothesis. *Mass Communication and Society*, *3*, 57–85.

Perloff, R. M. (2002). The third-person effect. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (2nd ed., pp. 489–506). Mahwah, NJ: Erlbaum.

Pianin, E. (2003, October 18). Farm dioxins won't be monitored; fertilizer posed little risk in studies, EPA says. *Washington Post*, p. A10.

Price, V., Tewksbury, D., & Huang, L.-N. (1998). Third-person effects on publication of a holocaust-denial advertisement. *Journal of Communication*, *48*(2), 3–26.

Rojas, H., Shah, D. V., & Faber, R. J. (1996). For the good of others: Censorship and the third-person effect. *International Journal of Public Opinion Research*, *8*, 163–186.

Salwen, M. B., & Driscoll, P. D. (1997). Consequences of third-person perception in support of press restrictions in the O. J. Simpson trial. *Journal of Communication*, *47*(2), 60–78.

Salwen, M. B., & Dupagne, M. (1999). The third-person effect: Perceptions of the media's influence and immoral consequences. *Communication Research*, *26*, 523–549.

Shah, D. V., Faber, R. J., & Youn, S. (1999). Susceptibility and severity: Perceptual dimensions underlying the third-person effect. *Communication Research*, *26*, 240–267.

Taylor, S. E. (1998). The social being in social psychology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 1, pp. 58–95). New York: McGraw-Hill.

Tewksbury, D., Moy, P., & Weis, D. S. (2004). Preparations for Y2K: Revisiting the behavioral component of the third-person effect. *Journal of Communication*, *54*, 138–155.

Tsfati, Y., & Cohen, J. (2003). On the effect of the "third-person effect": Perceived influence of media coverage and residential mobility intentions. *Journal of Communication*, *53*, 711–727.