Dual effects of implicit bystanders: Inhibiting vs. facilitating helping behavior

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Abstract

Encouraging consumers to engage in helpful behavior is a perennial task of marketers in non-profit and for-profit organizations. Recent research suggests that merely imagining the presence of others can lead to less helping behavior on a subsequent unrelated task (Garcia, S.M., Weaver, K.D., Moskowitz, G.B., and Darley, J.M. (2002). Crowded minds: The implicit bystander effect. Journal of Personality and Social Psychology, 83, 843–853.). The present analysis uncovers the boundary conditions of this effect. Across four studies, we establish that the degree to which a group situation fosters public scrutiny is an important moderator. When group primes are paired with public scrutiny, their inhibitive effect on helping behavior diminishes, and helping behavior on a subsequent task tends to increase. The present research thus adds complexity to previous findings by suggesting that implicit bystanders can both *decrease* and *increase* helping behavior.
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The classic bystander apathy effect (Darley and Latane, 1968; Darley, Teger, & Lewis, 1973) reveals that the more people present in a helping behavior situation, the less likely that each individual person present will actually help. Whether donating to a fundraising campaign or reporting an emergency, people are less likely to offer help in the presence of others than when they are alone. Recently, an extension to the classic bystander effect has been put forth, called the *implicit bystander effect* (Garcia, Weaver, Moskowitz, & Darley, 2002). It shows that merely priming the presence of a group can affect helping behavior on a second task. While classic accounts have assumed that would-be helpers must be present in the helping behavior situation in order for bystander apathy to occur, the implicit bystander effect shows that a similar decrease in helping can be found even when the would-be helpers are not built into the facets of the helping situation (Garcia, Weaver, Moskowitz, & Darley, 2002). To date no research has investigated boundary conditions of the implicit bystander effect. In the present analysis, we focus on public scrutiny, or the degree to which respondents perceive themselves to be the focus of a group's attention, as an important moderator of the effect. When group primes are paired with public scrutiny, their inhibitive effect on helping behavior diminishes, and helping behavior on a subsequent task will actually increase.

Understanding the boundary conditions of the implicit bystander effect informs the consumer behavior literature in three important ways: (i) it focuses on helping others—a less represented yet important manifestation of the consumption experience (Holbrook, 1987); (ii) it advances our theoretical understanding of the consumer psychology of helping (Bettman, 1986; Calder and Tybout, 1987); and (iii) it adds to the burgeoning literature on nonprofit marketing (e.g., Andreasen and Kotler, 2003). Indeed, just as understanding the consumer mindset is important in the for-profit world, "the same is true in the nonprofit world…Managers in these worlds also realize that their missions involve influencing donors to give, volunteers to come forward, clients to seek help, staff to be client-friendly, and so on" (p. 5, Andreasen and Kotler, 2003). Thus, the present analysis contributes to the broader consumer behavior literature

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as well as the specific intersection of consumers and helping behavior (e.g., Isen, 2001; Mowen and Sujan, 2005; Nelson, Brunel, Supphellen, & Manchanda, 2006; Strahilevitz, 1999).

Implicit bystander effect

The implicit bystander effect is also important theoretically. While consumer behavior researchers have long examined the effect of social influence (Bearden and Etzel, 1982; Childers and Rao, 1992; Dahl, Manchanda, and Argo, 2001; Moschis, 1976) and social cognition (Zajonc and Markus, 1982; Lynch and Srull, 1982) on consumer behavior, the implicit bystander effect examines the intersection of these literatures to understand how priming the presence of social others can affect helping behavior (e.g., Penner, Dovidio, Piliavin, & Schroeder, 2005). In a series of studies (Garcia, Weaver, Moskowitz, & Darley, 2002), participants were asked to imagine the presence of others at Time 1 and then were asked to help on an unrelated task at Time 2. For example, participants were asked either to imagine winning a dinner for themselves and *ten* friends or to imagine winning a dinner for themselves and *one* friend. Afterward, all participants indicated how many minutes they would be willing to volunteer for an experiment in "the other room." Those who imagined ten people at Time 1 volunteered fewer minutes than did those who imagined only one other person. These results occurred even though the imagined individuals were not built into the facets of the helping situation; that is, these imagined would-be helpers were not in the vicinity to volunteer. Thus, imagining the presence of others on one task can spill over and lead to a decrease in helping behavior on a second, unrelated task.

Boundary conditions: presence of others and social norms

While the implicit bystander effect shows that the presence of other people frequently decreases the incidence of helping behavior (Garcia, Weaver, Moskowitz, & Darley, 2002), recent research focusing not on helping behavior but on variety seeking has shown that the presence of other people can also promote behavior that is consistent with social norms. Considering that helping behavior is also a norm, one may hypothesize that this recent research may be relevant in illuminating conditions under which implicit bystanders may actually *increase* rather than *decrease* the tendency to help relative to a condition where the respondent is alone.

Ratner and Kahn (2002), for instance, showed that the presence of another person made norms toward variety seeking more salient: their respondents made more varied choices in public than in private. In a related demonstration, Ariely and Levav (2000) showed that the presence of others can lead consumers to make choices consistent with the cultural norm of uniqueness. Consumers dining in groups made more varied entrée choices than would be expected when compared to a matched control (Ariely and Levav, 2000, experiment 1). Presumably, diners eating together feel pressure to make more varied choices than usual because of the social norm to be unique. In both cases, the presence of others led consumers to

make decisions more in line with social norms. At first glance, these findings appear inconsistent with those of the bystander effect, which shows that the presence of other people leads respondents to engage in less helping. Given that helping is a prosocial norm, one may expect more helping in the presence of others.

One key difference between the findings on social presence and consumer choice and the implicit bystander studies is in the type of groups examined in the two literatures. In the study by Ariely and Levav (2000), for instance, the respondent likely felt him or herself to be the focus of the group's attention. That is, when placing an order in a group dining situation, a diner may feel that "all eyes are upon" him or her. This public scrutiny may make social norms especially salient (Duval and Wicklund, 1972). If so, then one may predict that perceived public scrutiny in an implicit bystander setting may actually lead groups to increase respondents' willingness to help. In contrast, most studies on the bystander effect, including those examined in the implicit bystander research, have focused on "mere presence" group situations—situations in which respondents were a part of the group, but not a central focus of its attention. Such mere presence situations may be more likely to instigate diffusion of responsibility.

A study by Schwartz and Gottlieb (1976) on the classic bystander effect lends some support to this hypothesis. They varied whether bystanders to a professionally enacted assault witnessed the event by themselves or in the presence of "other subjects" who were presumably also able to help, though not able to be seen since they were in separated cubicles. Half of the participants planned to meet the "others" later in the experiment and the other half were told they would be finishing the study early and thus not expect future interaction with them. While the prospect of public scrutiny did not eliminate the bystander effect, it did appear to lessen it. Participants who were alone helped the most (92%), followed by those who thought the others would know their responses (74%), and those expecting total anonymity (39%).

Social presence and social norms on the implicit level

In the current studies, we vary whether respondents feel they are under public scrutiny and the focus of a group's attention or simply part of a group to examine whether this variable moderates the implicit bystander effect. Building upon the original motivation behind research on the implicit bystander effect as well as other recent work on automaticity and social behavior (e.g., Cheng and Chartrand, 2003; Puntoni and Tavassoli, 2007; Schlenker and Wowra, 2003), a central focus of our analysis is whether the effects of public scrutiny paired with a group context in one situation at Time 1 will subsequently spill over to affect helping behavior on a second, unrelated task at Time 2. If so, this would both provide a new theoretical twist on the implicit bystander effect by identifying an important moderator, but it would also add to our knowledge of implicit social cognition in everyday life by showing that imagined social presence on one task can spill over and affect responses in different ways on a completely unrelated later task.

In sum, we predicted that the implicit bystander effect would interact with different levels of public scrutiny. When participants imagine being in a mere presence group situation, groups will decrease helping consistent with the implicit bystander effect. In contrast, we predicted that when the respondent imagined being in a group situation where attention from the group was focused on him or her, a reversal of the implicit bystander effect will occur and groups would actually increase helping on a subsequent, unrelated task. Such a predicted cross-over interaction would help reconcile conflicting findings of bystander effectiveness (e.g., Darley and Latane, 1968) with those of social presence and social norms (e.g., Ariely and Levav, 2000; Ratner and Kahn, 2002) on an implicit level, where social others are mentally, not physically, present.

Overview

Our main hypothesis is that there will be a significant interaction between the type of prime (group prime versus control prime) and the level of public scrutiny that respondents feel. We explored the effects of public scrutiny in two principle ways to build converging validity—as an individual difference variable (Studies 1 and 2) and as an experimental manipulation (Studies 3 and 4). Study 1 tested our hypothesis in the context of real helping behavior captured in a national survey. In Studies 2–4 we systematically examined the impact of implicit bystanders on respondents' willingness to help in hypothetical and real helping contexts through a series of scenarios in which people were asked to imagine the presence of others at Time 1 and indicate their willingness to help at Time 2.

Study 1: Evidence from a large scale survey

We know from naïve realism (Ross and Ward, 1996; Robinson, Keltner, & Ward, 1995) that people do not always interpret the same situation in the same way; in fact the same situation can be subjectively experienced in contrasting ways. This psychological principle was articulated by Gollwitzer and Moskowitz (1996), "behavior is not triggered simply by features of the environment, but by the interaction of those features with the properties of the individual" (p. 362). We reasoned that an individual's chronic tendency to feel under the scrutiny of others would influence their *subjective experience* of a group situation, and thus affect their subsequent helping behavior. Specifically, we predicted that people with a low dispositional tendency to feel under public scrutiny would chronically be more likely to experience group contexts as "mere presence" ones. If so, they should show less helping behavior when imagining being in the presence of others than after imagining being alone—the implicit bystander effect. In contrast, we predicted that the effect would be moderated for people with a high dispositional tendency to feel under public scrutiny, who are more likely to approach everyday situations with imaginary audiences in mind. Because one common criticism of the psychological decision-making approach is the exclusive use of hypothetical scenarios, we begin our empirical analysis by probing a dataset of real helping behavior to test our hypotheses.

Dataset

Real helping behavior

We examined the DDB Life Style dataset that was compiled by DDB Worldwide of Chicago and that was examined in *Bowling alone* by Robert Putnam (2000). We downloaded this dataset, which comprises responses to a national survey that was administered from 1975 to 1998, from www.bowlingalone.com. This dataset contained a questioned that asked directly about survey participants' actual helping behavior—"the frequency of volunteer work they did in the last 12 months" (1=none, 2=1–4 times, 3=5–8 times, 4=9–11 times, 5=12–24 times, 6=25–51 times, 7=52+ times), which we used as our dependent variable. In our analysis, we controlled for year of study, age of respondent, marital status, sex of the respondent, education level and household income leaving (N=49,466) respondents in the analysis.

Presence of others

Although previous work on the implicit bystander effect compares a situation in which people imagine being in the presence of many other people to a control condition in which they imagine there is only one or two persons present (Garcia et al., 2002), the DDB Worldwide dataset offered the opportunity to explore the effect of the number of bystanders present on respondents' helping behavior on a larger level. Specifically, we took advantage of information about the population density of the area in which the survey participant lived. The dataset tracked population density into four levels: <50K; 50K–499K; 500K–1.9M; >2M) and we used these population densities to establish a presence of others differential for analyses (e.g., Steblay, 1987). The assumption guiding our choice of this variable is that participants living in the presence of many citizens will tend to have more implicit bystanders chronically accessible in their minds (Higgins, King, & Mavin, 1982) than participants living amongst fewer citizens.

Level of public scrutiny

Our goal was to examine whether the population density in the area in which the respondent lived affected respondents' helping behavior differently for individuals who are dispositionally relatively high in public scrutiny versus those who are dispositionally relatively low in public scrutiny. The dataset provided responses to a question about self-confidence that we chose as a proxy for feeling subject public scrutiny: "I have more self confidence than most of my friends" (1=definitely disagree, 2=generally disagree, 3=moderately disagree, 4=moderately agree, 5=generally agree, 6=definitely agree). We reasoned that respondents higher on self confidence would feel less under public scrutiny and those lower in self confidence would feel more under public scrutiny. Of course, we might have measured the public scrutiny variable slightly differently had we commissioned this large-scale survey; however, it is clear that the supposition that this question about self-confidence and feeling under public scrutiny are highly related is reasonable. To empirically substantiate this relationship, we conducted a pre-test where we asked 33 undergraduates to

answer both the self-confidence question from the national survey as well as items from the imaginary audiences scale (Kelly, Jones, & Adams, 2002), a proxy for public scrutiny that measures the degree to which people feel chronically in the public eye in everyday situations (e.g., *I wonder what other people are thinking about me at a party; When I am with people I get nervous because I worry about how much they like me*). The correlation was highly significant in the predicted direction ($N=33$, $r=-.612$, $p<.001$). People who feel highly self confident relative to their friends feel under less public scrutiny while those who are less self confident relative to their friends feel themselves under more public scrutiny.

Results and discussion

To establish the presence or absence of public scrutiny, we used participants' evaluations of their self confidence relative to their peers as a continuous measure in the analysis. Survey participants who indicated they were highly self-confident relative to their peers were designated *low public scrutiny*, whereas participants who indicated they were not self-confident relative to their peers were designated *high public scrutiny*. To test our prediction that the implicit bystander effect will occur more strongly among low public scrutiny survey respondents than among high public scrutiny respondents, we conducted a regression analysis on the dependent variable *volunteer*. The continuous public scrutiny and population density (<50K; 50K–499K; 500K–1.9M; >2M) variables were entered as well as the interaction between them, and we controlled for year of study, age of respondent, marital status, sex of respondent, level of education and household income. As predicted, results indicated a significant interaction between population density and the public scrutiny measure in the expected direction,[2] $B=.05$, $t=2.8$, $p<.01$. To examine the pattern of means we used a median split to collapse the population density variable into high (greater than 500,000) and low (less than 500,000) and present the mean level of volunteering for each level of the self-confidence proxy in Fig. 1.

Using evidence from a real world dataset measuring actual volunteering behavior, this pattern of results is striking. Consistent with our main hypothesis: respondents who are low in perceived public scrutiny exhibit the implicit bystander effect to a greater degree than those who are high on perceived public scrutiny, who show a slight reversal of the pattern, actually helping directionally more when in a high density than a low density area. This pattern of results is not only consistent with our prediction, it also benefits from the external validity and experimental richness gained from probing dynamics of real helping behavior.

[2] Regression analyses examining population density and public scrutiny separately indicated that both had significant independent effects on volunteering, $B=.04$, $t=9.68$, $p<.001$ and $B=-.039$, $t=-8.76$, $p<.001$, respectively. As would be expected from an implicit bystanders' perspective, volunteering decreased with increases in population density. Volunteering also decreased as public scrutiny increased. These simple effects, however, were qualified by the predicted interaction between population density and public scrutiny.
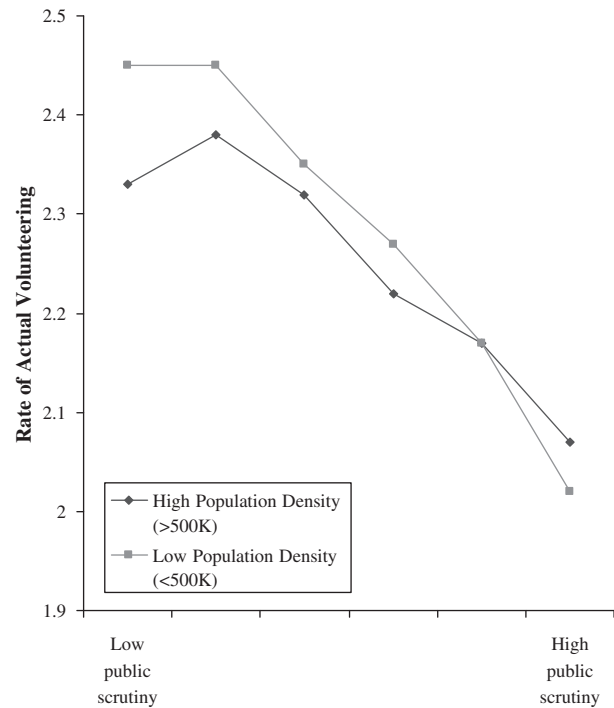
*Note: Higher numbers equal greater volunteering.

Fig. 1. The effects of population density of area in which respondents live and perceived public scrutiny (as measured by self reported self confidence relative to peers) on volunteering behavior. High population density equals areas with 500,000 or more people; low population density equals areas with less than 500,000 people. Note: Higher numbers equal greater volunteering.

Still, Study 1 has a number of limitations. For one, because we did not commission this large national survey, we could not measure participants' level of feeling under public scrutiny directly. Similarly, we could not systematically manipulate the precise presence of implicit bystanders. Even in the *few bystanders condition* (i.e., population density <50,000), quite a number of implicit bystanders are present. Indeed, this could explain why the reversal of the implicit bystander effect among the high public scrutiny respondents is not large. The population density levels used in this analysis (<50K; 50K–499K; 500K–1.9M; 2M+) are probably best conceptualized as varying levels of a group condition with no real "alone" control condition. Nevertheless, given its external validity and focus on actual helping behavior, Study 1 is a compelling demonstration of the effect in a real world setting and a useful first step toward establishing converging evidence for our central hypothesis.

Study 2: Socially anxious personalities and implicit bystanders

Whereas Study 1 finds evidence that is consistent with our hypothesis in a dataset of real helping behavior, these findings, however externally valid, are nevertheless subject to all the limitations that the experimental approach attempts to remedy. Although we can reasonably assume that residents of a highly populated city might chronically imagine a greater presence of other bystanders than residents of a less populated city, it is

possible that other factors, unbeknownst to us, are contributing to this effect. Moreover, though the degree of one's self-confidence relative to others seems like a reasonable proxy question for feeling under public scrutiny, we cannot be entirely certain that self-confidence in this context captures the full essence of feeling under public scrutiny. Therefore, in Study 2, we attempt to manipulate, experimentally, whether others are mentally present or not and examine the effects of social anxiety—another proxy of public scrutiny—by measuring it directly using a widely accepted individual difference measure (Fenigstein, Scheier, & Buss, 1975).

We predicted that participants' level of dispositional social anxiety would interact with their subjective experience of a group situation, and thus affect their subsequent helping behavior. More specifically, we predicted that people low in social anxiety would show evidence of the implicit bystander effect: they would indicate less willingness to help on a second, unrelated task after imagining a group than after imagining being alone. In contrast, we predicted that people high in social anxiety would show the opposite pattern; they would exhibit relatively greater willingness to help on a second, unrelated task after imagining a group than after imagining being alone. Thus, we predicted a cross-over interaction between social anxiety and the presence of implicit bystanders.

Participants

A total of 108 undergraduates from a Midwestern university were recruited to participate. Data was collected during three "Questionnaire Day" sessions. Participants were paid $8 for completing a 45-minute questionnaire packet.

Procedure

In a between-subjects design, participants were assigned to one of two presence of bystanders conditions: *group condition* or *alone control condition*. The group condition read, "For a brief moment, please imagine you are sitting with hundreds of others in a large lecture hall." In the alone control condition participants imagined being alone in the lecture hall and read, "For a brief moment, please imagine you are sitting all alone in a large lecture hall." Everyone then answered a filler question, "What room temperature would you prefer? (1=Very Cool, 7=Very Warm)." On the next page, participants completed an "Annual Charity Contribution" dependent variable. "Imagine you have long since graduated from college. What percentage of your annual after-tax earnings would you be willing to donate to charity? (Please Check)" At this point, participants could check one of the following percentage ranges: 1% or less, 2%–3%, 4%–5%, 6%–10%, 11%–15%, 16%–20%, 21%–25%, or over 25%.

To measure social anxiety, participants completed the social anxiety subscale of the self-consciousness scale (Fenigstein et al., 1975) in another section of the questionnaire packet. The social anxiety items were measured on five point scales ranging from 0="extremely uncharacteristic" to 4="extremely characteristic." Upon completion of the entire questionnaire packet, participants were thanked and compensated for their time.

Results and discussion

We first calculated social anxiety scores for all the participants by taking the average of their responses to the social anxiety subscale. We then conducted a regression analysis to test for the predicted interaction of this continuous measure with our manipulated presence of others variable (presence of bystanders: 1=alone, 2=with hundreds of others). Results from the regression suggest that both presence of bystanders (B-value=-1.57, $\beta=-.58$, $p<.05$) and social anxiety (B-value=-1.07, $\beta=-.62$, $p<.05$) were significant predictors of the willingness to donate to charity. More importantly, the presence of bystanders × social anxiety interaction was significant (B-value=$.68$, $\beta=.85$, $p<.05$) in the predicted direction. Based on the model, Charity=$2.486+1.57*$Alone$+.282*$Social Anxiety$-.68*$Alone$*$Social Anxiety. Charity values can thus be estimated for the Alone and Group conditions for low (mean−standard deviation), mid (mean), and high (mean+standard deviation) levels of social anxiety ($M=2.08$, $SD=.77$). The predicted values are plotted in Fig. 2.

These results provide further converging evidence of the predicted cross-over interaction; relative to a control condition in which respondents imagine being alone, imagining the presence of others tends to either decrease or increase people's willingness to help at Time 2, depending on the level of social anxiety. More specifically, Study 2 suggests that the perception of an identical prime can be subjectively experienced in contrasting ways and subsequently affect respondents' willingness to help in opposite directions. Interesting too, while naïve realism suggests that persons may perceive interpersonal and intergroup conflict differently (Ross and Ward, 1996; Robinson, Keltner, & Ward, 1995), the present results also suggest that the subjective experience of naïve realism may affect how we construe implicit bystanders, consequently affecting our decision to help.
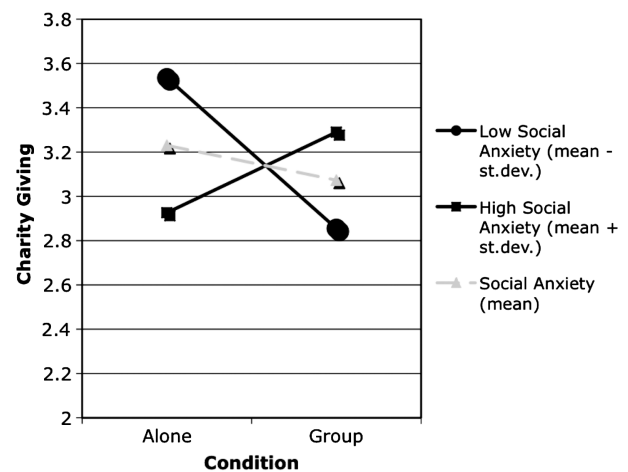

Fig. 2. Based on model, predicted charity values are plotted for alone and group conditions for low (M−SD), mid (M), and high (M+SD) levels of social anxiety.

Studies 3 and 4: Manipulating public scrutiny

Studies 1 and 2 used individual difference variables as proxies to estimate the impact of perceived public scrutiny on the implicit bystander effect. The premise underlying those studies was that individuals who are chronically disposed to feeling that they are the focus of attention of imaginary audiences (Kelly et al. 2002) would perceive a group prime as entailing more public scrutiny and focused attention than those who are low in the tendency to feel the focus of attention of imaginary audiences. Studies 3 and 4 seek to build further convergent validity for our hypothesis that public scrutiny moderates the implicit bystander effect by experimentally manipulating its presence or absence. Accordingly, Studies 3 and 4 experimentally manipulate public scrutiny in two different ways. Study 3 manipulates public scrutiny through an arousing act of embarrassment: tripping and falling down. This manipulation directly embodies one of the items of the social anxiety psychometric: "I get embarrassed very easily" (Fenigstein et al., 1975). Because we are primarily interested in how public scrutiny affects helping behavior in the presence of others, Study 3 focused exclusively on two group conditions—a *public scrutiny group condition* and a *control group condition*. The main prediction was that participants in the public scrutiny group condition would help more at Time 2 than participants in the control group condition. A second purpose of Study 3 was to determine whether hypothetical helping and real helping worked similarly as dependent variables. For this reason, in one sample ($N=64$) we used a hypothetical helping dependent variable—hypothetical charity giving—while in the other sample ($N=91$) we used a real helping measure—the actual number of minutes participants were willing to spend helping the researchers with an online survey to be held at a future date.

Study 3: Hypothetical vs. real charitable behavior

Participants and design

A total of 155 undergraduates from two Midwestern universities participated. Participants were assigned to one of two between-subjects conditions: public scrutiny group condition and control group condition. Participants asked to respond to a hypothetical helping measure filled out the experimental materials in a "Questionnaire Day" held in a campus classroom at two Midwestern universities. The materials were embedded in a packet, which required approximately 45 min to complete. Participants were paid $8.00. Participants asked to respond to the real helping measure were recruited at the library and campus student centers and did not receive compensation for their participation.

Procedure

The public scrutiny group condition read as follows on the first page: "Imagine you are walking in (the name of a popular campus lecture hall) during the change of classes. People are walking around on their way to class, and you trip and fall."

Table 1
Helping behavior as a function of type of group prime (social anxiety group vs. control group) and type of helping behavior measures (hypothetical vs. real), experiment 3

Type of group prime	Charity giving	Actual volunteering
Social anxiety group	3.90	3.65
Control group	2.91	2.97

Then participants responded to a filler question, "What room temperature would you prefer? ($1=Cool$, $7=Warm$)." Participants in the group control condition read the identical scenario, minus "and you trip and fall."

Hypothetical helping sample: charity giving

Participants in the hypothetical helping behavior sample completed on the second page the "Annual Charity Contribution" dependent variable used in Study 2.

Real helping sample: volunteering for online survey

Participants in the real helping behavior sample were asked on the second page: "In addition to this survey, we are conducting a voluntary online survey. How much time would you be willing to spend on this online survey?" (Participants then check-off: 0 minutes, 2 minutes, 5 minutes, 10 minutes, 15 minutes, 20 minutes, 25 minutes, or 30 minutes). Participants were then prompted to, "Please write your e-mail so that we can e-mail you the appropriate link for the survey." To requite their willingness to volunteer, we e-mailed all participants who indicated a willingness to volunteer a short online survey about decision-making, after completing the data collection for Study 3.

Results and discussion

We predicted that those in the public scrutiny group condition would help more than those in the control group condition, and that hypothetical and real helping measures would act similarly. In order to standardize responses for analysis, we first computed separate *z*-scores of the helping behavior measures for each of the two types of helping (charity giving versus real volunteering). We then conducted a 2 (type of group prime: *public scrutiny group* versus *control group*) × 2 (type of helping behavior: *hypothetical* versus *real helping*) ANOVA. As predicted, this analysis revealed a significant main effect for type of group prime, $F(1,151)=7.16$, $p<.01$. This showed that collapsing across type of helping measure, those in the public scrutiny group condition helped more ($M=.21$; $SD=.97$) than those in the control group condition ($M=-.19$; $SD=.99$). Also as predicted, there was no significant interaction between type of group prime and type of helping behavior, $F(1,151)=1.56$, $p=.22$, *ns*. This indicates that the hypothetical helping measure and the real helping measure acted similarly. Table 1 presents the condition means for each of the experimental conditions in terms of the original metrics measured.

Study 3 provides further evidence that public scrutiny plays a role in predicting helping behavior following implicit bystander situations. Individuals are more likely to help after imagining

the presence of others if imagining the presence of others is paired with public scrutiny. Hence, Study 3 adds converging evidence to the idea that when perceived public scrutiny, whether as the manifestation of an individual difference or paired with a group prime, coincides with imagination of bystanders at Time 1, individuals will tend to help more at Time 2. Study 3 also indicates that dependent measures involving hypothetical helping behavior and real helping behavior are affected similarly by group primes.

Study 4: Public scrutiny through evaluation apprehension

Whereas Study 3 manipulated perceived public scrutiny by having participants imagine a socially embarrassing situation (i.e., tripping and falling), Study 4 focuses on another facet of social scrutiny by manipulating whether respondents feel that their ability is being judged or evaluated by others. Schwartz and Gottlieb's (1976) investigation is relevant here. As mentioned previously, these authors varied whether participants believed they would be meeting with the "other bystanders" later in the study or not, and showed that those anticipating future interaction helped more frequently than those not expecting to meet others. Schwartz and Gottlieb (1976) interpreted their results in terms of evaluation apprehension. Respondents expecting others to know about their behavior were more motivated to behave prosocially than those not expecting future interaction. In Study 4 we tested whether public scrutiny from evaluation apprehension would also influence willingness to help in implicit bystander situations. Specifically, we investigated whether evaluation apprehension would interact with a group prime to differentially influence willingness to help on a separate, unrelated task at Time 2.

In a between-subjects design, business school undergraduates either made a series of business decisions that had right or wrong answers (high evaluation apprehension condition) or simply expressed their preferences toward a matched set of scenarios (low evaluation apprehension condition). After completing one of these two tasks, participants were presented with either a group prime or a one person control prime. Finally, all respondents completed a dependent measure that measured their willingness to help. Again, our main prediction was a cross-over interaction between the evaluation apprehension manipulation and the group prime. Those in the low evaluation apprehension condition should tend to show an implicit bystander effect and help less following a group prime than the control prime. In contrast, those in the high evaluation apprehension condition should tend to feel more public scrutiny and thus tend to express a greater willingness to help after the group prime than after the control prime.

Participants

A total of 307 undergraduates at a large southeastern university participated in a laboratory study in exchange for extra credit in their Introduction to Marketing class. Students completed the experimental manipulations and dependent

variables on a computer through the self-guided computer software program MediaLab.

Procedure

This study used a 2 (evaluation apprehension: 1=high; 2=low)×2 (presence of bystanders: 1=one person control, 2=ten person) between-subjects design.

Evaluation apprehension

High evaluation apprehension participants completed between five and ten scenarios, all requiring them to make a business decision that involved predicting what others would prefer. For instance, one of the scenarios read as follows: "You are in charge of marketing for an airline and you want to increase the airline's appeal to upper class customers…If your goal is to make customers perceive your tickets will be the most expensive, which ratings would you advertise on your website? (choose A or B)." Those in the *low evaluation apprehension* condition completed a matched set of scenarios, but simply expressed their personal preferences for which there was no right or wrong answer (e.g., for the airline scenario they indicated how much they would pay to fly on the airline).

To confirm that the scenarios manipulated evaluation apprehension, a separate group of respondents (*N*=22) read either the high evaluation apprehension scenarios or the low evaluation apprehension scenarios and answered the following Likert survey item after each scenario, *To what extent is this a situation where you will be evaluated by others and want to do the right thing in their eyes?* (1=not applicable/not at all; 7=very much). In addition, for each scenario, respondents indicated the number of "others" they had been thinking of when answering the evaluation question. This test confirmed that the manipulation was successful; averaging across the scenarios, high evaluation apprehension respondents expressed more evaluation apprehension (*M*=4.89; *SD*=1.05) than low evaluation apprehension respondents (*M*=3.05; *SD*=.85), *F*(1, 20)=19.78, *p*<.0001. Respondents' reports of the number of others who would be evaluating them were highly skewed so they were log transformed and the log transformed values were used in statistical analyses. Both the log transformed numbers and actual numbers are reported below. Averaging across the scenarios, high evaluation apprehension respondents reported thinking of a larger number of others when answering the evaluation apprehension questions (log values: *M*=2.84; *SD*=1.89; actual numbers: *M*=40,746; *SD*=86,618) than respondents reading the low evaluation apprehension scenarios (log values: *M*=.50; *SD*=.54; actual numbers: *M*=5.95; *SD*=8.15), *F*=14.2, *p*<.01.

Presence of others

The computer then presented participants with either a group prime or a control prime. The group condition read: "Imagine you won a dinner for yourself and 10 of your friends at your favorite restaurant." In the single person control, participants imagined one other person: "Imagine you won a dinner for yourself and a friend at your favorite restaurant." Everyone then

answered a filler question, "What time of day would you most likely make your reservation? (please check one)." The computer then presented participants with the Annual Charity Contribution dependent variable used in Study 2.

Results and discussion

To examine our main prediction we performed a 2 (evaluation apprehension: 1=high; 2=low)×2 (presence of bystanders: 1=one person control, 2=ten person) ANOVA, using the annual charity giving percentage as the dependent variable. Analyses revealed no main effects for evaluation apprehension or presence of bystanders, both F's<1. More importantly and as predicted, analyses revealed a significant evaluation apprehension×presence of bystanders interaction, F (1, 303)=5.87, p<.05. When respondents were under low evaluation apprehension, they tended to indicate a willingness to give less following the group prime (M=2.77; SD=1.09) than after the one person control (M=3.03; SD=1.14). However, when participants were under high evaluation apprehension, they tended to indicate a willingness to give *more* after the group prime (M=3.00; SD=1.24) than after the one person control prime (M=2.63; SD=.96). To test the predicted cross-over interaction pattern, we conducted a contrast analysis using the following weights (Rosenthal and Rosnow, 2008): +1 (no evaluation apprehension, one person control condition), −1 (no evaluation apprehension, group condition), −1 (evaluation apprehension, one person control condition), and +1 (evaluation apprehension, group condition). As predicted, this predicted cross-over pattern was significant (F(1,303)=5.91, p<.05).

These results build on Studies 1–3 by providing further converging evidence that public scrutiny can moderate the effect of imagining the presence of others at Time 1 on helping behavior at Time 2. More specifically, Study 4 shows that completing a prior task that engenders evaluation apprehension—a form of public scrutiny—can significantly interact with a group prime to differentially affect respondents' willingness to help. In this cross-over interaction, participants experiencing low public scrutiny tended to help less following a group prime relative to the control condition, whereas participants experiencing high public scrutiny tended to help more following a group prime relative to the control condition.

General discussion

These findings build a theoretical bridge between the bystander apathy literature (e.g., Darley and Latane, 1968; Latane and Darley, 1968) and the literature on social presence and social norms (Ariely and Levav, 2000; Ratner and Kahn, 2002) on an implicit level. While one research stream has contended that as the number of bystanders present in a helping situation increases, each individual will feel less compunction to help (e.g., Darley and Latane, 1968), a reciprocal research stream has argued that the presence of others can lead respondents to behave in ways that are consistent with social norms. Considering that helping others is a strong social norm,

these two literatures seem to make contradictory predictions about whether the presence of implicit bystanders will increase versus decrease helping. Examining the moderating role of the type of group involved, and in particular whether it is paired with public scrutiny, the present analysis finds that implicit bystanders at Time 1 will lead to less helping behavior at Time 2 when the group is a "mere presence" one and to more helping behavior at Time 2 if the same group prime is accompanied by a feeling of public scrutiny.

An interesting aspect of the current research is the demonstration that the effect of group primes on the inhibition versus the facilitation of helping behavior can be affected by respondents' *perceptions* of public scrutiny as well as by the actual level of public scrutiny respondents are under. That is, respondents low on self confidence (Study 1) and high on social anxiety (Study 2)—personality variables that past work has associated with going through everyday life with imaginary audiences in mind (Kelly et al., 2002)—responded differently to implicit bystander situations than those with greater self confidence and less social anxiety. Indeed, our analysis indicates that the identical group prime, be it the number of implicit bystanders chronically accessible due to the population density of one's area of residence or a hypothetical scenario involving an everyday classroom setting, is interpreted by some to entail public scrutiny and by others as a mere presence group situation.

Theoretical implications and future directions

Taken together with four empirical demonstrations that systematically vary the variables of interest for the sake of convergent validity, the present analysis clearly implicates the role of public scrutiny in a group context as a moderator of the implicit bystander effect. In doing so, it raises several interesting questions for future research. In particular, the observed effects of public scrutiny in a group situation may be driven through two possible mechanisms. One possibility is that feeling that one is in the public eye may instigate an impression management process. While one may assume that impression management would be more likely to have an effect if the audience that is scrutinizing the respondent is real rather than imagined, and is the same audience that will witness the helping behavior (e.g., Schwartz and Gottlieb, 1976), recent evidence suggests that impression management goals can actually be automatically activated, even in the absence of direct interaction with a group (Puntoni and Tavassoli, 2007). If so, then our observed effect of increased willingness to help in the face of public scrutiny may be driven by an increased salience of social norms and expectations. This possibility is interesting because it would build on recent research demonstrating that activation of self presentational goals can spill over and influence behavior in new situations (e.g., Schlenker and Wowra, 2003). While automatic activation of self presentational goals may be one possible explanation for the effect, an equally interesting possibility is that perceiving oneself to be a focus of public scrutiny may increase respondents' level of arousal. This increased arousal may in turn increase respondents' willingness

to help through a mechanism such as by influencing their perceptions of the seriousness of the helping request. Indeed, several studies have suggested a link between arousal and helping (e.g., Clark and Word, 1972, 1974; Coke, Batson, & McDavis, 1978; Griffitt and Veitch, 1971; Harris and Hwang, 1973; Gaertner and Dovidio, 1977; Piliavin and Piliavin, 1975; Piliavin, Piliavin, & Rodin, 1975; Amato, 1986). To the degree that perceptions of public scrutiny increase respondents' level of arousal, this could lead to more helping in the group condition.

These two potential explanations are reminiscent of a long standing debate in social psychology involving how investigators may achieve empirical reconciliation of impression management and intrapsychic explanations for social behavior (e.g., Tetlock and Manstead, 1985). While at first glance it appears as if the two motivations are easily empirically separable, a closer look demonstrates that they are interwoven. For instance, it is likely that impression management concerns may produce negative arousal. As anyone who has given an important presentation in front of a group can attest, an attempt to create a good impression often co-occurs with an arousal state. Similarly, the experience of arousal *qua* arousal may alert respondents to a change in their environment, which could potentially be interpreted in a way that instigates impression management concerns. While the resolution of this issue is beyond the scope of the present analysis, a promising direction for future research is to attempt to design studies that disentangle these two possibilities, while at the same time acknowledging that oftentimes "no neat arbitrary line divides the intrapsychic from the social" (Tetlock and Manstead, 1985, p. 67.)

On a more general level, the present analysis also has implications for the debate about the epistemology of helping behavior. While one research stream largely considered helping behavior a manifestation of altruistic intentions (e.g., Batson, Darley, & Coke, 1978; Krebs, 1975), other theorists argued that the basis for helping behavior was rooted in hedonic intentions (e.g., Paliavin, et al., 1975). The present analysis, however, broaches yet another dimension on the origins of helping behavior—a social cognitive account. Implicit bystanders, who are not parties in the facets of the helping situation, may influence the willingness to help on a subconscious level, not strictly as a consequence of altruism or hedonism per se.

As for future directions, it also would be interesting to establish a theoretical link between the implicit bystander effect and self-categorization (e.g., Hogg, 2001). Self-categorization describes the process by which an individual categorizes themselves in terms of a social category based on environmental cues. For instance, Americans upon arriving in London are more likely to categorize themselves as "Americans" than when arriving in Boston. A promising direction for future research would be to examine whether simply asking people to self categorize as a group member versus an individual would instigate an implicit bystander process.

Practical implications

While the present analysis reveals a new theoretical twist in our understanding of group primes and helping behavior, it simultaneously offers practical implications for marketers in nonprofit and for-profit worlds and even policymakers whose common task is frequently attempting to get consumers to be more helpful. Indeed, while the practical implications of research on the classic bystander effect, examining how the presence of actual bystanders affects helping behaviors in real world emergency situations are clear, research on the implicit bystander effect, examining the effects of imaginary audiences on helping, may actually be more relevant to the daily activities of marketers. That is, in many helping appeals, it is implicit bystanders rather than actual ones who are invoked. For instance, charity fundraising campaign managers typically use references to an aggregate of other individuals in their appeal for funds—"Join the thousands of people who have made a pledge." While this social proof strategy—the general notion that many other people are engaging in a certain behavior—is among the most powerful forces of social influence (Cialdini, 1993), the present analysis suggests that imagining many others giving to charity may not necessarily lead to an increase in helping behavior. Indeed, one critical question is whether or not the conjured image of these "many others" is accompanied by a perception of public scrutiny. If imagining many others giving to charity incites a perception of public scrutiny such as when agencies ask for donations in a way that puts consumers "on the spot," then people are probably more likely to give. If not, then they are probably less likely to give. Although the objective of the present analysis is primarily a theoretical one, it nevertheless underscores the practical importance of considering whether implicit bystanders facilitate or impede helping behavior. Accordingly, practitioners should monitor their use of implicit bystanders in their appeals, as savvy marketers already do with other variables, to better understand whether implicit bystanders ultimately advance or thwart their helping behavior initiatives.

Conclusion

Merging the findings on bystander apathy (Darley and Latane, 1968; Darley, Teger, & Lewis, 1973) with the literature on social presence and social norms (Ariely and Levav, 2000; Ratner and Kahn, 2002), the present analysis dovetails two seemingly contradictory research streams by investigating how public scrutiny interacts with group primes to affect helping behavior on an implicit level. Whereas recent findings on the implicit bystander effect (Garcia, Weaver, Moskowitz, & Darley, 2002) suggested that simply imagining the presence of others is sufficient to inhibit helping behavior on an unrelated task, this effect is largely limited to circumstances where the group prime is not paired with public scrutiny. When the group prime induces or coincides with a perception of public scrutiny, helping behavior will tend to increase on a subsequent task. Thus, implicit bystanders can both decrease and increase helping behavior.

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