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Rethinking the Target Corollary:

The Effects of Social Distance, Perceived Exposure, and Perceived Predispositions on First-Person and Third-Person Perceptions

This study examines the effects of social distance, perceived exposure, and perceived predispositions on perceived media effects for desirable and undesirable health messages. It finds support for the effect social distance as traditionally measured; that is, groups that are more socially distant from the self, like the public, are perceived to be more affected by cigarette ads than close groups, such as friends. However, individual measures of respondents' social distance from any given comparison group generally are unrelated to perceived effects on the group. The influence of a group's perceived exposure on perceived message effects is confirmed for cigarette ads but not for desirable messages. Perceived attitudes of comparison groups toward message-relevant behaviors emerge as a factor that deserves inclusion in models of perceived effects.

Keywords: *third-person effect; first-person effect; social distance; exposure; prosocial messages; stereotypes*

The explanatory framework for the third-person effect has expanded considerably since the effect was first described by Davison (1983) as the tendency to believe that media effects will be greater for others than for oneself. Among the first factors to be identified (Perloff, 1993) as contributing to first-person and third-person effects were message desirability (Chapin, 2000; Gunther & Mundy, 1993; Gunther & Thorson, 1992; Hoorens & Ruiter, 1996; Innes & Zeitz, 1988; White, 1997; White & Dillon, 2000) and social distance between the self and comparison groups (Cohen & Davis, 1991; Cohen, Mutz, Price, &

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Gunther, 1988; Duck, Hogg, & Terry, 1995; Gibbon & Durkin, 1995; Gunther, 1991; White, 1997).

Most third-person effect studies, especially early on, dealt with messages that would be seen as "not smart to be influenced by" (Gunther & Mundy, 1993); however, it was found that the effect diminished or reversed into a first-person effect when the media message in question was prosocial or could have desirable consequences. As for social distance, it was implicitly recognized as a key variable by Davison (1983), and after several studies, the positive relationship between perceived media effects and the social distance of the self from the "others" was enshrined as the "social distance corollary."

The social distance corollary was challenged by findings that perceived exposure of a group to a message was a better predictor of perceived effects than perceived similarity to the group (Eveland, Nathanson, Detenber, & McLeod, 1999; McLeod, Detenber, & Eveland, 2001; McLeod, Eveland, & Nathanson, 1997). Thus was born the "target corollary"—to the extent that a group is perceived as the target of a type of media content, perceived effects on them will be greater. Unfortunately, the target corollary has been empirically incorporated almost exclusively in work by Eveland and McLeod and their colleagues. Others have discussed the target corollary but mainly in terms of its untenability as an alternate explanation for their findings (Meirick, 2004; Scharrer, 2002).

Despite the strong results of the target corollary studies cited above, the effect has been tested only for antisocial music lyrics. It has not been tested for messages where there would likely be less perceived variance in exposure, nor has it been tested for desirable messages. There is some evidence to suggest that the target corollary might not hold for positive messages (Meirick, 2002), perhaps because of incompatibility between beliefs about a group's exposure and (heretofore underexamined) beliefs about a group's predispositions toward the message's advocated behavior.

This most recent suggested factor in first-person and third-person effects draws from a logic similar to that of the target corollary. At its core, the target corollary relies on the idea that people "observe or infer a relationship between certain types of media content and certain types of people. For instance, most people could guess that romantic comedies are more popular among women, whereas action movies are more popular among men" (Eveland et al., 1999, p. 281). This kind of belief is stereotypical in that stereotypes are "cognitive structures that contain our knowledge, beliefs, and expectations about a social group" (Kunda, 1999, p. 315). Recent studies suggest that other stereotypical beliefs, such as beliefs about comparison groups' predispositions, may play a role in perceived effects on those groups (Meirick, 2004; Scharrer, 2002); however, evidence is tentative and indirect so far.

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The current study attempts to bring all the aforementioned factors together for the first time. It will examine the relative explanatory power of social distance, perceived exposure, and perceived predispositions for the perceived effects of positive and negative messages concerning tobacco use and drinking and driving. In preparation for doing so, it discusses each of these factors in turn, paying particular attention to areas where they may come into conflict and where the findings in the literature are inconclusive.

Battle of the Corollaries: Social Distance Versus Target

The social distance corollary typically has been demonstrated by showing a pattern of increasing effects of undesirable messages as comparison groups grow more general or more geographically distant from the self. For instance, Gibbon and Durkin (1995) found such a pattern as the locus of effects moved from self to family to neighbors to other state residents to other Australian citizens to others in general. Some have found similar patterns (Cohen et al, 1988; Gunther, 1991; White, 1997); however, others have not (e.g., Cohen & Davis, 1991). Other conceptions of social distance have used a reference group approach, conceiving of comparison groups as in-groups or out-groups based on, for example, politics (Duck et al., 1995; Meirick, 2004) or race (Neuwirth & Frederick, 2002; Sharrer, 2002). In this approach, in-groups are seen as reacting much as the self does, whereas out-groups are contrasted with the self. Social identity theory (Tajfel & Turner, 1979) and social categorization theory (Turner, 1985) posited that this is done to enhance self-esteem through the part of the self-concept drawn from reference group identification and disidentification.

There were often anomalous findings in studies examining the social distance corollary, regardless of how distance was conceived. However, the greater blow to the corollary came in the form of the target corollary (Eveland et al., 1999; McLeod et al., 1997, 2001). These studies were perhaps the first to include individual-level measures of the social distance that respondents perceived from the comparison groups; that is, respondents were asked how similar they thought they were to the average member of a wide array of comparison groups—some arranged along traditional lines of generality, others along lines of age or education. In addition, they measured perceived exposure for each comparison group. A series of regression equations showed perceived exposure to be a much better predictor of perceived effects on comparison groups than social distance.

The logic of the target corollary is that effects estimates for others are based on perceived exposure in line with a lay theory of media effects

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resembling the hypodermic model: People observe negative attitudes and behaviors, they observe messages that would seem to encourage those behaviors, and they make a causal assumption, as people are wont to do, about media effects (Eveland et al., 1999; McLeod et al., 2001). The logic works well for negative messages, and thus far, the four types of messages examined have been all undesirable, all concerning violent or misogynistic music lyrics. As McLeod et al. (2001) acknowledged, the target corollary needs to be examined with a broader range of messages.

Indeed, the logic above would seem to break down for messages intended to discourage negative behavior. If an observer believes a group uses a lot of drugs and is asked about the effects on that group of an antidrug message to which the observer believes they have been exposed, the observer would be hard-pressed to assume that exposure equals influence. Another consideration is that prosocial messages tend to be targeted toward groups considered "at risk" for the behavior they discourage, groups that may be perceived as prone to misbehavior. Along those lines, Meirick (2002) found that college student respondents thought their fellow students would be less affected than the general public by public service announcements (PSAs) about drunk driving, wearing seat belts, and avoiding tobacco, most of which are, in fact, targeted toward young adults. This study did not measure perceived exposure, and it is possible that the public would have been perceived as more exposed to the PSAs, contrary to reality. However, the results did not square with the social distance corollary, either, if we assume that the student respondents felt closer to other students than to the general public.

What else could explain the pattern of results Meirick (2002) found? A deeper answer may lie in going further down the path blazed by the target corollary. If perceived exposure of social groups is relevant to their perceived effects, then other beliefs about the social groups may be as well—and these beliefs may have conflicting influences on perceived message impact. Perhaps perceptions of other college students as prone to risky behavior placed limits on the usual self-enhancing pattern of pro-in-group bias that characterizes the social distance corollary. Biernat, Vescio, and Green (1996) observed similar tendencies among sorority and fraternity members, who rejected negative stereotypes for themselves but accepted them as valid for sorority and fraternity members in general. In a sense, this would be an example of a social reality constraint on self-enhancement similar to the "limits/possibilities" approach of Peiser and Peter (2001). The difference is that where Peiser and Peter were concerned principally with the perceiver's situation, the current research is concerned with perceptions of the comparison groups' predispositions; in other words, stereotypical beliefs.

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Stereotypical Beliefs: Beyond Perceived Exposure

Knowledge, beliefs, and expectations about social groups or categories are organized as cognitive structures called stereotypes. As Hamilton and Sherman (1994) pointed out, people rely on stereotypes of social groups as a cognitive efficiency to help simplify and make sense of the information-rich social environment (Bodenhausen & Lichtenstein, 1987), and they even may draw on stereotypes automatically (Brewer, 1988; Devine, 1989). Moreover, as mentioned above, people may derive some of their self-esteem from categorizing people into in-groups and out-groups and holding beliefs about the superiority of the group to which they belong (Tajfel & Turner, 1979; Turner, 1985).

Stereotypes are conceived of as containing "lists of unrelated attributes" (Kunda, 1999, p. 315) that may vary in their degree of accuracy and typicality across members of a culture. By this definition, a belief about a social group's exposure to a message is a stereotypical belief. However, by no means is it the only belief a person is likely to have about a social group. Many beliefs about a group will be irrelevant to the perceived effects of a message; however, others may not be.

Some researchers have begun exploring other stereotypical beliefs beyond perceived exposure. McLeod et al. (2001) measured the effect of perceived common sense of oneself and of different groups on the perceived effects of rap and metal music. They found that common sense was related to perceived effects on the self but was unrelated to perceived effects on others; effects on others were predicted almost exclusively by perceived exposure. However, as they acknowledged, there may be other relevant antecedent variables; indeed, their rationale was based not only on beliefs about exposure but also on beliefs about attitudes and behaviors: "Individuals are aware of negative media content *as well as negative social attitudes and behaviors* [italics added] and believe that exposure to negative content leads to negative effects" (Eveland et al., 1999, p. 297). Their rationale was meant to assert that the negative attitudes and behaviors would be seen as effects of the content. However, it also could be argued that perceived effects of a message will be affected by the extent to which a group is perceived as being predisposed toward a behavior the message advocates (or opposes). Indeed, the fundamental attribution error (Ross, 1977; Ross & Nisbett, 1991) argued that people generally tend to make dispositional attributions about outcomes experienced by others. Beliefs about such predispositions would be much more specific than common sense, and attitude research has found that

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predictiveness increases with specificity, a principle that may apply here (Fishbein & Azjen, 1981).

Scharrer (2002) set out to explore the effect of stereotypes on perceived effects on others. She observed greater perceived effects of violence on minorities than on Whites, on the poor than on the rich, on the less educated than the more educated, on the urban than the suburban. She explained these findings as indicative of negative stereotypes of marginalized out-groups. She also found that men and children were perceived as more affected by media violence—and rightly so, she noted, citing the findings of media violence researchers (Paik & Comstock, 1994). In this case, it was not a matter of stereotypes, she argued; it was a matter of being right. Under Kunda's (1999) definition, we would consider beliefs about all these groups as stereotypes.

Scharrer (2002) made an appealing case for the role of stereotypes in the third-person effect; however, as she acknowledged, her evidence was indirect. The study had no measures of racism or other quantification of perceived similarity to the target groups that would presumably reflect in-group identification or negative out-group stereotyping. As with the advocates of the target corollary, her rationale discussed the perceived predispositions of others; however, she took the step of posing them as a reason that the groups may be seen as more vulnerable to media effects. "Thus, respondents may view marginalized groups as more prone to violence and therefore more vulnerable to the effects of television violence" (p. 686). She drew on a nearly identical notion for men: "(Respondents) may consider that social norms make physical aggressiveness more acceptable and common for men compared to women" (p. 688).

Scharrer (2002) assumed (correctly, it would seem) that men, minorities, the poor, the less educated, and the urban would be stereotypically perceived as predisposed to violence. Still, to make the case stronger, it would make sense to attempt to measure perceived attributes of target groups that might be relevant to their susceptibility to certain messages.

In his study of the perceived effects of political ads on partisans, Meirick (2004) used difference scores in perceived ideology measures to represent the inferred political distance between a candidate and a comparison group. Although he viewed this measure as an indication of the perceived desirability of the candidate's ad for a group, it also could be considered a measure of a comparison group's attitude toward a candidate. It was expected that the closer the candidate and group were perceived to be, the greater would be the perceived effects on the group. Significant partial correlations were found for just two of the six cases; however, an across-group correlation showed that the greater the mean distance between a candidate and a group, the smaller

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the mean perceived effects of a candidate's ad. Although these findings may seem somewhat weak, consider the measure: a difference score of ideology, which is in itself a concept the public may not reliably grasp (Converse, 1962). Perhaps a stronger measure would find stronger effects.

These results, combined with Scharrer's (2002) indirect evidence and McLeod et al.'s (2001) call for further testing, lead us to our hypotheses.

Hypotheses

The first hypothesis predicts that a third-person effect will be found for cigarette advertising. Similar results have been found by others for this type of message (Banning, 2001; Meirick, 2002) and for undesirable messages in general (Paul, Salwen, & Dupagne, 2000). This a priori judgment of message desirability is probably justified.

Hypothesis 1: Perceived effects of cigarette advertising will be greater for the comparison groups than for the self.

Conversely, first-person effects should be found for antitobacco and anti-drunk-driving messages.

Hypothesis 2: Perceived effects of antitobacco advertisements and anti-drunk-driving PSAs will be greater for the self than for the comparison groups.

Next, we turn to the corollaries. Based on previous (albeit mixed) support for the social distance corollary, it should be in evidence here. The traditional test is comparing perceived effects between comparison groups, seeing on an aggregate level if, for instance, the sample perceived greater effects on their friends or on the public. The more general or geographically distant the group is, the greater effects for undesirable messages should be (and the smaller the effects of desirable messages should be). In addition, as Eveland et al. (1999) did, we can test the relationship between individually measured perceived similarity and perceived effects for each comparison group. We would expect, for instance, that respondents who feel relatively close to the public would perceive smaller effects of cigarette ads on the public than those respondents who feel distant from the public. The relationship between perceived similarity and perceived effects should be negative for undesirable messages and positive for desirable messages.

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Hypothesis 3: Perceived effects of cigarette advertising will increase as the social distance from the self of the comparison group increases.

Hypothesis 4: Perceived effects of antitobacco advertisements and anti-drunk-driving PSAs will decrease as the social distance from the self of the comparison group increases.

The target corollary repeatedly has been found for undesirable messages. Based on its logic, we would expect it to be found here for cigarette advertising.

Hypothesis 5: A comparison group's perceived exposure will be positively related to the perceived effects of cigarette advertising on the group.

However, based on the incompatibility of the target corollary's logic with desirable messages and on suggestive findings (Meirick, 2002), we would not expect the target corollary to hold for the desirable messages in this study. Although we cannot test what amounts to a null hypothesis, we can hypothesize that the predictive power of perceived exposure will be greater for undesirable messages than for desirable messages.

Hypothesis 6: A comparison group's perceived exposure will be more strongly related to the perceived effects of cigarette advertising on the group than to the perceived effects of antitobacco ads or anti-drunk-driving PSAs on the group.

Effects on the self have not yet been addressed here. McLeod et al. (2001) found that one's own perceived exposure to antisocial lyrics had no relationship with perceived effects on the self. However, Peiser and Peter (2001) found that one's self-reported frequency of television viewing was associated with positive (purposiveness) and negative (habitual) self-ascribed viewing orientations.

Research Question 1: How will one's perceived exposure be related to perceived effects on the self?

The evidence for the influence of perceived predispositions on perceived media effects is inconclusive and indirect, but suggestive. Also consider that the theoretical arguments for the influence of perceived exposure and of racial and gender stereotypes draw on stereotypical beliefs such as perceived predispositions. We would expect this to apply to the self in particular, based on the fact that perceived common sense was related to perceived effects on self but not others (McLeod et al., 2001).

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Hypothesis 7: A comparison group's perceived predisposition toward smoking will be positively related to perceived effects of cigarette advertising on the group.

Hypothesis 8: A comparison group's perceived predisposition toward smoking will be negatively related to perceived effects of antitobacco advertising on the group, and perceived predispositions toward drinking and driving will be negatively related to perceived effects of anti-drinking-and-driving ads toward the group.

Finally, there is the question of relative effects. Eveland et al. (1999) and McLeod et al. (2001) showed that perceived exposure was a stronger predictor of perceived effects than perceived similarity. If these two and perceived predispositions are entered into a regression equation, what will happen?

Research Question 2: What will be the relative effects of perceived similarity, perceived exposure, and perceived attitudes toward drinking or smoking on perceived message effects?

Method

The current study set out to examine perceived effects of three messages: cigarette advertising, antitobacco advertising, and drunk-driving PSAs. It was decided that two of the three messages would be desirable because previous research on the target corollary had focused exclusively on undesirable messages. The current study also examined a wide variety of comparison groups as internal replication, as an aid in making this work comparable with previous work on the target corollary, and because a large number of comparison groups can lend power to an across-group analysis.

Participants and Design

Data for the current study were gathered over the course of 1 week from 323 undergraduates attending a southwestern university. The respondents took part in exchange for credit in communication classes. Respondents were evenly divided between the sexes with a mean age of 20.6 years (SD = 2.69); 21% identified themselves as members of racial or ethnic minorities. The current study was administered via paper-and-pencil questionnaire with responses entered on Scantron sheets. In that each respondent was asked about each of the three kinds of media content and about effects on each comparison group, the current study employed a repeated-measures design.

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Measures

Perceived effects. Three sets of effects questions were asked, one for each message. Respondents were asked, "How do you think (cigarette advertising/antitobacco advertising/public service announcements about drinking and driving) affects the likelihood that the following people will (smoke/drive drunk)?" Responses were given on a scale of 0 (*Makes me/them much less likely to smoke/drive drunk*) to 8 (*Makes me/them much more likely to smoke/drive drunk*), with 4 identified as a *No effect* midpoint. Each of these questions was asked for "you" and for nine comparison groups that reflected social distance based on three dimensions: generality (your friends, university students, the public in general), gender (males and females) and age (16-year-olds, people your age, 30-year-olds, and 60-year-olds).

Perceived exposure. For each of the three messages, respondents were asked, "How often do you think the following people see cigarette advertising/antitobacco advertising/public service announcements about drinking and driving?" Responses were given on a scale from 0 (*never*) to 8 (*very frequently*). As above, perceived exposure estimates were obtained for the self and each of the comparison groups.

Perceived predispositions. For both message topics, respondents were asked, "How would you describe the following people's attitudes toward (smoking/driving drunk)?" Responses were given on a scale of 0 (*Very unfavorable toward smoking/driving drunk*) to 8 (*very favorable toward smoking/driving drunk*), with 4 identified as *neutral*. Perceived predispositions were obtained for the self and each of the comparison groups.

Perceived similarity. Two items were used to assess respondents' feelings of similarity to and identification with the comparison groups. The first asked, "How similar would you say you are to the average person in the following groups?" Answers used a scale from 0 (*not at all similar*) to 8 (*very similar*). The second asked, "How strongly do you identify with the following groups?" Again, a scale from 0 (*not at all strongly*) to 8 (*very strongly*) was provided for responses. For each group, the similarity and identification ratings were summed to create a two-item scale. As an indication of reliability, correlations between the two items were strong for all comparison groups, ranging from .53 to .66 ($p < .001$).

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Table 1
Perceived Effects by Message and Comparison Group

Perceived Effect on . . .	Cigarette Ads[a]		Antitobacco Ads[b]		Drunk-Driving PSAs	
	M	*SD*	*M*	*SD*	*M*	*SD*
Yourself	2.64	2.07	2.39	2.12	2.01	1.82
Your friends$_{c}$	$3.60_{a,c,d}^{***}$	1.84	$3.00_{a,d}^{***}$	1.75	$2.54_{a,d}^{***}$	1.64
University students	$4.68_{b,d}^{***}$	1.59	$3.56_{b,d}^{***}$	1.36	$3.26_{b,d}^{***}$	1.27
Public in general	$5.38_{c,d}^{***}$	1.48	$3.56_{b,d}^{***}$	1.38	$3.18_{b,d}^{***}$	1.37
Males	5.06^{d***}	1.53	3.82^{d***}	1.31	3.73^{d***}	1.41
Females	4.69^{d***}	1.63	3.30^{d***}	1.47	2.70^{d***}	1.37
16-year-olds	6.05^{d***}	1.73	3.74^{d***}	1.66	3.30^{d***}	1.68
People your age	4.75^{d***}	1.52	3.64^{d***}	1.31	3.29^{d***}	1.42
30-year-olds	3.67^{d***}	1.64	3.44^{d***}	1.47	3.14^{d***}	1.61
60-year-olds	2.83	1.86	3.07^{d***}	1.90	2.71^{d***}	1.90

Note. PSAs = public service announcements. N = 320 to 323. Responses were given on a scale of 0 (*Makes me / them much less likely to smoke / drive drunk)* to 8 (*Makes me / them much more likely to smoke / drive drunk).*
a. Higher scores reflect greater message-consistent persuasion for cigarette ads.
b. Lower scores reflect greater message-consistent persuasion for antitobacco ads and drunk-driving PSAs.
c. Among the first set of comparison groups, those with different lettered subscripts are significantly different at $p < .05$.
***Indicates comparison group is different from the self at $p < .001$.

Results

Third-Person Effects

The first hypothesis predicted that perceived effects of cigarette advertising would be greater for the comparison groups than for the self. A series of paired t tests was run and found the prediction upheld for eight of the nine cases. See the first column of Table 1. In those eight cases, all values of t were greater than 8 ($p < .001$). The only comparison group for which perceived effects were not significantly greater was 60-year-olds ($t_{321} = 1.40$, *ns*). The hypothesis was largely supported.

First-Person Effects

The second hypothesis predicted that perceived effects of antitobacco ads and drunk-driving PSAs would be greater for the self than for the comparison

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groups. Here, message-consistent effects would be associated with lower scores, becoming less likely to smoke or drive drunk. Again, a series of t tests were run. See the middle and outside columns of Table 1. First-person effects were indeed found for all nine cases for antitobacco ads (all ts > 4.9, $p < .001$) and all nine cases for drunk-driving PSAs (all ts > 5.8, $p < .001$). Hypothesis 2 was supported.

Social Distance

Hypothesis 3 predicted that perceived effects of cigarette advertising would increase as social distance from the self increased. The analysis for this hypothesis began with the between-groups test, a repeated-measures ANOVA using perceived effects on self, friends, university students, and the public as the four levels in the distance factor. The test was significant, $F(3, 315) = 152.97, p < .001, \eta^2 = .59$, and the means as shown on Table 1 indicate a clear linear pattern of ascending effects with increasing distance, in preliminary support of Hypothesis 3. Post hoc tests showed each level significantly different from the others.

Similar analyses were run for Hypothesis 4, which predicted decreasing effects of antitobacco ads and drunk-driving PSAs as social distance from the self increases. The repeated-measures ANOVA for antitobacco ads, $F(3, 319) = 36.23, p < .001, \eta^2 = .25$, and for drunk-driving PSAs, $F(3, 319) = 54.45$, $p < .001, \eta^2 = .34$, were both significant. The means as shown in Table 1 indicate a general trend of less conferred resistance to smoking and driving drunk (reflected in higher scores) as distance from the self increases, in support of Hypothesis 4. Except for fellow university students and the public in general, all levels are significantly different from each other.

As social distance is typically defined, its effect is affirmed. However, next we consider its effects as measured at the individual level, in conjunction with the effects of perceived exposure and perceived predispositions.

Perceived Similarity, Exposure, and Predispositions for an Undesirable Message

The remaining analyses employ multiple regression for each message to assess the relationships between perceived effects on each comparison group and our three individually measured antecedents: perceived similarity to the group (our proxy for social distance), perceived exposure of the group to the message, and perceived predispositions of the group toward the behavior advocated or discouraged by the message. Each regression is structured to

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Table 2
Predictors of Perceived Effects of Cigarette Ads

Perceived Effect on . . .	Perceived Similarity	Perceived Exposure	Perceived Predisposition
	Final β	Final β	Final β
Yourself	NA	–.05	.30***
Your friends	–.04	.14**	.23***
University students	–.02	.28***	.18**
Public in general	–.19***	.27***	.19***
Males	–.10	.19***	.23***
Females	–.08	.21***	.25***
16-year-olds	–.06	.27***	.28***
People your age	–.06	.20***	.22***
30-year-olds	–.08	.26***	.20***
60-year-olds	.06	.08	.17**

Note. N = 306 to 315. The above table shows standardized regression coefficients for 10 different regression models, one for each row (self and the nine comparison groups). Perceived effects on each group were controlled for the effects of the respondent's gender, age, race, and perceived effects on the self (the latter was not included in predicting perceived effects on self). Higher scores reflect greater persuasion for cigarette ads.
**p < .01. ***p < .001.

control for demographic variables (gender, age, and race—White or non-White) and perceived effects on the self.[2] These are entered simultaneously with the variables of interest: perceived similarity, perceived exposure, and perceived predispositions.

First, we examine the results for cigarette advertising (see Table 2). Previously, we found that more distant comparison groups were perceived as more affected by cigarette ads, in support of Hypothesis 3; however, we found little support within each comparison group for the effect of perceived similarity (our individual measure of social distance) on perceived effects. There were no significant findings for eight of the nine cases. The exception was for the public in general; the closer the respondents felt to the public, the less they thought the public would be influenced by cigarette ads (β = –.19, p < .01).

Hypothesis 5 predicted that perceived exposure would be positively related to perceived effects of cigarette ads, and this was largely the case. Significant positive betas were found in eight of the nine cases, with betas greater than .20 (p < .001). The exception was for 60-year-olds (β = .08, *ns*). Research Question 1 asks about this relationship for the self: There is not one (β = –.05, *ns*). Hypothesis 7 predicted that perceived predispositions toward smoking would be positively related to perceived effects of cigarette ads. This prediction was upheld for all 10 cases (all βs .17, all ps < .005).

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Table 3
Predictors of Perceived Effects of Antitobacco Ads

Perceived Effect on . . .	Perceived Similarity	Perceived Exposure	Perceived Predisposition
	Final β	Final β	Final β
Yourself	NA	–.08	.40***
Your friends	–.02	.05	.25***
University students	–.01	.04	.23***
Public in general	.00	.06	.25***
Males	–.06	–.01	.23***
Females	.00	–.02	.30***
16-year-olds	–.07	–.04	.29***
People your age	.02	.02	.26***
30-year-olds	.05	–.07	.30***
60-year-olds	.04	–.04	.31***

Note. N = 306 to 315. The above table shows standardized regression coefficients for 10 different regression models, one for each row (self and the nine comparison groups). Perceived effects on each group were controlled for the effects of the respondent's gender, age, race, and perceived effects on the self (the latter was not included in predicting perceived effects on self). Lower scores reflect greater message-consistent persuasion for antitobacco ads.
***$p < .001$.

Perceived Similarity, Exposure, and Predispositions for Desirable Messages

Next we consider perceived effects for antitobacco ads (Table 3) and drunk-driving PSAs (Table 4). Hypothesis 4, which passed the traditional between-groups test, predicted that social distance would be negatively related to perceived effects of these desirable messages. As operationalized here, the prediction would be that as perceived similarity increases, we would see lower scores on the effects measure (becoming less likely to smoke or drive drunk). The expected result was seen for just three of the nine groups when the message was drunk-driving PSAs. Furthermore, perceived similarity had no significant relationship with effects of antitobacco messages. The hypothesis receives little support.

Hypothesis 6 predicted that perceived exposure would be more strongly related to perceived effects for cigarette ads than for antitobacco ads and drunk-driving PSAs. We saw earlier (in Table 2) that perceived exposure was positively related to perceived effects of cigarette advertising. For the desirable messages, the target corollary would have predicted that greater perceived exposure of a group to a desirable message would lead to lower scores on the effects measure (becoming less likely to smoke or drive drunk). A quick look at the perceived exposure betas for these messages, however, shows only

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Table 4
Predictors of Perceived Effects of Drunk-Driving PSAs

Perceived Effect on . . .	Perceived Similarity	Perceived Exposure	Perceived Predisposition
	Final β	Final β	Final β
Yourself	NA	.01	.45***
Your friends	–.10**	.04	.15***
University students	–.12*	.03	.25***
Public in general	–.05	.04	.28***
Males	.05	.09	.30***
Females	–.10	–.01	.25***
16-year-olds	–.03	.02	.31***
People your age	–.11*	.13*	.29***
30-year-olds	.01	.13*	.20***
60-year-olds	–.01	.05	.30***

Note. PSAs = public service announcements. N = 306 to 315. The above table shows standardized regression coefficients for 10 different regression models, one for each row (self and the nine comparison groups). Perceived effects on each group were controlled for the effects of the respondent's gender, age, race, and perceived effects on the self (the latter was not included in predicting perceived effects on self). Lower scores reflect greater message-consistent persuasion for drunk-driving PSAs.
*p <.05. **p < .01. ***p < .001.

two coefficients of 20 significant at $p < .05$, and those two have signs that run counter to the expectations of the target corollary.

Perceived exposure's relative lack of predictive power for desirable messages is suggestive; however, it is not sufficient to declare Hypothesis 6 supported. Next, z tests were conducted to compare perceived exposure's regression coefficients for cigarette ads to its coefficients for the desirable messages (Brame, Paternoster, Mazerolle, & Piquero, 1998). We computed z scores using the unstandardized regression coefficients and standard errors for each comparison group; the signs of the coefficients for the desirable messages were changed so that like the ones for the cigarette ads, positive coefficients reflect a positive relationship with message-consistent effects (see Table 5). In 16 of the 18 cases where the comparison group was other than the self, the regression coefficient for perceived exposure was significantly greater for cigarette ads than for antitobacco ads or drunk-driving PSAs. Hypothesis 6 was largely supported. Perceived exposure was not related to effects on self for the desirable messages, either, giving us another negative answer to Research Question 1.

Hypothesis 8 predicted that perceived predispositions toward smoking and drunk driving would be negatively related to perceived effects of

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Table 5
The Effect of Perceived Exposure on Perceived Effects of Three Messages: A Cross-Model Comparison of Regression Coefficients

Perceived Effect on . . .	1 Cigarette Ads (Undesirable)		2 Antitobacco Ads (Desirable)		3 Drunk-Driving PSAs (Desirable)		1 vs. 2	1 vs. 3
	b	(*SE*)	*b*	(*SE*)	*b*	(*SE*)	*z*	*z*
Yourself	.051	(.053)	–.086	(.054)	–.009	(.047)	1.81	.85
Your friends	.135	(.045)	–.046	(.032)	–.038	(.029)	3.28**	3.23**
University students	.255	(.049)	–.032	(.040)	–.023	(.038)	4.54***	4.48***
Public in general	.246	(.050)	–.054	(.046)	–.031	(.044)	4.42***	4.16***
Males	.177	(.053)	–.010	(.045)	–.073	(.042)	2.69**	3.70***
Females	.208	(.055)	.018	(.047)	.011	(.040)	2.63**	2.90**
16-year-olds	.254	(.052)	.036	(.053)	–.016	(.046)	2.94**	3.89***
People your age	.178	(.048)	–.015	(.038)	–.102	(.041)	3.15**	4.44***
30-year-olds	.231	(.048)	.057	(.042)	–.112	(.045)	2.73**	5.21***
60-year-olds	.068	(.050)	.032	(.047)	–.043	(.046)	.52	1.63

Note: PSAs = public service announcements. $N = 306$ to 315. The above table shows the unstandardized regression coefficients and standard errors for perceived exposure in 30 different regression models representing the different combinations of message and comparison group. For each comparison group, two *z* tests were performed comparing the group's coefficient in the cigarette smoking model (1) with the antitobacco ad model (2), and the drunk-driving PSA model (3). Positive coefficients reflect greater message-consistent persuasion for all messages.
**$p < .01$. ***$p < .001$.

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here, the prediction would be that as perceived predispositions increase, we would see higher scores on the effects measure (becoming more likely to smoke or drive drunk). As the rightmost columns of Tables 3 and 4 show, this relationship was found in all 20 cases, with betas ranging from .15 to .45 (all ps < .001).

The second research question asks what the relative effects of perceived similarity, perceived exposure, and perceived predispositions are. A glance at the regressions suggests that perceived similarity plays little role in effects for either desirable or undesirable messages, perceived exposure is a factor for undesirable messages but not for desirable messages, and perceived predispositions are important in both cases. As an overall analysis, the mean perceived effects for each group (including the self) and message were correlated with the mean perceived similarity, exposure, and dispositions for each group and message. The results confirm the above summary. Perceived similarity has no significant relationships with perceived effects of cigarette ads, antitobacco ads, or drunk-driving PSAs (r = .08, –.08, and –.10, respectively, N = 9, *ns*). Perceived exposure was correlated with perceived effects of cigarette ads ($r = .90, N = 10, p < .001$) but not antitobacco ads ($r = .41, N = 10,$ *ns*) or drunk-driving PSAs (r = .47, N = 10, *ns*). Perceived predispositions, however, are related to perceived effects cigarette ads (r = .89, N = 10, $p < .001$), antitobacco ads (r = .98, N = 10, $p < .001$), and drunk-driving PSAs (r = .94, N = 10, $p < .001$).

Discussion

The current study set out to examine the roles of social distance, perceived exposure, and perceived predispositions in the context of desirable and undesirable messages. It confirmed the limitations of social distance, found a limitation to perceived exposure, and put forth perceived predispositions as a factor that although often an implicit part of theorizing, deserves explicit inclusion in models of perceived effects.

There is little to say about Hypothesis 1: Once again, a third-person effect was found. First-person effects are somewhat more controversial; some studies have failed to find them, and David, Liu, and Myser (2004) argued that the effect is an artifact of measurement. The current study was not designed to refute that claim. However, it can be said that measurements designed to reduce anchoring or comparison effects reduce third-person and first-person effects; it is just that third-person effects are usually more robust to begin with because motivations to respond optimally to the message and to maintain self-determination are in a consistent direction. That is not the case for

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first-person effects. Still, it could be said that the first-person effect was, if anything, more consistent than the third-person effect in the current study.

The findings for social distance were split depending on whether a traditional across-group test or a within-group test (using individual measures of perceived similarity) is used, a finding that mirrors those of Eveland et al. (1999) and McLeod et al. (2001). Whereas groups that were less general and more distant from the self were seen as more susceptible to cigarette ads and less receptive to the desirable messages, the within-group tests were mostly nonsignificant. Perceived similarity's best showing was in the drunk-driving PSAs condition, where it was a significant predictor of perceived effects for the three groups (of 9) with the highest perceived similarity to the self. Within-comparison-group tests arguably minimize the effect of social distance because they restrict its variance (e.g., most people are very close to their friends; however, there is more variance in perceived similarity when we compare friends and complete strangers). However, perceived predispositions are subject to similar restrictions and still show significant results. Moreover, the across-group correlation still showed little relationship between perceived similarity and perceived effects. Perceived similarity appeared to be the weakest of the three independent variables considered here.

Perceived exposure of comparison groups to the media content, the key variable in the target corollary, showed a fairly consistent relationship with perceived effects on others for cigarette advertising; this finding expands the range of undesirable messages for which this phenomenon has been found into the realm of advertising, where exposure is (usually) not by choice, as opposed to music. However, two potential limitations to the target corollary were found, one old, one new. The old one is that perceived exposure did not predict perceived effects on the self, as McLeod et al. (2001) showed. People do appear to employ different processes when forming effects estimates for the self and others.

The new potential limitation to the target corollary is that as predicted, it did not appear to hold for desirable, prosocial messages. In 16 of 18 cases, perceived exposure had no relationship with perceived effects of antitobacco ads and drunk-driving PSAs; in the other two cases, greater exposure to drunk-driving PSAs was weakly related with greater likelihood to drink and drive. Clearly, the simple heuristic of "exposure equals effects" does not apply here. It may be that the schema of powerful media effects (Price, Huang, & Tewksbury, 1997) does not apply to prosocial messages, that people think such messages are ineffectual (however much they themselves claim to be influenced by them).

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Here, however, we can point to another explanation: perceived predispositions. We see consistent evidence across antisocial and prosocial messages, across self and nine comparison groups, that perceived predispositions are related to perceived effects. In recent discussions of how effects estimates are made, perceived predispositions have been implicitly recognized as important; however, rarely have they been operationalized. It stands to reason that messages advocating a behavior (say, cigarette advertising that advocates smoking) would be perceived as more effective when a group is seen as being predisposed toward that behavior.

Of course, the direction of causality is ambiguous. It would be just as easy to argue that a group is seen as favorably disposed toward smoking because it is seen as more affected by cigarette advertising. However, the reverse causality argument is harder to make for the prosocial messages precisely because the target corollary does not apply for them. If people do not appear to equate exposure with effects of these messages, it suggests that these messages are seen as relatively weak. Thus, in the respondents' view, it is probably not prosocial messages' effects driving predispositions; instead, these weak but well-intentioned messages have their effects when they reach already receptive minds (like their own).

Future research could help to address this causal tangle, perhaps with a multistage experiment. Researchers may also wish to return to the area of media schemas (Price et al., 1997), particularly the notion that prosocial messages are seen as relatively ineffectual. Although this idea has been mentioned as a possibility (Perloff, 1999), no one has empirically explored it.

The current study has several limitations. Chief among them is common: the sample, drawn by convenience from undergraduates at one institution. Generalizing from means found here is not recommended; generalizations based on relationships found here can be made, but with caution. Demographic variables such as age or education, for instance, may have more of an effect when there is more variance in them than this sample had. The current study dealt with only three types of media content, two of which were prosocial. There are reasons not to assume that the relationships found here would apply to all prosocial content; for instance, exposure to antitobacco ads and drunk-driving PSAs is usually unplanned and not by choice. Likewise, it may be possible that the differences in predictors observed between cigarette ads on one hand and antitobacco ads and drunk-driving PSAs on the other reflect some dimension other than desirability. Future researchers would do well to replicate the current research for other messages, respondents, and comparison groups.

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Notes

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2. The latter is one point of departure with the tests employed by Eveland, Nathanson, Detenber, & McLeod (1999), which the current study otherwise attempted to follow. Results without perceived effects on self are quite similar except that there were no significant coefficients for perceived similarity when regressed on the desirable messages. Betas for perceived effects on self were highest for the your friends group (.52, .70, and .75 for cigarette ads, antitobacco ads, and drunk-driving Public Service Announcements, respectively) and lowest for the 16-year-olds group (.11, .11, and .20, respectively). Except for the two lowest betas for the 16-year-olds, all coefficients were significant at $p < .001$. Obviously, perceived effects on self were not used in the regression predicting perceived effects on self.

References

Banning, S. A. (2001). Do you see what I see? Third-person effects on public communication through self-esteem, social stigma, and product use. *Mass Communication and Society*, *4*(2), 127-147.

Biernat, M., Vescio, T. K., & Green, M. L. (1996). Selective self-stereotyping. *Journal of Personality and Social Psychology*, *71*(6), 1194-1209.

Bodenhausen, G. V., & Lichtenstein, M. (1987). Social stereotypes and information processing strategies: The impact of task complexity. *Journal of Personality and Social Psychology*, *52*, 871-880.

Brame, R., Paternoster, R., Mazerolle, P., & Piquero, A. (1998). Testing for the equality of maximum-likelihood regression coefficients between two independent equations. *Journal of Quantitative Criminology*, *14*(3), 245-261.

Brewer, M. B. (1988). A dual-process model of impression formation. In T. K. Srull & R. S. Wyer, Jr. (Eds.), *Advances in social cognition* (Vol. 1, pp. 1-36). Hillsdale, NJ: Lawrence Erlbaum.

Chapin, J. R. (2000). Not like me: Self vs. other distinctions in first-person perception. *Communication Research Reports*, *17*, 320-330.

Cohen, J., & Davis, R. G. (1991). Third-person effects and the differential impact in negative political advertising. *Journalism Quarterly*, *68*, 680-688.

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.

Converse, P. E. (1962). Information flow and the stability of partisan attitudes. *Public Opinion Quarterly*, *26*, 578-599.

David, P., Liu, K., & Myser, M. (2004). Methodological artifact or persistent bias? Testing the robustness of third-person and reverse third-person effects for alcohol messages. *Communication Research*, *31*(2), 206-233.

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

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Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, *56*, 5-18.

Duck, J. M., Hogg, M. A., & Terry, D. J. (1995). Me, us, and them: Political identification and the third person effect in the 1993 Australian federal election. *European Journal of Social Psychology*, *25*, 195-215.

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*(3), 275-302.

Fishbein, M., & Azjen, I. (1981). Acceptance, yielding and impact: Cognitive processes in persuasion. In R. E. Petty, T. M. Ostrom, & T. C. Brock (Eds.), *Cognitive responses in persuasion* (pp. 339-359). Hillsdale, NJ: Lawrence Erlbaum.

Gibbon, P., & Durkin, K. (1995). The third person effect: Social distance and perceived media bias. *European Journal of Social Psychology*, *25*, 597-602.

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., & Mundy, P. (1993). Biased optimism and the third-person effect. *Journalism Quarterly*, *70*(1), 58-67.

Gunther, A. C., & Thorson, E. (1992). Perceived persuasive effects of product commercials and public service announcements: Third-person effects in new domains. *Communication Research*, *18*(3), 355-372.

Hamilton, D. L., & Sherman, J. W. (1994). Stereotypes. In R. S. Wyer, Jr., & T. K. Srull (Eds.), *Handbook of social cognition* (Vol. 2, pp. 1-68). Hillsdale, NJ: Lawrence Erlbaum.

Hoorens, V., & Ruiter, S. (1996). The optimal impact phenomenon: Beyond the third person effect. *European Journal of Social Psychology*, *26*, 599-610.

Innes, J. M., & Zeitz, H. (1988). The public's view of the impact of the mass media: A test of the "third person" effect. *European Journal of Social Psychology*, *18*, 457-463.

Kunda, Z. (1999). *Social cognition: Making sense of people*. Cambridge, MA: MIT Press.

McLeod, D. M., Detenber, B. H., & Eveland, W. P. (2001). Behind the third-person effect: Differentiating perceptual processes for self and other. *Journal of Communication*, *51*(4), 678-695.

McLeod, D. M., Eveland, W. P., & Nathanson, A. I. (1997). Support for censorship of violent and misogynic rap lyrics: An analysis of the third-person effect. *Communication Research*, *24*(2), 153-174.

Meirick, P. C. (2002). Self-enhancement, self-affirmation and threats to self-worth: Three tests of a motivational explanation for first- and third-person effects. *Dissertation Abstracts International*, *63*(6), 2037. (UMI No. 3056339)

Meirick, P. C. (2004). Topic-relevant reference groups and dimensions of distance: Political advertising and first- and third-person effects. *Communication Research*, *31*(2), 234-255.

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Neuwirth, K., & Frederick, E. (2002). Extending the framework of third, first and second-person effects. *Mass Communication and Society*, *5*(2), 113-141.

Paik, H., & Comstock, G. (1994). The effects of television violence on antisocial behavior: A meta-analysis. *Communication Research*, *21*(4), 516-546.

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

Peiser, W., & Peter, J. (2001). Explaining individual differences in third-person perception: A limits/possibilities perspective. *Communication Research*, *28*(2), 156-180.

Perloff, R. M. (1993). Third-person effect research 1983-1992: A review and synthesis. *International Journal of Public Opinion Research*, *5*, 167-184.

Perloff, R. M. (1999). The third-person effect: A critical review and synthesis. *Media Psychology*, *1*, 353-378.

Price, V., Huang, L.-N., & Tewksbury, D. (1997). Third-person effects of news coverage: Orientations toward media. *Journalism and Mass Communication Quarterly*, *74*, 525-540.

Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 174-221). New York: Academic Press.

Ross, L., & Nisbett, R. E. (1991). *The person and the situation: Perspectives of social psychology*. Philadelphia: Temple University Press.

Scharrer, E. (2002). Third-person perception and television violence: The role of out-group stereotyping in perceptions of susceptibility to effects. *Communication Research*, *29*(6), 681-704.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 7-17). Monterey, CA: Brooks/Cole.

Turner, J. C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. In E. J. Lawler (Ed.), *Advances in group processes* (Vol. 2, pp. 77-121). Greenwich, CT: JAI.

White, H. A. (1997). Considering interacting factors in the third-person effect: Argument strength and social distance. *Journalism and Mass Communication Quarterly*, *74*(3), 557-564.

White, H. A., & Dillon, J. F. (2000). Knowledge about others' reaction to a public service announcement: The impact of self-persuasion and third-person perception. *Journalism and Mass Communication Quarterly*, *77*(4), 788-803.

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