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Report

Is our absence as conspicuous as we think? Overestimating the salience and impact of one's absence from a group

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Abstract

This research provides evidence that people overestimate the salience to others of their own absence from a group. Although individuals regard the removal of someone else from a group to be less salient than the addition of that person, they regard their own removal as every bit as salient as their addition (Study 1). Those absent from a group also expect their absence to be salient in the eyes of others, overestimating the extent to which their absence will be noticed by others (Study 2), and rating their absence as having had a larger impact on the group's subsequent functioning than others do (Study 3). Discussion focuses on individuals' assessments of their absence as an example of a broader egocentrism in social judgment.

In "It's a Wonderful Life," the Frank Capra film that airs around the clock during the holiday season, George Bailey is granted a unique opportunity. Through an act of divine intervention, Bailey (Jimmy Stewart) is allowed to see what the world would be like if he had never existed. What Bailey sees shocks him. The things that were so familiar to him—his friends, family, and the picturesque town of Bedford Falls—are radically different in his absence. "Strange, isn't it?" asks Bailey's guardian angel. "Each man's life touches so many other lives. When he isn't around he leaves an awful hole, doesn't he?"

In the real world, most of us reach a similar conclusion without the help of divine revelation. Although we seldom get to see how things would be different if we were not around, most of us nevertheless harbor the intuition that our absence would be noteworthy and consequential. In this article, we suggest that such intuitions are likely to be misguided—that the "awful hole" thought to be left by one's own absence is typically smaller than one suspects. We contend that people overestimate the salience to others of their own absence—that they overestimate the extent to which their absence is noticed by others, and the extent to which others regard their absence as having affected the group's functioning.

To anticipate the salience of one's absence to other people, it is necessary to ascertain how one is viewed by others. A growing body of research suggests that individuals frequently err in their appraisals of how others view them, in part because they base their judgments egocentrically on how they appear to themselves (Gilovich & Savitsky, 1999). In particular, individuals commonly overestimate the extent to which others notice their appearance and behavior, a phenomenon we have termed the *spotlight effect* (Gilovich, Kruger, & Medvec, 2002; Gilovich, Medvec, & Savitsky, 2000; Savitsky, Epley, & Gilovich, 2001). For example, participants in a group discussion overestimated the extent to which their contributions were salient to their fellow discussants, and those asked to don an embarrassing T-shirt overestimated the number of observers who would be able to recall what was pictured on their shirt (Gilovich et al., 2000). In both cases, individuals' focus on their own appearance and behavior appeared to contaminate their assessments of how salient their appearance and behavior were to others.

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The present investigation was designed to examine whether the spotlight effect applies to an additional (and frequently encountered) class of situations—whether individuals likewise tend to overestimate the extent to which others take note of their *absence*. We predicted that people would overestimate the extent to which their absence from a group was salient to others, as well as overestimate the impact their absence had upon the group, relative to the judgments of those left behind. In addition to previous research on the spotlight effect, we base these predictions on the phenomenology of an individual who is absent from a group, and how that phenomenology differs from the perceptions of those who remain. To the absent individual, the absence is an *occurrence*—i.e., an event that (presumably) may be noticed and attended to. To others, that same individual's absence is, by definition, a *nonoccurrence*. Research indicates that people experience difficulty processing the nonoccurrence of features, a phenomenon termed the *feature-positive effect* (e.g., Newman, Wolff, & Hearst, 1980; Sainsbury, 1971). In particular, research has shown that people are less adept at detecting changes in stimuli when those changes involve *deletions* as opposed to *additions* (Agostinelli, Sherman, Fazio, & Hearst, 1986; Maki, 1989). For example, participants were more likely to spot a change to a drawing when it involved the addition of a feature (e.g., a bumper added to a car), as opposed to its removal (Agostinelli et al., 1986).

This suggests that one's absence, as a nonoccurrence, may not be especially salient or noteworthy to others. Indeed, research on the feature-positive effect suggests that it is no great leap to imagine that the members of a group may sometimes overlook altogether the absence of one of their own. Yet this is likely to be discrepant with one's own perceptions. Because people tend to be highly aware of their own performance and contributions to a group, an individual who is absent may regard his or her own absence as a salient occurrence—perhaps as salient as his or her presence would be. Indeed, Hearst (1991) acknowledges that "very salient or important objects" may give rise to "exceptions to the general rule that additions are more easily detected and identified than deletions" (p. 441).

Because people are very salient and important in their own eyes, they are likely to be acutely aware of their own absence—and expect others to see their absence as salient as well. As with the spotlight effect, it may be difficult for people to appreciate the extent to which their own perceptions diverge from those of others. Thus, they may adjust insufficiently from their own rich phenomenology when attempting to determine how their absence appears—or does not appear—to others. This tendency may be exacerbated, moreover, by the fact that individuals likely regard their own absence as an occurrence, whereas others see it as a nonoccurrence. As a result, absentees may overestimate the extent to which their absence is conspicuous to those who remain.

Study 1

Our first study examined whether an individual's own absence constitutes an exception to the feature-positive effect. In particular, we investigated whether individuals regard the removal of someone else from a group as less salient than the addition of that person, but their own removal as just as salient as their addition.

To accomplish this, we presented participants with two sets of photographs in which a target photograph that did not appear in the first set was added to the second ("present" condition), or in which a photograph that appeared in the first set was missing from the second ("absent" condition). For half of the participants, the target photograph was their own picture ("self" condition); for the rest, yoked individually to participants in the self condition, the target photograph was of someone else ("partner" condition). We expected participants to regard the removal of a photograph to be less salient than its addition (i.e., the feature-positive effect), but for this effect to be diminished in the self condition.

Method

Participants

Eleven female and 25 male Northwestern MBA students participated as part of a class demonstration.

Materials

Participants received a packet containing stimulus materials constructed specifically for them. Each packet contained two sets of black and white photographs of students in the class (taken from an online directory), with each set appearing on a separate page. The two sets of photographs were identical with two exceptions: The various pictures appeared in different locations on the two pages, and one picture was missing from one of the two sets. Each set thus contained either 18 or 19 pictures. Each photograph was 3 cm × 3 cm with the student's name beneath. The photographs included in each packet, and their placement, were counterbalanced across participants such that each student's photograph appeared an approximately equal number of times in others' booklets and appeared in a variety of locations on the page. In the *present* condition, the set of photographs missing one picture appeared first in the booklets and the set containing an extra picture appeared later. In the *absent* condition, the order was reversed. For participants in the *self* condition, the target photograph—i.e., the one that appeared in only one of the sets—was their own. The target photograph in the *partner* condi-

tion was a picture of a yoked participant in the self condition.

Two pages separated the two sets of photographs: a page containing a lexical filler task and a page of instructions. Depending upon condition, the instructions either explained that one picture that had appeared in the first set was missing from the second, or that one picture absent from the first set had been added to the second. Each booklet ended with a page containing the dependent measure.

Procedure

An experimenter led participants through the procedure, instructing them not to turn pages in their booklet until told to do so, and not to look back at previous pages once they had moved on.

Participants were given 35 s to study the first set of photographs and were then asked to turn the page and work on the lexical task for 2 min. They were then asked to turn the page and read the set of instructions, after which they were given another 35 s to study the second set of photographs. Finally, participants were asked to complete the dependent measure.

Dependent measure

Participants answered a number of questions on the final page, all but one of which were included as filler. The one critical item measured the degree to which participants found the target photograph, whether added or removed, to be salient: "When you saw the second set of photos, to what extent did the additional [missing] picture 'pop out' as being new [absent]?" This question was answered on an 11-point scale ranging from 0 (*not at all*) to 10 (*very much*).

Results

There were no effects of gender in this or the other studies reported here.

We expected to find evidence of a feature-positive effect in the partner condition, but not in the self condition. That is, we expected participants in the partner condition to rate the target photo as having "popped out" at them (cf., Treisman, 1986) to a greater degree when it was added than when it was removed, but we expected no such asymmetry in the self condition.

Participants' responses yielded strong support for these predictions. A mixed-model analysis of variance (ANOVA) of participants' ratings, treating their role (self vs. partner) as a within-pair variable and whether the target's photograph was added to or missing from the second set of pictures (present vs. absent) as a between-pair variable, revealed main effects for both factors. Participants reported that the target popped out more when it was their own picture ($M = 9.39$) than when it was not ($M = 3.44$), $F(1, 16) = 65.99$, $p < .0001$, and that the target picture popped out more when it was added to the second set of photographs ($M = 7.72$) than when it was missing from the second set ($M = 5.11$), $F(1, 16) = 9.02$, $p < .01$. These effects were qualified by the predicted interaction, $F(1, 16) = 4.85$, $p < .05$. Consistent with the feature-positive effect, the addition of the target photograph popped out more to those in the partner condition than did its removal (Ms = 5.56 and 1.33, respectively), $t(16) = 3.16$, $p < .01$. Among participants in the self condition, however, there was no significant difference in the degree to which the two pictures popped out (Ms = 9.89 and 8.89, respectively), $t(16) = 1.12$, *ns*.

Discussion

These findings support our contention that an individual's own absence is typically salient to him- or herself. This was not true when the picture removed was of someone else. In that case, we replicated Agostinelli et al.'s (1986) finding that the addition of material (here, a photograph) is more salient than its removal.

Individuals appear to regard their own removal from a group (and resulting absence) as quite salient. Do they assume that it is salient to others as well? We conducted Study 2 to find out.

Study 2

Groups of participants in Study 2 assembled in a large room to view three short videos. After each video, participants adjourned to separate cubicles. One randomly selected participant, however, was surreptitiously removed from the group prior to the second video, and was then reintroduced into the group for the final video. Afterwards, absent participants estimated how conspicuous their absence had been. These estimates were compared with the ability of the remaining participants to determine who had been absent for a portion of the study. We expected absent participants to think their absence was more conspicuous than it actually was.

Method

Participants

Ninety-two female Cornell undergraduates participated in groups of 10–12 and were awarded extra credit for their participation.

Procedure

Unacquainted participants reported to the laboratory in groups and were escorted into a room with a number of chairs oriented towards a television monitor. As they

entered, an experimenter randomly assigned each participant a number between 1 and 12 and took a Polaroid picture of each. The experimenter then explained that they were to watch several 5-min videos and answer some questions about each.

After showing the first video, the experimenter explained that the numbers participants had received at the beginning of the session corresponded to a cubicle where they would complete a short quiz about the film they had just viewed. Participants were then escorted to private cubicles. Inside, all but one of the participants found a quiz and instructions directing them to leave the quiz in the cubicle when they were finished and to reconvene in the video screening room. One participant (the participant randomly assigned to cubicle 3) received a different note attached to her quiz. She was instructed not to rejoin the others when finished, but to remain in her cubicle with the door closed. (We will refer to this participant as the "absent participant" and the others as "present participants," although these labels were not used in the experiment itself).

When the present participants had finished their quizzes and returned to the screening room, the experimenter started the second video. No mention was made that one individual was missing (and none of the present participants ever inquired about the absent participant). Meanwhile, a second experimenter retrieved the absent participant from her cubicle and explained that the others were currently watching a second film and that she had been selected randomly to be absent from the group for this portion of the experiment.

The experimenter explained that the others would return to their cubicles for a second quiz, and would again reconvene in the screening room when they had finished. The absent participant was instructed to wait in her cubicle and rejoin the group when they returned to the screening room after the second quiz, doing her best to blend in as well as possible. The experimenter explained that he would make an announcement—"Wrap it up and finish your quizzes"—when approximately half of the group had finished their second quiz and had exited their cubicles, and that the absent participant should then rejoin the others.

After the second video, present participants returned to their cubicles and completed the second quiz. When half of them had finished, the experimenter signaled to the absent participant, whereupon she rejoined the others in the screening room. When all participants had reconvened, the experimenter started the final video. At the conclusion of the video, participants were sent to their cubicles for a third time. This time, however, all participants (including the absent participant) were instructed to remain in their cubicles until retrieved by an experimenter.

Present participants were retrieved in random order and interviewed individually. The experimenter explained that one of the individuals in the experiment had been absent from the room when the group had watched one of the videos. Their attention was then directed to the Polaroid pictures taken earlier, arranged in a random order on the table, and they were asked to identify the absent individual. They were instructed to guess if they were uncertain. Finally, they were asked to estimate the number of present participants in the experiment—including themselves but excluding the absent participant—who would be able to identify the absent participant, "keeping in mind that people can guess correctly by chance alone."

This continued until all present participants had been asked to identify the absent person from the Polaroid line-up, whereupon the absent participant was interviewed. She was given the same instructions the others received, and was told that the others had been asked to select the absent individual from the set of photographs. The absent participant was then asked to estimate the number of participants who had identified her, "keeping in mind that people can guess correctly by chance alone."

Results and discussion

Because the 8 groups differed slightly in size, all results are presented as proportions of the group, rather than number of individuals. All analyses were conducted at the level of the group, not the individual participant.

We hypothesized that absent participants would overestimate the proportion of the group that would identify them as the missing participant. This hypothesis was supported: Absent participants predicted that 36.9% of their fellow group members would pick them from the line-up, whereas only 21.2% did so, paired $t(7) = 3.88$, $p < .01$.

It could be argued that this finding is an artifact of a more general miscalibration regarding how conspicuous people's absences tend to be or how observant people are, rather than a *personal* feeling of being in the spotlight. We addressed this possibility in two ways. First, we examined the estimates made by each of the present participants. They too estimated the proportion of the group who would be able to identify the absent individual. Because present and absent participants should not differ in their abstract theories of human perceptual abilities, the estimates of the present participants should, according to this artifactual account, be the same as those provided by absent participants. They were not. Present participants' estimates ($M = 26.2\%$) were significantly lower than those provided by absent participants ($M = 36.9\%$), $t(7) = 3.35$, $p < .02$.

We also collected data from an additional group of 9 participants who took part in a recreation of the original procedure. They watched the same videos as the original participants, adjourned to the same cubicles to take the

same quizzes, etc. After the "walk-through" was finished, these participants were asked (separately) the same question that had been asked of the original participants: How many of the observers in a typical session of the experiment (out of 11, the modal number in the study) would correctly select the absent participant from the photographic line-up? These participants estimated that 23.0% of the observers in the original study would have identified the absent participant, a lower value than the 36.9% reported by the original absent participants, $t(15) = 1.97$, $p < .07$. These data, and the estimates made by the original present participants, affirm our position that the absent participants' estimates resulted from the conviction that their absence was in the spotlight, not a faulty general theory of human perceptual ability.

Study 3

Beyond believing that their absence will be noticed, do absent individuals tend to believe that it will have a considerable impact on the group—more so than do those who remain? Such an intuition may result from the salience of one's absence in one's own eyes. Because one can imagine the contributions one would have made at a meeting from which one was absent, for example, one is likely to see a large contrast between the actual meeting and the meeting that "might have been," had one been present. To those present, in contrast, one's would-be contributions are likely to be less salient, leading them to regard the absence as having had little effect. Thus, we contend that absentees tend to overestimate the impact of their absence, compared to the judgments of those who remain. Study 3 examines this hypothesis.

Participants engaged in a two-part group experiment, performing a creative task in part 1 and a discussion in part 2. Prior to the second task, one member of each group was removed. This individual watched a live video feed of the group working on their second task. All participants—those who participated in the discussion and those who watched from afar—then rated the impact that the absent person's absence had on the group's functioning.

Method

Participants

Forty Northwestern undergraduates (27 females) participated in mixed-gender groups of 5 and were paid $10 for their efforts.

Procedure

Participants were escorted into a room with a variety of items placed on a table (10 Lego blocks, 15 marshmallows, 7 pieces of paper, 5 straws, and a stapler). Participants were told they would be given 10 min to use the materials to build a tower, which would be evaluated on height, structural soundness, and artistic merit.

After 10 min, the experimenter returned and took a photograph of the group and their tower. The experimenter explained that only four participants were required for the next task and a drawing was held to determine who was to be dismissed. The dismissed participant was then asked to wait while the group undertook their next task.

The four "discussant" participants were informed that they would now take part in a 15-min group discussion. Each was handed an identical packet of materials and was escorted to a private room where they were given 15 min to read the materials and prepare for the discussion. Meanwhile, the "absent" participant was informed that he/she would view the discussion on a monitor and was given the same packet as the discussants.

The packet informed discussants that they were to serve on a "citizen's review committee" evaluating four hypothetical candidates for a heart transplant. Participants read descriptions of criteria one might use to make such a decision (e.g., likelihood of future contributions to society) but were told to use any criteria they wished to make their ranking. Biographical summaries of four individuals were provided, along with worksheets to record the "pro's" and "con's" of each candidate, and to make an initial, private ranking of the four.

When the four discussants reconvened, the experimenter emphasized that they should use the first 10 min to discuss each candidate and the final 5 min to rank the four. The discussion took place in a room with a camera mounted near the ceiling, enabling the absent participant to view the proceedings from an adjacent room. After the discussion, the experimenter handed the discussants a "committee recommendation form" on which to record their final decision. All participants, including the absent participant, then (separately) completed a questionnaire containing the dependent measures.

Dependent measures

Absent participants were asked to contemplate the discussion they witnessed, to imagine the discussion the group "would have had" had they not been removed, and then to assess the difference between the two. This assessment was made on an 11-point scale ranging from 0 (*the two discussions are exactly the same*) to 10 (*the two discussions are entirely different*). Absent participants then indicated the extent to which they believed their absence had affected the tone of the discussion, the group's final decision, and "the overall discussion, all things considered." These judgments were made on scales ranging from 0 (*had no effect*) to 10 (*had a large effect*).

After being reminded that one member of their original group had been dismissed, discussants completed the same dependent measures.

Results and discussion

Absent participants believed that the difference between the group's actual discussion and the discussion the group would have had, if they had not been removed, was more substantial ($M = 6.38$) than did the discussants ($M = 4.53$), $t(7) = 4.57$, $p < .005$. Absent participants also rated their absence as having had a greater effect on the group's final decision ($M = 6.13$) and the group's overall discussion ($M = 6.75$) than did the discussants (Ms $= 3.97$ and 3.44, respectively), ts$(7) = 2.41$ and 3.92, respectively, both ps $< .05$, and rated their absence as having had a somewhat larger effect on the tone of the discussion ($M = 4.75$) than did the discussants ($M = 2.74$), $t(7) = 2.19$, $p < .07$.

As anticipated, absent participants believed that their absence had a more substantial effect on the group than did the discussants. In addition to overestimating the noticeability of their absence, then, individuals appear to overestimate the impact their absence has on a group.

General discussion

Individuals are frequently called upon to anticipate how they are seen by others. "Does my spouse know how hard I worked on the household chores?" "Did I come across as confident, or as arrogant?" A growing body of research suggests that such judgments tend to be egocentrically biased—that people often base their assessments of how others view them on their own phenomenology and self-perceptions (Gilovich & Savitsky, 1999; Kenny & DePaulo, 1993; Vorauer & Ross, 1999). In particular, research on the spotlight effect has shown that individuals expect others to be more attentive to their appearance and behavior than is actually the case—largely because they themselves are often so focused on how they look and what they are doing (Fenigstein, 1984; Gilovich et al., 2000). When it comes to ascertaining how one appears in the eyes of others, it is easy to lose sight of the fact that others are seldom as focused on us as we are on ourselves.

The present research suggests that this is not confined to occasions when we are present, but also applies when we are absent. Here too, individuals are often quite focused on their appearance (or lack thereof), and regard their absence as highly salient. As with the spotlight effect, individuals account insufficiently for the fact that others are not as focused on them as they are themselves and consequently overestimate the salience of their absence in the eyes of others.

Study 1 corroborated our conjecture that individuals regard their own absence to be virtually as salient (in their own eyes) as their presence. Participants indicated that the removal of their photograph "popped out" as much as did its addition. This was not true for participants who saw others' photographs. For them, the addition of a photograph was more salient than its removal (Agostinelli et al., 1986). Study 2 demonstrated that individuals expect their absence to be salient to others, more so than is actually the case. Randomly selected participants who were removed from large groups overestimated others' ability to identify them as the one who had been absent. Study 3 expanded these findings by demonstrating that absentees tend to overestimate the *impact* their absence has had on the group they left behind. Because absent individuals have a richer representation of what their contributions would have been than others do, they tend to regard their absence as having had more impact than do others.

Although we have emphasized the role of egocentrism in people's assessments of their absence, there may be additional reasons why absentees overestimate the salience and impact of their absence in the eyes of others. Absent individuals may be insufficiently aware of the extent to which their (would-be) contributions are redundant with those of others, and thus would have offered little "value added." This could lead one to overestimate both the impact of one's absence and the likelihood that others would miss one's contributions. Absent individuals may also overestimate the extent to which they would have "spoken their mind" had they been present. Group discussants are often disinclined to discuss information they alone possess, dwelling instead on information known to all (Stasser & Titus, 1985). More generally, any number of factors including conformity pressure, politeness, and time constraints may keep one from contributing fully when the "moment of truth" arrives. Because such barriers to participation are unrepresentative of idealized group interaction, they are unlikely to be considered by absent individuals when imagining their own presence, thus creating a schism between anticipated and actual contributions.

It is tempting to speculate about variables that may moderate the effects demonstrated here. Our discussion of egocentrism, for example, implies that self-focus may be one. Research on the spotlight effect indicates that when individuals are induced to be less focused on themselves and their appearance—say, by being given time to habituate to wearing an embarrassing T-shirt—they lower their expectations of how salient their appearance will be to others (Gilovich et al., 2000; see also Savitsky et al., 2001). A corresponding effect might be observed in individuals' assessments of the salience of their absence: Those individuals who focus on their absence—either because they are dispositionally self-conscious or because they have been made self-aware by

features of the situation (Carver & Scheier, 1978; Fenigstein, 1987)—may be especially likely to overestimate how salient their absence is to others. Indeed, focusing on the absence of anything (e.g., a close friend), to the extent that others do not share one's focus, may give rise to effects like those we demonstrated here.

The kind of group from which one is absent (e.g., friends vs. strangers) may also be important. For example, adolescents often feel as though "all eyes are upon them" when they interact with their peers (Elkind, 1967), and would regard their absence from a social event as unforgivable—while believing their absence (or presence) is "invisible" to their parents.

There is a tendency in discussions of bias in social judgment to focus only on the negative implications. But there can be salutary effects as well. In this case, a tendency to overestimate the salience of our absence may compel us to take part in social interactions when tempted to sit them out. We suspect that readers will be able to recall gatherings—dinner parties, colloquia, etc.—they attended because they were concerned about how it would be perceived if they did not, and in retrospect were glad to have done so. Any bias that has the consequence of inspiring participation in this way is particularly beneficial, moreover, given research indicating that failures to participate are often among people's most enduring regrets in life (Gilovich & Medvec, 1995). If, as Woody Allen quipped, eighty percent of success is merely showing up, then a tendency to overestimate the salience and impact of our absence, and a resulting tendency to be present when tempted not to, may yield substantial benefits.

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