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**JURORS AND SOCIAL LOAFING: FACTORS THAT REDUCE PARTICIPATION DURING JURY DELIBERATIONS**

**Cynthia J. Najdowski, M.A.**

*The American jury system rests on the fundamental assumption that jurors will engage in a thorough analysis of facts and robust debate to ensure that verdicts are reliable. Research demonstrates, however, that this expectation is rarely met. All jurors do not participate equally in deliberations. This may be explained in part by social loafing, or the withdrawal of effort that may occur when an individual works in a group relative to when the individual works alone. Despite evidence that jurors do not participate equally during jury deliberations, an analysis of factors contributing to participation, or the lack thereof, has not been conducted in this context. Thus, in this review the author examines the social loafing literature in the context of jury deliberations and discusses implications and suggestions for preventing jurors from losing motivation to participate.*

The right of trial by jury, guaranteed by the United States Constitution, is the right to have a group of impartial peers (i.e., jurors) determine the facts of a case based on evidence and law. The jury system rests on the fundamental assumption that jurors will engage in a thorough analysis of facts and robust debate to ensure that verdicts are reliable. Research demonstrates, however, that this expectation is rarely met. All jurors do not participate equally in deliberations (1-5). Jury simulation studies have been particularly enlightening with regard to this issue: In mock juries composed of 12 people drawn from actual jury pools (i.e., prospective jurors), Strodbeck and colleagues (4) showed that three jurors accounted for half or more of the discussion in 82% of the deliberations, and an average of three jurors remained virtually silent throughout the deliberations examined by Hastie and colleagues (1).

Disparity in participation rates does not appear to stem from insufficient opportunity to contribute: On a recent survey, 98% of jurors reported having had ample chance to express their opinions during deliberations, despite doing so to varying degrees (6). Why, then, do some jurors refrain from con-

tributing to deliberations? Although a host of factors (e.g., shyness, [7]) might preclude any particular juror from participating fully, in this review the role of social loafing is analyzed in the context of jury deliberations, specifically considering whether unbalanced juror participation in jury deliberations can be explained in part by the withdrawal of effort that sometimes occurs when an individual works in a group relative to when the individual works alone.

Social loafing is important to consider because it has the potential to compromise the jury's ability to make reliable and accurate decisions. For example, deliberations are intended to ensure a robust analysis of case facts but Henningsen and colleagues (8) found that the anticipation of making a group rather than individual decision led mock jurors to remember less information from a civil litigation case. Henningsen and colleagues concluded that loafing manifested as less effortful processing of case details. Although loafing may occur while evidence is being presented during a trial, jurors could also loaf during deliberations by exerting little effort to recall case details, instead relying on other jurors to remember the facts. The active participation of all jurors is also necessary to ensure that the jury is exposed to a diversity of ideas and perspectives. Further, satisfaction with the quality of jury deliberation is positively related to individual participation (4) and the number of jurors who participate (9). Thus, reducing social loafing in deliberations has the potential to improve jury decision making in several ways.

The most broadly accepted conceptualizations of social loafing are based on expectancy-value theories (10, 11). According to this framework, social loafing occurs when individuals perceive that (a) their contributions will not lead to a valued outcome, (b) their contributions are not instrumental to group performance, or (c) the costs of contributing are too excessive. In this review, existing research on these elements of social loafing, structural and individual difference factors that accentuate or attenuate loafing effects, and recommendations that might help to reduce loafing in the context of jury deliberations will be discussed.

#### **THE ROLE OF TASK VALUE**

Social loafing sometimes occurs when individuals place a low value on collective outcomes. For example, Price (12) found that participants loafed

on a brainstorming task only when given instructions that diminished the importance of the task. He concluded that individuals who value a task will not engage in social loafing. What are the implications of research on task value for understanding and improving jury deliberations? Because jurors receive little monetary compensation, the value of participating in deliberations must be derived from other extrinsic and intrinsic sources of motivation.

### **Evaluation Potential**

Individuals tend to loaf when it is unlikely that their efforts will be assessed or acknowledged because they are not identifiable (i.e., inputs are anonymous or pooled across many individuals). As such, identifiability curbs social loafing. Several studies in which participants were asked to cheer loudly have shown this: Participants who thought they were working in a group made less noise compared to those working alone, but social loafing was eliminated by telling participants that the amount of noise they produced would be identifiable even when they were in a group (13-15). Williams et al. (14) also found that telling participants who worked alone that their output would not be identifiable led those participants to withdraw effort, further evidence that identifiability is a crucial predictor of social loafing.

In addition, research suggests that the potential for an individual's efforts to be compared to a standard is necessary to eliminate social loafing. For example, Harkins and Jackson (16) asked participants to generate as many uses for an object as they could and told participants that their ideas would either be evaluated individually or pooled with others' ideas. Participants who anticipated individual evaluation generated more ideas than those anticipating collective evaluation only when they thought their ideas would be compared to others'. That is, social loafing was reduced only when participants believed that their individual performance was identifiable and that it would be compared to others' performances.

How might evaluation potential affect jurors' participation in deliberations? Once a jury verdict is reached, there is no means of assessing individual jurors' contributions to the group product. Thus, jurors might loaf during deliberations because there is no potential for their contributions to be assessed. It might be possible to prevent loafing from occurring for this reason,

however. For example, after a verdict has been returned, the judge or clerk of court could ask each juror in open court whether he or she agrees with the verdict (i.e., poll the jury). Although it is the defendant's right to request a jury poll in most states and in the federal court system, this right is not commonly invoked. Simply informing jurors that they might be polled about their verdicts could be sufficient to instill a sense of individual accountability and reduce the likelihood of jurors loafing. Further, although polling is currently limited to the question of whether each juror agrees with the verdict, research suggests that telling jurors that they might have to justify their verdicts could eliminate social loafing during jury deliberations. For example, Weldon and Gargano (17) found that, when instructed that they might be required to explain their judgments on a job evaluation task, participants who were told that their output would be averaged with other judges' output worked just as hard as participants who had sole responsibility for the evaluation.

Of importance, research has demonstrated that the potential for evaluation need not stem from an external source. Subjective comparisons can be made in reference to the performance of other group members, normative standards (18), or personal standards (19). For example, Harkins and Szymanski (20) found that the potential for participants to evaluate their own performance relative to an objective standard was sufficient to reduce social loafing on a visual vigilance task. Thus, to prevent loafing, jurors could be encouraged to evaluate their contributions to the deliberation by comparing them to other jurors' participation or, perhaps more pertinently, to the normative expectation that all jurors should participate equally in deliberations. The potential for external evaluation or encouragement to engage in subjective evaluation could be communicated to jurors either during jury orientation (i.e., efforts to inform and familiarize jurors with the jury process) or via jury instructions (i.e., legal rules and guidelines provided to the jury by the judge).

#### **Task Meaningfulness**

A task can also have value because it is intrinsically meaningful. Generally, individuals are not motivated to exert effort if group outcomes are not personally important, relevant, or interesting (21-23). For example, Brickner

and colleagues (21) asked undergraduate students to generate thoughts about a proposal to require that seniors pass competency exams to graduate. Personal involvement was manipulated by telling students that the proposal would be instituted at their university in the next year, at their university in several years, or at a different university. Students' output was either identifiable or pooled. When involvement was low, typical social loafing effects were found such that identifiable students generated more thoughts than students whose results were pooled. When involvement was high, however, there was no difference in the number of ideas generated by students in the identifiable condition compared to those in the pooled condition. Similarly, George (22) asked a sample of salespeople to report the degree to which their supervisors were aware of their efforts (i.e., task visibility) and the significance and meaningfulness of their job as well as the importance of their contribution (i.e., intrinsic involvement). Ratings of social loafing were provided by the salespeople's supervisors. Replicating Brickner and colleagues' (21) results, George (22) found that intrinsic involvement moderated the effect of task visibility on social loafing such that task visibility predicted social loafing when intrinsic involvement was low but not high. Thus, social loafing effects can be eliminated when participants are highly involved and find a task personally meaningful. Indeed, research suggests that jurors who consider their cases important, relevant, or interesting are more likely to engage in thorough deliberations (6).

The implications of research on task meaningfulness for jury deliberations are heartening: Because attitudes about jury service are generally quite positive (24-28), it is likely that most jurors consider their role in deliberations to be meaningful. Even so, positive perceptions of jury duty are not universal. In fact, research suggests that 7-9% of jurors report that they would try to get out of jury duty if summoned again and more (9-49%) have neutral opinions about serving in the future (24, 25). Thus, a significant minority of jurors may not consider jury duty to be a meaningful experience, and negative attitudes toward jury service could translate into reduced participation (29).

Research suggests that education can play an important role in improving perceptions of jury service (30, 31). In particular, public education and outreach and jury orientation efforts could be used to emphasize the jury's role

as the “collective community conscience” (31, p. 16) and the importance of their ultimate decision. In addition to these broader measures, jury instructions could include specific appeals to jurors’ sense of civic duty by discussing the significance of their role to society. These strategies to improve attitudes toward jury duty and highlight the meaningfulness of service might be useful for preventing jurors from loafing.

#### **THE ROLE OF INSTRUMENTALITY**

Research has also demonstrated that individuals loaf on collective tasks when they perceive that the group’s ability to perform well is not contingent on their efforts (32-37). That is, individuals withdraw if they feel that their contributions are dispensable or unnecessary for the group to succeed because they can rely on other group members to accomplish the task. Weldon and Mustari (37) demonstrated this effect in two experiments with undergraduate students engaged in a job evaluation task. Compared to students who completed the judgment task alone or in pairs, those who thought their evaluations would be pooled with many other judges’ evaluations exerted less cognitive effort by using less complex judgment strategies. Questionnaire responses provided in the second experiment revealed that students who shared responsibility for the task reported that they felt more dispensable compared to students who worked alone or in pairs.

This research suggests that jurors who perceive that their contributions are important to the collective task of deliberating might be less likely to loaf. Jurors might feel that they are not instrumental to reaching a verdict for a variety of reasons, however. For example, jurors might lack confidence in the legal system or in their own ability to contribute to deliberations (see subsequent review of self-efficacy beliefs). Jury orientation or instructions could be used to combat feelings of dispensability by explaining that jurors’ ability to contribute a unique perspective to jury deliberations is crucial to the pursuit of truth and justice.

#### **THE ROLE OF RATIONALITY: COST-BENEFIT ANALYSIS**

Expectancy-value models of social loafing (10, 11) assume that rational individuals weigh the costs and benefits of exerting effort when working in groups. The costs of participation may be considered too high for several

reasons. If there is no potential for individual efforts to be evaluated, the prospect of not receiving acknowledgment or rewards for one's contributions might outweigh the benefits of exerting effort on the group's behalf. If the task is not meaningful or jurors feel dispensable, the cost of any effort may be considered too high.

There might be other psychological costs associated with participating in jury deliberations. Specifically, jurors may experience negative affect as a consequence of perceptions that otherwise capable jury members are loafing. Research demonstrates that the prospect of being taken advantage of, of being a "sucker," causes people to withhold their efforts (18, 32, 38-41). For example, Jackson and Harkins (38) paired students with a confederate following a practice trial for a shouting task. Confederates confided to their student partners either that they had tried hard on the practice trial and would continue to try hard or that they had not and did not intend to try hard on the task. Regardless of whether students' efforts were identifiable, they matched the confederates' level of effort. That is, students reduced their own efforts when they expected their partners to exert little effort. Hart et al. (42), however, demonstrated that loafing did not occur if the partner had a justification for "free riding." Specifically, participants received bogus messages from partners regarding their partners' level of effort and ability on an idea generation task. When the partner said he or she would exert low effort, participants loafed when the partner had high ability but actually worked harder to compensate for the partner's low effort if they believed the partner had low ability.

Using a similar task, Williams and Karau (23) found that participants were less likely to loaf when working with a partner whom they expected to perform poorly only when the task was meaningful to the participants. Research is necessary to determine whether jurors can be convinced that the benefits outweigh the costs of participating in these conditions and whether other jurors are ever perceived as justified for holding back during deliberations. Efforts to persuade jurors that their participation is valuable and influential might not be sufficient to override the negative effects of perceptions that other jurors are loafing. For example, highlighting normative expectations of equal participation might draw attention to other jurors' loafing, further frustrating jurors who feel like "suckers." Williams and Karau's (23)



results, however, suggest that increasing the value that jurors place on jury service may ensure that jurors exert more effort (i.e., participate more) to compensate for poorly performing group members.

The potential cost of embarrassment might also be an impediment to jurors' participation in deliberations. Jury instructions can be complex and difficult to comprehend (1, 43, 44). Thus, jurors might withdraw because they do not understand the instructions and they fear they will embarrass themselves by making inappropriate comments. Revisions designed to enhance the clarity and comprehension of jury instructions (45) might also increase the quality of deliberations by enhancing juror participation.

Still, highlighting the potential costs of jurors' nonparticipation (e.g., inferior deliberation quality, the possibility of making a poor decision) and the ramifications of those costs could be sufficient to inhibit social loafing.

#### **ACCENTUATION AND ATTENUATION OF SOCIAL LOAFING EFFECTS**

##### **Structural Variables**

The value that individuals place on a task, feelings of instrumentality, and cost-benefit judgments can be affected by many factors. In the following section, the potential influence of group cohesion, jury decision rules, jury size, deliberation outcomes, and time on juror participation in jury deliberations are reviewed.

*Group cohesion.* Group cohesion, the degree to which individuals feel united with the group, is positively related to performance (46) and negatively related to social loafing. For example, Karau and Williams (47) manipulated group cohesion by having participants work in groups with either friends or strangers. Participants were less likely to loaf when working with friends than with strangers, an effect that was found on both a physical task (i.e., typing) and a cognitive task (i.e., idea generation). Further, Liden and colleagues (41) found that employees' reports of cohesiveness with their existing workgroup members were negatively associated with managers' objective reports of employee social loafing.

The manipulation Karau and Hart (48) used to create cohesion in dyads is similar to dynamics that might create cohesion within a jury. In the high cohesion condition, participants were told that their partners agreed with

them on many issues and they were asked to discuss one such issue that they both felt was important with the goal of convincing each other that their position was correct. Conversely, in the low cohesion condition, participants were told that their partners agreed with them on few issues and they were asked to discuss an issue that was important to both of them but on which they disagreed with the goal of convincing each other that their divergent opinion was correct. There was also a control condition, in which dyads were told that their partners agreed with them on a moderate number of issues. Control dyads were asked to discuss the pros and cons of an issue that they moderately disagreed on but that they both rated as low in importance. Following the discussion, participants were asked to work on an idea generation task either alone or with their partners. Participants in the low cohesion and control conditions generated fewer ideas when working in dyads than when working alone but participants in the high cohesion condition worked just as hard collectively as they did alone, demonstrating that high group cohesion can eliminate social loafing.

Mullen and Copper (46) suggest that the association between group cohesion and performance may be bidirectional. That is, cohesiveness may lead to improved performance but improved performance may also increase feelings of cohesiveness. Relations between social loafing and group cohesion could also be affected by several factors. For instance, group norms may moderate the effect of group cohesion on social loafing. Gammage and colleagues (49) found that even highly cohesive group members may have lower performance goals if there are no group norms for performance.

How could this structural variable affect jury deliberations? Karau and Hart's (48) manipulation of group cohesion suggests that divergent opinions might lead to low cohesion among juries. On the other hand, robust debate might cause jurors to feel that the group is performing as it should be and increase feelings of cohesion. Research is necessary to understand how feelings of cohesion can be increased during deliberations, which are often characterized by ardent disagreement. Gammage and colleagues' (49) research also suggests that it is important to encourage jurors to follow equity norms to reduce social loafing effects. Engaging in equal participation might contribute to a sense of unity and further encourage equity in jury deliberations.

*Jury decision rules: coalitions and ostracism.* Although conflicting posi-

tions may affect juror participation via group cohesion, it is also necessary to consider the potential impact of jury decision rules on social loafing. In most cases jurors must unanimously agree on a verdict but a significant minority of jurisdictions requires that only a majority of jurors agree for a verdict to be reached.

Research shows that unanimous juries deliberate longer than non-unanimous juries (see Devine et al. [50] for review), but it remains unclear whether participation is distributed more equally. In fact, unanimous juries provide a unique opportunity for social loafing. When jurors share their thoughts and opinions about the case, other jurors are able to identify those who hold similar beliefs and coalitions based on consensus may then develop (51). Research has revealed that juror participation increases as the size of the coalition decreases (1, 51), and Hawkins (51) suggested that this is because minority coalition members are required to talk more to defend their position. This would suggest that minority members would remain active participants in jury deliberation. Cruz et al. (52), however, demonstrated that conformity pressures can be very influential and may lead otherwise dissenting jurors to abandon their positions. Participants in their study were asked to choose the best job candidate to hire and then read a transcript of a hypothetical group discussion about the candidates. Despite being fully informed about the candidates' qualifications prior to reading the group discussion, participants conformed to normative pressures and changed their votes to a suboptimal candidate on the basis of preferences expressed by hypothetical group members. Research using potential jurors suggests that, even when a minority attempts to stand firm and end the deliberation, the majority will sometimes continue efforts to persuade the minority to shift (53). Such strong conformity pressures are stressful (27) and may lead jurors to lose their motivation and withdraw from the deliberation.

Thus, jurors may be pressured to surrender to a majority in juries that operate under the unanimous decision rule, but the threat is even greater in non-unanimous juries for dissenters to be ostracized and disregarded. By definition, non-unanimous juries require only that a majority of jurors reach the same verdict, rendering it completely unnecessary to give voice to dissenters. Diamond and colleagues (9, p. 216) provided a clear demonstration of ostracism and effort withdrawal in an actual non-unanimous jury under these cir-

cumstances. When one juror disagreed with the majority, a member of the majority asked the bailiff, "Does that person have to stay or can he be excused or do we all have to be here?" The bailiff confirmed that the juror would have to stay and the majority member told the dissenter, "All right, no offense, but we are going to ignore you." Following this exchange, the dissenting juror only infrequently participated to support other jurors in defense of the minority position. This example suggests that non-unanimous decision rules leave much to be desired. Jurors may be marginalized when verdicts are not required to be unanimous and such ostracism might reduce a minority juror's motivation to participate in the debate (but see Williams & Govan, [54]).

In summary, although majority rule is based on the assumption that all group members participate equally (55), research on jury deliberations has demonstrated that this is not the case. Research should examine the extent to which loafing occurs under both unanimous and non-unanimous decision rules, whether coalitions and ostracism contribute to jurors' effort withdrawal as suggested herein, and, if so, whether instructions dissuading the coercion and marginalization of minority jurors might be effective in reducing loafing.

*Jury size.* Social loafing increases as group size increases. The moderating effect of group size on social loafing has been demonstrated in various physical (e.g., cheering [13]; rope-pulling, [56]) and cognitive domains (e.g., signal detection [57]; educational tasks [58]; existing employee workgroups [41]). Research examining the effect of group size on jury deliberations has yielded similar results: Jurors are more likely to loaf in larger 12-person juries than in smaller 6-person juries. Velasco (5) provided a striking example of this: At least one juror remained silent during deliberations in more than half of large juries whereas all jurors in small juries participated. Thus, social loafing during deliberations might be curbed by having smaller rather than larger juries. It is important, however, to balance any potential benefits of reducing loafing against costs associated with using small rather than large juries. For example, smaller juries are less diverse (59) and render more inconsistent (60), variable (61), and potentially incorrect verdicts (62). In addition, on a 6-person rather than 12-person jury, a juror holding the minority position is less likely to find an ally and more likely to conform to the major-

ity opinion (59), perhaps as a consequence of losing motivation and withdrawing effort, as previously reviewed.

Given the potential limitations of small juries, rather than limiting jury size, it might be more constructive to implement what is known about why people loaf in larger groups to combat effort withdrawal in 12-person juries. Sorkin and colleagues (57) suggested that social loafing was facilitated in larger groups because individuals were able to rely on other group members' judgments when making a decision. Although individuals might feel more dispensable in larger groups, the effect of group size on social loafing can also be explained in terms of evaluation potential. That is, social loafing is more likely to occur in larger groups because it is more difficult to identify individual contributions to the group product. As suggested by Kerr and Bruun (56), individuals may attempt to "hide-in-the-crowd." More specifically, Mullen (63) proposed that group members become more conscientious and more concerned with matching performance to objective standards as group size decreases. Also, Mullen and Copper (46) found in their meta-analytic review that group cohesion was a better predictor of performance in smaller groups than in larger groups. Thus, previous recommendations of using jury orientation, instructions, and post-trial polling to increase jurors' perceptions of instrumentality, adherence to equity norms, and potential for evaluation might help to override the debilitating effect of group size on performance.

*Deliberation outcomes.* Case outcomes might have important implications for social loafing. The product of jury deliberation depends on whether the case is being tried in criminal or civil court. The consequences of rendering a guilty verdict in criminal court can range from fines to imprisonment to capital punishment for the defendant. In civil court, guilty verdicts are accompanied by judgments regarding the compensatory and punitive monetary damages owed to the plaintiff by the defendant. Research has yet to examine whether the implications of the jury's decision influence jurors' tendency to loaf. Jurors' perceptions of task meaningfulness or importance might vary as a function of the type of case (i.e., criminal versus civil), but the seriousness of eventual outcomes might be an even more important predictor of deliberation quality (64). Even so, the specific issues involved in any given case

might interact with individual differences to predict the likelihood that any particular juror will engage in social loafing.

*Time.* Social loafing is positively associated with task duration and fatigue. For instance, in Hoeksema-van Orden et al. (65), men students engaged in cognitive tasks (i.e., reaction time, memory search, and monitoring tasks) continuously for 20 hours. Although performance deteriorated over time for all men, performance decrements were greater for men who worked in a group compared to those who worked individually. Research suggests that loafing associated with fatigue might be prevented by having brief breaks at optimal times (66). Deliberations typically do involve breaks, however, possibly too many breaks. In fact, the use of jurors' time during the course of a trial tends to be the most negatively evaluated aspect of jury service (25). Thus, it might be more beneficial to focus prevention efforts on other ways in which time influences social loafing. For example, task meaningfulness might diminish after protracted deliberations involving constant effort. It is also possible that jurors holding a minority position may become demoralized and worn down after lengthy deliberations, and thus more likely to loaf. Research should examine whether these suppositions bear out and whether efforts to increase task meaningfulness or to prevent minority view holders from loafing are effective even in deliberations that continue over many days.

Also relevant, research shows that experience with a group establishes performance norms that influence later performance. Paulus and Dzindolet (18) demonstrated in three studies that participants who worked in interacting groups performed more similarly on a brainstorming task than did participants in nominal (i.e., noninteractive) groups. In a fourth study, participants completed three brainstorming sessions either alone or with a group. The performance norms established in the first session predicted performance in subsequent sessions, and more strongly predicted performance in the third session than in the second. Manzo (67) provided some evidence that Paulus and Dzindolet's findings also apply to juries. In a qualitative analysis of jury deliberations, Manzo found that speaking turns and duration of participation were influenced by implicit norms of equity and democracy during the early stages of deliberation. Specifically, deliberations began as a round-robin discussion, with each juror stating his or her thoughts about the case. Following

this initial stage, however, deliberations were characterized by turn-taking that is more typical of everyday conversations. Thus, the early stages of deliberation differ from later stages in two important ways. First, jurors do not have the potential to loaf during early stages of deliberation because they are expected to participate in a round robin of position statements. But as deliberations assume a less formal, conversational style, jurors might be able to withdraw their efforts less conspicuously. Second, during later stages of deliberation, equity norms transition to expectancies based on individual jurors' prior participation rates and this might allow jurors who have already contributed less to loaf further. Further, Strodbeck and colleagues (4) noted that jurors who meaningfully contributed to the discussion were encouraged to continue participating, leading the deliberation to be dominated by a few jurors. Paulus and Dzindolet, however, demonstrated that participants attempted to match external norms when they were provided with information about other groups' performance. Thus, encouraging equal participation throughout deliberations might prevent jurors from following disproportionate participation patterns that are established at the onset.

#### **Individual Difference Variables**

Research has shown that individual differences account for little verdict variance (68), yet it may still be important to consider these factors in the context of social loafing and deliberation input. Individual differences are sometimes the basis for attorneys' decisions about which prospective jurors will be chosen to serve on a jury (i.e., jury selection) (69), and this has the potential to impact jury deliberations in multiple ways. For example, one party might consider it beneficial to select jurors who are predisposed to loaf if they believe that the loafers will defer to other jurors who support that party's position. In addition, to the extent that individual differences that predict loafing are also associated with attitudes that are more favorable to the defense or prosecution, the underrepresentation of those attitudes in jury deliberations could result in biased trial outcomes. Although many individual difference factors are related to social loafing (e.g., individualism and collectivism [10, 70]; achievement motivation [71]; performance anxiety, [72]), a subset of variables have been studied more extensively in relation to participation in jury deliberations, including perceptions of competence; social sta-

tus, respect, and socioemotional motivations; need for cognition; and juror gender.

*Expectations: perceived competence of self and others.* Self-efficacy beliefs relate to perceptions that one is competent to contribute to the group's goals. Research has demonstrated that individuals increase contributions when they perceive they are able to perform well on a task (32). Individuals with low self-efficacy beliefs might withdraw their efforts because they feel that their contributions would be inadequate or to avoid appearing incompetent.

Self-efficacy beliefs also have implications for participation in jury deliberations. Gastil and colleagues (6, 73) found that jurors' political self-confidence predicted active participation in jury deliberations, but variations in self-confidence among jurors related to lower ratings of deliberation quality. Gastil and colleagues (6) suggested that those with less knowledge and confidence may yield to the "experts" during deliberations. Other research suggests that jurors who value collective outcomes or who have prior experience serving on a jury may have higher self-efficacy beliefs about their ability to contribute to deliberations and are likely to feel more confident about participating compared to others (74). Education and training about the legal system and group decision making could be useful for increasing jurors' confidence and, thereby, participation. In fact, research suggests that jury orientation is effective at increasing jurors' knowledge about the jury system and their confidence in their role as jurors (75).

Do expectations about the performance of other group members affect participation? The research on "free riding" effects suggests that they do (23, 42). In addition, Plaks and Higgins (76) demonstrated that individuals use stereotypes about other group members to decide how much effort to expend. Specifically, participants who expected to work on cognitive problems (e.g., anagram-solving problems) performed better when working with a partner they expected to do poorly than when they worked alone, but performed worse when they worked with a partner they expected to do well than when they worked alone. Thus, jurors might be more likely to engage in social loafing when they hold stereotypes about other jurors that suggest that those jurors will do the deliberating for them. Emphasizing equity norms might prevent stereotypes from having this effect on juror participation in delibera-



tions.

*Social status, respect, and socioemotional motivations.* Perceptions of other jurors' competence may also be influenced by social status, another factor that has been shown to relate to participation in deliberations. In fact, Strodbeck and colleagues (4) suggested that low status jurors might defer to high status jurors because they perceive high status jurors to be more competent. They found that proprietors and clerical workers participated in jury deliberations more than laborers did, and similar effects of status have been reported elsewhere (1, 77).

Although perceptions of competence are important, it is also possible that the effect of social status on social loafing is mediated by interpersonal respect. Perceiving that one is not respected might cause a juror to withdraw from deliberations because of concerns that his or her contributions will not be valued. Gastil and colleagues (6, 73) found that pre-service attitudes, such as trust in judges and the jury system, influenced jurors' reports of perceived respect during deliberations. Further, jurors who rated their interactions with other jury members as more respectful were more satisfied with their deliberations. Future research is needed to determine whether the effect of respect on satisfaction is related to increased participation, but Gastil and colleagues' research suggests the potential for education and orientation focused on enhancing jurors' trust in the legal system to foster respect for fellow jurors and override biases based on social status which could potentially contribute to social loafing.

Research using samples of jurors suggests that the relations between social status, respect, and loafing are linear. Research using other groups suggests that the relations might not be so straightforward, however. Sleebos and colleagues (78) told participants that other group members had rated them on a scale of respectability based on past experiences with the group. After receiving bogus respectability scores, participants were asked to perform an accounting task on the group's behalf and they were told that they could stop at any time. Both high- and low-respected participants worked longer than did average-respected participants, but high- and low-respected participants' underlying motivations for working differed. Specifically, high-respected participants were more motivated by concerns with group cohesion compared to low-respected participants (78). This is consistent with prior re-

search suggesting that people who feel superior to others feel uniquely qualified to contribute to a group's success when faced with challenging tasks (79). In contrast, in Sleebos and colleagues' research, low-respected participants were more anxious about being accepted than were high-respected participants. This finding is consistent with other research showing that appealing to individuals' needs for belongingness can increase identification at the group level and thereby thwart social loafing (80).

In summary, social status, respect, and socioemotional motivations likely work in concert to affect social loafing in jury deliberations. Research identifying the unique sources of motivation associated with these individual differences variables can be used to inform juror education and orientation efforts to increase juror participation.

*Need for cognition.* Need for cognition, the tendency to engage in and enjoy cognitive efforts, is also related to social loafing. Research on decision-making groups suggests that people with high rather than low need for cognition contribute more to discussions (81, 82) and are less likely to loaf (83). Jury simulation studies have replicated this effect, demonstrating that jurors high in need for cognition participate more in deliberations compared to jurors low in need for cognition (84, 85). Shestowsky and colleagues (84) paired people high in need for cognition and low in need for cognition to create two-person juries for a mock trial. Jurors high in need for cognition presented more arguments during deliberations compared to jurors low in need for cognition. Shestowsky and Horowitz (85) replicated this effect using larger groups of four mock jurors. Specifically, jurors low in need for cognition talked less and participated more passively than did jurors high in need for cognition. In a second study using dyads, although participation rates did not differ, jurors low in need for cognition were more likely to change their position in response to strong arguments than weak ones, whereas jurors high in need for cognition did not exhibit this sensitivity to argument quality. Thus, jury deliberations may be compromised when jurors low in need for cognition do not participate fully because they appear to be better at evaluating the strength of a case compared to jurors high in need for cognition. To motivate jurors low in need for cognition, Shestowsky and Horowitz (85) suggested using jury instructions to emphasize jurors' "duty to deliberate" (p. 333) or charging the foreperson with the responsibility of en-

sure that all jurors participate. In addition, Shestowsky and Horowitz (85) found that jurors low in need for cognition reported enjoying debate less and felt less confident when debating compared to jurors high in need for cognition. Thus, using education and orientation to boost self-efficacy beliefs might prevent jurors' low in need for cognition from losing motivation during deliberations.

*Juror gender.* Social psychological research on small groups shows that men are more likely to loaf than women (10, 39, 86), but, in jury deliberations, men participate more than do women (1, 4, 87). It is important to note, however, that the research examining gender differences in jury deliberation participation is quite dated and certainly much has changed in the past several decades with regard to interpersonal relations between men and women. In fact, more recent research suggests that, although past studies revealed that men were perceived as more influential during deliberations than women (87), this is no longer the case (77). Thus, future research is necessary to examine whether gender differences in social loafing during jury deliberations currently exist and, if so, why.

In addition, research should test whether the gender composition of the jury affects subsequent gender differences in loafing. Hickerson and Gastil (64) recently found that women jurors who served on juries composed mostly of women reported more satisfaction with the jury experience than women who served on non-woman-majority juries. Because juror participation is known to predict satisfaction with deliberations (4), it is possible that Hickerson and Gastil's findings reflect gender differences in participation rates. One way gender composition might lead to gender differences in loafing is through deliberation style. Marder (88) suggested that the likelihood that a jury will take a poll of jurors' positions early on in the deliberation (i.e., that deliberations will be verdict driven) increases as does the proportion of men to women. As reviewed earlier, this process allows for coalitions to form and for the majority to attempt to influence the minority (51). Thus, because verdict-driven juries are more likely to be man-majority, it is more likely that coalitions will form with women in the minority position and, consequently, that women might be more likely to loaf (see previous discussion of jury decision rules).

Another question for future research is whether gender interacts with

case type to predict social loafing. For example, because women are more likely to be victims of sexual crimes than are men (89), the tendency of women to participate less might be eradicated in deliberations for sexual victimization cases. In support, Hickerson and Gastil (64) found that women reported being more satisfied with deliberations when their cases involved sexual crimes rather than other types of crimes. Understanding the unique conditions under which gender differences in social loafing emerge will shed light on why they occur and whether prevention strategies should be custom tailored for men and women.

### CONCLUSION

This review identified some of the conditions that contribute to social loafing in groups and discussed their implications for participation during jury deliberations. Research is necessary to specifically test whether the variables identified in this review similarly influence social loafing in jury deliberations, although existing research suggests that they do. In addition, there are many more structural and individual difference variables that have been shown to relate to social loafing and more research is needed to understand whether and how those variables might also affect loafing in deliberations.

Further research is also necessary to empirically test whether social loafing can be prevented in the context of jury deliberations. Researchers seeking to eliminate loafing in groups may provide some guidance. For example, explicitly informing jurors about group processes that lead to social loafing might be an effective strategy for inducing the active participation of all jurors during deliberations. Crott and Hansmann (90) found that groups who received an educational intervention about conformity pressures (e.g., “majority rules” norms) made more correct decisions compared to control groups (but see Huddleston et al. [91]). Research has also demonstrated that providing performance feedback can improve performance for participants who are below target (92). In addition, introducing a group facilitator to monitor and encourage juror participation may reduce social loafing. Further, having a group facilitator might attenuate the tendency for jurors to loaf when a foreperson is appointed (93). Providing additional information and guidelines for participation through jury instructions may also be an efficient and useful prevention strategy (66). Empirical research is still needed to demonstrate

that education, orientation, and instructions can successfully motivate jurors to participate in deliberations and that changes instituted to reduce social loafing are effective, well-designed, and straightforward to implement. Further, research showing variable participation rates across jurors suggests that efforts that are already in place (e.g., instructions that encourage active participation) should be evaluated for efficacy and modified as necessary.

It is also important to recognize that social loafing is not the only reason jurors do not participate in deliberations. For example, some jurors may be so shy or reserved that they are unlikely to participate in deliberations regardless of any interventions implemented to reduce social loafing. Thus, there is certainly good call for research exploring other possible explanations for jurors' failure to participate in deliberations, each with their own unique remedies for enhancing participation.

Clearly, social loafing is a multi-faceted phenomenon and many variables influence the extent to which it occurs. This review suggests that knowledge derived from empirical research on social loafing can be used to improve juror participation. Eliminating social loafing will enhance jurors' satisfaction with deliberations (6), improve the ability of juries to render reliable and accurate verdicts, and protect the integrity of the jury system.

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