

Authors' Response

Differentiating selves facilitates group outcomes

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Sarah E. Ainsworth,^a Roy F. Baumeister,^b and Kathleen D. Vohs^c

^aDepartment of Psychology, University of North Florida, Jacksonville, FL 32224; ^bDepartment of Psychology, Florida State University, Tallahassee, FL 32306; ^cDepartment of Marketing, Carlson School of Management, University of Minnesota, Minneapolis, MN 55455.

s.ainsworth@unf.edu

baumeister@psy.fsu.edu

vohsx005@umn.edu

<https://psy.fsu.edu/faculty/baumeister.dp.html>

<https://carlsonschool.umn.edu/faculty/kathleen-vohs>

Abstract: The target article proposed that differentiation of selves is a crucial moderator of group outcomes, such that differentiation of selves contributes to beneficial outcomes of groups while limiting undesirable outcomes. In this response, we aim to complement the target article by refining and expanding several aspects of the theory. We address our conceptualization of optimal group functioning, clarify the term *differentiation of selves*, comment on the two-step nature of our model, offer theoretical connections and extensions, and discuss applications and opportunities for future research.

Some of humanity's greatest accomplishments are born of group activity and performance, from constructing the Panama Canal to landing on the moon. Other evidence of the power of groups shows their destructive side as in cases of war, genocide, and social harms. The target article aimed to address the issue of when groups are more or less than the sum of their parts. That is, when does a group outperform the summation of an equal number of individuals working alone? Our article reviewed the literature on group performance and decision processes and concluded that differentiation of selves within groups allowed for some of the best group outcomes while limiting the worst outcomes. We proposed a two-stage process that divides the formation of performance-focused groups into two steps. The first step emphasizes shared identity and belongingness within the group, and the second step emphasizes roles and the differentiation of selves within the group. We are grateful to the commenters who provided insights, connections, and challenges to our theory. Our response aims to address misunderstandings, refine the theory, and incorporate insights from the commentaries.

R1. Optimal group functioning

A central feature of our theory is that differentiation of selves promotes optimal group functioning by increasing system gain. What do we mean by that? We wrote that system gain can help members of a systematically organized group achieve "better results than the same number of individuals working together but without a system" (sect. 1.1, para. 5). **Smaldino** raised the question of what constitutes "better" results. He asked whether we meant that which would aid group survival and enable groups to attain resources or whether we meant other outcomes, such as

subjective enjoyment of group membership. Most groups are formed for reasons and purposes, which means that they have functions. Culture itself likely originated because togetherness and coaction created benefits reflected in the biological outcomes of survival and reproduction (Baumeister 2005; Boyd & Richerson 1985; Mead 1934). We therefore consider optimal group outcomes those that enable a group to compete effectively with other groups and accomplish group objectives (as defined by the group).

Belzung, Billette de Villemeur, Grivin, & Iorio (Belzung et al.) suggested that our focus on system gain may carry implicit value judgments and that not all groups actually value system gain (and certainly not all individuals within the group). We focused our review on task groups, that is, groups formed to work together to accomplish some function. Not all collections of individuals or categories of people can be considered a group according to this definition. Religious groups or other types of groups that are not task oriented may not value group survival or system gain. An example of such a group is the Shakers, a religious group that promoted celibacy and experienced a stark reduction in population as a result of that practice. Even among task-oriented groups, the benefits of system gain may vary in importance. System gain should be most important when it can produce the greatest benefits, such as when there is competition among groups for scarce resources. System gain may be important in the context of intergroup competition because that competition may threaten a group's survival. Suddendorf (2013) argued that human ancestors competed against other hominids and prevailed, and this presumably occurred because of system gain (especially including warfare). When such competitive pressures are low and life is easy, there may be less need for system gain and hence less interest in cultivating it. **Nijstad & de Dreu** also added the helpful point that differentiation of individual selves is much more helpful with some kinds of tasks (especially those involving cognitive complexity and deliberate information processing) than with others.

R2. Differentiation of selves

The target article argued that differentiation of selves is a key feature that allows for optimal group outcomes. Several commenters expressed the need for clarification about what constitutes differentiated selves or argued that the concept includes conceptually dissimilar ideas that do not belong together. In this section, we aim to clarify the term *differentiation of selves* and to discuss mechanisms that can promote differentiation. Differentiation of selves occurs when group members contribute their distinct skills, knowledge, or opinions to a group task (whether performance-related, informational, or moral). People exist first as bodies, and in that sense they are inherently separate and different. Group systems present ways of organizing these disparate bodies into larger, multiperson units. The central issue for us is how much groups retain and capitalize on differences among selves. Groups may even increase differences among selves, such as when division of labor creates specialized expertise. Alternatively, groups may treat members as essentially similar, interchangeable parts (e.g., cannon fodder). The central

argument of the target article is that groups benefit by using systems based on differences among members rather than training members to be more or less interchangeable.

Kruger, Vigil, & Stith (Kruger et al.) noted that there are several potential interpretations of the term *differentiation of selves*. To be clear, differentiation of selves does not refer to surface characteristics, such as whether a group member is male or female. Differentiation of selves also does not refer to perceptions of identities, such as the extent to which a person views him or herself as a prototypical group member. Instead, differentiation of selves refers primarily to contributing a distinct skill, special knowledge, or key opinion to the group. Differentiation of selves could be construed as an umbrella term for different types of role differentiation. That is, differentiation of selves involves taking on a unique role in the group by contributing skills or knowledge that are different from the contributions made by other group members. In group performance or moral tasks, role differentiation promotes personal responsibility for contributing to group outcomes and thereby promotes effort. In informational tasks, role differentiation can mean playing devil's advocate, arguing for a non-conventional viewpoint, or more simply contributing one's opinion without undue influence or pressure from others. Role differentiation in informational tasks promotes independent thought and thus frees the individual from pressure to conform.

Several commenters mentioned that our definition of *differentiation of selves* as stated in the target article seemed to involve two conceptually distinct ideas. **Dar-Nimrod & Gonsalkorale** noted that we discuss differentiation of selves as resulting from both identifiability (e.g., being publicly identified) and specialization through role differentiation. **Talaifar & Swann** similarly pointed out that we defined the term *differentiation of selves* both as personal regulation, a result of being individually identified and responsible, and social regulation, a result of role differentiation. **Levine** also differentiated two constructs within our concept of differentiation of selves. Subjective differentiation, as described by Levine, occurs when people feel pressure to behave in accordance with group goals; and objective differentiation involves contributing differing skills, knowledge, and opinions.

Although we appreciate the difference between public and private aspects of self, we sought in our analysis to straddle the two for an important reason. Our investigation began with an attempt to understand the roots of human selfhood. Differentiation is not so much a need originating from inside a person but rather in the social system. People become different not because of some mysterious instinct for uniqueness but rather because differentiated selves make groups function better and so people evolved and learned the capacity to perform differentiated roles in these groups.

The issue of sharpening the definition of differentiation also was raised by **Mojzisch, Schultze, Hüffmeier, & Schulz-Hardt (Mojzisch et al.)**. They suggested that the concept of differentiation of selves as we described it could refer to three different constructs, including (1) distinct roles, knowledge, or expertise, (2) metaknowledge about other differentiated identities, and (3) perceiving the self as autonomous and independent. Our intended meaning of the construct *differentiation of selves* fits most closely with what **Levine** called *objective differentiation*

and the first definition of *differentiation of selves* provided by Mojzisch et al. Mojzisch et al.'s latter two constructs are also quite real, we think, but they are there to facilitate the first.

In reviewing our target article, we can understand the source of confusion. In the fifth paragraph of the introductory section, we wrote: "By *submerged in the group*, we mean any of the following: People are held neither accountable nor responsible, they are not in competition or playing a distinct role, and they are not publicly identified or rewarded." This statement equates the definition of *differentiation of selves* with the mechanisms that can be used to promote or discourage differentiation of selves. Here, we differentiate the definition of the concept of differentiation of selves (contributing a distinct skill, distinct knowledge, or distinct opinion to the group) from the mechanisms that promote or undermine differentiation of selves. Our review focused on the benefits of differentiation of selves in three domains: group performance, group decision processes, and moral group behavior. The mechanisms that can affect differentiation of selves include public identifiability, competition, reward, and accountability. None of these features universally increases differentiation of selves. Instead, the effect of each mechanism on differentiation of selves depends on the task domain (e.g., group performance, group decision processes, moral group behavior).

In the domains of group performance and moral behavior, public identifiability, competition, reward, and accountability motivate group members to exert effort on behalf of the group and to successfully execute their role in the group. In other words, these mechanisms promote differentiation of selves in group performance tasks and moral behavior by serving as a form of group control. The tools of group control may backfire in informational tasks. As **Budescu & Maciejovsky** indicated, competition can undermine willingness to share information, which could hurt group performance on informational tasks. In a range of group informational processes, public identifiability, competition, reward, and accountability may undermine differentiation of selves by providing incentives for conforming to the dominant opinion and keeping unshared information private. Thus, differentiation of selves is not the same thing as public identifiability, competition, reward, or accountability. These factors are mechanisms that can encourage or stifle differentiation of selves in different contexts.

The context-dependent nature of the mechanisms that can promote or hinder differentiation of selves is evident when considering the example of accountability. Whether accountability promotes differentiation of selves is in part dependent on to whom one is accountable. In general, accountability promotes careful thought and action because, by definition, people who are held accountable must justify their feelings, beliefs, or actions to others (Lerner & Tetlock 2003). Nonetheless, accountability may produce conformity rather than differentiation of selves if group members are accountable to an audience that prefers a certain conclusion, outcome, or course of action (Tetlock et al. 1989). **Haslam & Ellemers** asserted that accountability produces moral behavior only when the norms and goals of the group support moral behavior. This point raises a broader question about the definition of moral behavior. Originally, perhaps, moral behavior consisted of

behavior that benefited the group and enabled it to survive and flourish (starting, presumably, with cooperation and reciprocity). This utilitarian definition of morality would condone behaviors, such as intergroup violence, that benefit one group at the expense of another. The later introduction of notions of higher, more abstract levels of moral reasoning would allow people to raise moral objections to their group's perceived interests as a whole. In the context of intragroup relations, one interpretation is that accountability increases moral behavior because it reduces selfish behavior and leads people to be more likely to act in accordance with group goals. But yes, if one classifies the group's welfare or tactics as immoral, then increasing group control of individuals, such as by accountability, will push to increase immoral behavior.

We hope this response is useful in clarifying the distinction between the concept of differentiation of selves and the mechanisms that may facilitate or hinder the process. When considering other mechanisms that may affect differentiation of selves, it is useful to consider why these mechanisms have their effect. **Faber, Savulescu, & Van Lange (Faber et al.)** argued that reputational concerns may underlie many of the mechanisms that we suggested affect differentiation of selves. Similarly, **Levine** argued that almost all of the factors that influence differentiation of selves can be tied together because they all evoke evaluation apprehension. We agree that reputational concerns or evaluation apprehension are likely responsible for the effect of public identification, competition, reward, and accountability on differentiation of selves. Indeed, these comments underscore our assumption that the inner mechanisms of self were developed to enable groups to function effectively and efficiently. We reiterate, however, that reputational concerns and evaluation apprehension are useful primarily for promoting effort and good behavior in group performance and moral tasks. Reputational concerns and evaluation apprehension can actually be counterproductive in informational tasks, insofar as they create pressure to conform to majority views and thereby suppress the gathering and exchange of information. But even with informational tasks, reputational concerns can help, especially when people gain status in the group by contributing new insights or information. Thus, Levine's and Faber et al.'s point is mainly correct, with the caveat that sometimes reputational concerns and evaluation apprehension can be counterproductive – and mainly when they decrease differentiation of selves.

Healey raised another aspect of the problem of differentiating selves. His contention was that each person may contain multiple selves, or different versions of it, specifically conscious/explicit and implicit structures. In our view, the notion that each person has different selves violates the definition and purpose of selfhood (see Baumeister 2011), so it is best to think of the conscious and unconscious aspects as different parts of the same self (see also commentary by **Forsyth**). Terminology aside, Healey's point is instructive. Our target article was in fact motivated by the broad question of how the human self came into being. A solitary person would not need much of a self because things such as ownership, moral reputation, social rank, and even name and address would lose all value, and things like self-esteem and interpersonal appeal (including mate value and job qualifications)

would also be irrelevant, if not impossible. The point is that selfhood emerged not out of the needs of the solitary psyche but as something useful to make group systems function better. The different parts of mind and brain thus gradually coalesce to work together to operate an identity in the social system. Healey's comment reminds us that this process is likely incomplete. Making a commitment, such as a marriage or a mortgage, implicates the full self as a unity, even though one may have had inner conflict and misgivings at the time. Inner conflict and disunity can even come back to haunt the person and undercut role performance.

R3. Identification and differentiation of selves

In the target article, we proposed that group formation may occur in two complementary steps. People group together because groups provide benefits to members that ultimately help them survive and reproduce. These benefits can include sharing of resources and information and competitive advantages over other groups. When groups form it is important that individual group members adopt a shared identity and sense of belonging with other group members. As pointed out by **Haslam & Ellemers** and by **Reicher, Spears, Postmes, & Kende (Reicher et al.)**, a major function of social identity is to promote adherence to group norms (which can even include the norm of being nonconformist, a point raised by **Hornsey & Jetten**). Promoting adherence to group norms is useful for coordinating activity and developing shared group goals that can act as a guide for individual behavior. The second step, according to our theory, is differentiation of selves. This is accomplished primarily through role differentiation, such as when group members contribute unique skills, knowledge, or opinions to group tasks. We note that these two steps are not necessarily inevitable or governed by a concrete rule. Instead, the steps are meant to have heuristic value and may apply to many but certainly not all groups.

If differentiation of selves involves people contributing distinct skills and expertise, does this mean that differentiation is incompatible with group identification? The commentaries provided a range of interpretations concerning the relationship between step one and step two of our model. **Haslam & Ellemers** and **Hornsey & Jetten**, for example, interpreted the target article as arguing that group identification and differentiation of selves are mutually exclusive. We are sorry for the misunderstanding: Again, the steps are intended as complementary, not contradictory.

As another revealing instance, **Nijstad & de Dreu** characterized our argument as asserting that “members need to differentiate themselves from the group.” Differentiating the self from the group would indeed make the differentiation step the opposite of the first (group identity) step. But that is not what we meant. Instead, we would say that what makes a group effective is that members differentiate themselves *within* the group – not *from* it.

We aim to clarify the relationship between group identification and differentiation of selves in this section. The root of the various interpretations of our point can perhaps be tied back to our use of the phrase “submersion of the self in the group.” We intended to use this phrase to

indicate that individual selves within groups are not differentiated (e.g., in different roles). A lack of differentiation of selves does not imply anything about group members' social identification with a group. We view social identity and differentiation of selves as orthogonal concepts. Group members can identify strongly with their group and yet show a differentiation of selves, such as when a person adopts a group's goals and yet uses individual agency, thought, and skill to help accomplish those goals. That is what we meant when we wrote that groups flourish when members differentiate themselves within the group rather than from it.

Hodges & Packer indicated that people who lack a social identification with the group may be most likely to benefit from external mechanisms that can promote differentiation of selves, such as accountability and incentives. This excellent point has several implications. The first is that not all group members in large organizations have developed a sense of shared identity with the group, and identification with the group is more likely a continuum than a dichotomy. With group performance tasks, those people who lack strong identification with the group may be more likely to exert effort on its behalf when they are individually identified and can be held accountable for their behavior. (To be sure, the group must control some rewards that the person cares about, or else accountability lacks motivational force.) For people who do identify with the group, differentiation of selves may promote excellent performance because differentiation of selves made possible through role differentiation would enable people who really care about the group to receive credit for their effort. **Blanton's** comment elucidated this point very well. Meanwhile, people who care less about the group would be unable to hide their lack of effort within the crowd.

Differentiation of selves is likely most beneficial when a person is also socially identified with the group, as several commentators pointed out (**Budescu & Maciejovsky; Haslam & Ellemers; Healey; Hornsey & Jetten; Nijstad & De Dreu**). This insight improves the analysis of the two steps as complementary. In performance tasks, for example, rewards, competition, and accountability are unlikely to promote effort if group members care little about maintaining their membership in the group, **Faber et al.** noted. The idea that identification is needed to reap the benefit of differentiation is consistent with our heuristic model of two complementary steps. Group members who identify with their group will likely be motivated to behave in a manner that benefits the group. Differentiation of selves allows groups to achieve maximum benefits through roles, development of unique skills, and willingness to share privileged information. Consistent with these comments, we predicted that the best outcomes occur both when group members achieve a sense of belonging and identity in the group and then go a step beyond that by differentiating themselves within the group.

Nijstad & De Dreu argued that the contribution of differentiation of selves may have been overestimated while the contribution of identification underestimated. In their analysis, they suggested that many problematic group behaviors can be tied back to individuals acting in accordance with their own self-interest rather than in line with the interests of the group. In particular, Nijstad & De Dreu raised the issue of anonymity (one factor we proposed

has an effect of differentiation of selves) allowing people to act according to their own self-interest. In the domain of group performance, anonymity could enable group members to act out of self-interest by slacking off on effortful tasks. In the domain of informational tasks, anonymity again may allow a person to act out of self-interest, which could result in a reduction in conformity. One of the main points of Nijstad & De Dreu's commentary is that differentiation of selves can be harmful to group performance if this differentiation leads people to act out of self-interest. Possibly this again suggests the misunderstanding we noted earlier: They thought we were talking about differentiating the self from the group, whereas we focused on differentiating the self within the group. Still, the broader point involves the value of combining both steps, or the need for identifying with a group before cultivating role differentiation. Group identification is needed to reap the benefits of differentiation because it helps to align self-interest to the interests of the group and to avoid negative outcomes mentioned in their commentary, such as deception and power struggles. This insight also reinforces the order of our model's two steps. If group identification is not in place before people act in accordance with differentiated selves, then problematic outcomes driven by self-interest could well occur.

Several commentaries (**Belzung et al.; Forsyth; Healey; Hodges & Packer**) pointed out that the two steps may be more continuous and fluid than we depicted. Forsyth noted that previous models of group formation, such as Tuckman (1965), have identified four stages of group development. Forsyth's own work shows that groups cycle through different levels of cohesion, productivity, and conflict (Forsyth 2014). Healey raised the issue of whether social identity may need to be reinforced in an ongoing manner. In general, if something about the group (such as being large and loose) leads to decreased social identity, then it may be necessary, as Healey suggested, to reinforce group identity. We recognize that groups are not static and that groups may shift their focus at times, from promoting differentiation of selves to social identity, as goals and members change. These ideas imply opportunities for future empirical work.

Given that we identified the two complementary steps as important to group formation, it is worthwhile to consider factors that may lead groups to move on from Step 1 to Step 2 of the model. **Cabeza de Baca, Garcia, Woodley of Menie, & Figueredo (Cabeza de Baca et al.)** offered an ecological analysis of factors that may lead to differentiation of selves within groups. They used the Strategic Differentiation-Integration Effort hypothesis (SD-IE) to argue that differentiated roles within groups may be driven in part by pressure due to environmental or ecological conditions. In particular, their work has focused on the question of why some groups are highly differentiated and specialized while others remain undifferentiated and unspecialized. SD-IE argues that high population density in combination with low resource availability should promote "niche-splitting," which means specialization or role differentiation. Niche-splitting reduces competition for scarce resources by increasing labor productivity and the ability to use resources efficiently and effectively. SD-IE offers support for the prediction that differentiation of selves is particularly relevant to the functioning of large groups and suggests that this differentiation

is useful for promoting system gain due to the benefits it confers in making use of scarce resources.

R4. Theoretical connections and extensions

The commentaries offered several opportunities to connect our work to that of other theorists and to consider potential extensions. **Blanton** provided a particularly useful connection between the target article and his Deviance Regulation Theory (Blanton & Christie, 2003). Deviance Regulation Theory proposes that groups have two main goals. The first goal is increasing social order, which involves group members adhering to certain conduct codes. The second goal is social complexity, which is the idea that groups benefit from diversity of thought and order. These two group goals approximately mirror the two complementary steps we proposed in the target article. Deviance Regulation Theory centers on how groups employ rewards and punishments to enforce behavior. Instead of focusing on differentiation of selves in terms of performance, knowledge, or opinions, Deviance Regulation Theory defines deviation as differentiation from descriptive and injunctive social norms. According to Deviance Regulation Theory, groups can promote social order by punishing members who deviate from the social norm and can promote social complexity by rewarding group members who excel and differ from the group in a desirable way. As Blanton noted, Deviance Regulation Theory offers a framework for predicting contingencies or mechanisms that might best serve the function of differentiating individual selves. Punishment may promote conformity to group norms, and reward may be especially useful for promoting differentiation within groups.

Possibly related to the regulation of deviance is the encouragement of dissent. **Hodges & Packer** made the important point that identifying with the group can increase trust, thereby making members feel more comfortable and willing to express dissenting views. Actually, the term they used was “solidarity,” which captures not just the member’s individual identification with the group but also the confident sense of being accepted by it. Regardless, the point is that the person who feels strongly included in the group can express dissent without fearing being ejected from the group. Further research may profitably test and build on this insight.

Several commentaries offered thoughtful ideas for expanding our theory to other aspects of group functioning. **Zlatev, Halevy, & Tiedens (Zlatev et al.)** asserted that rank differentiation may be needed in addition to role differentiation. Indeed, they elaborated this by pointing out that social rank or status can be used as a type of reward to incentivize cooperation and presumably other behaviors that benefit the group (such as when high-performing employees receive promotions). This is a great point that we had overlooked (hence the value of exchanges such as *BBS* provides!) Rank differentiation is needed in order to direct group activities and to make use of mechanisms that promote differentiation of selves (Halevy et al. 2011; 2012b; Simpson et al. 2012).

With group performance tasks, rank differentiation is needed to know who is responsible for making decisions, enforcing punishments, or delivering incentives (all of which rely on differentiation of selves). In informational tasks, group leaders or enforcers of some kind are

needed to assign people to play the role of devil’s advocate or to ensure that perspectives can be expressed without outside influence. In terms of tasks in the moral domain, rank differentiation may be needed to help establish group goals and norms, not least by allowing leaders to emerge. Rank differentiation is therefore a special form of role differentiation that could foster further differentiation of selves and help the group capitalize on the advantages of differentiation. Even in the absence of explicit rank differentiation, a form of rank differentiation may nonetheless be possible. As **Hogg** specified, prototypical group members have a greater influence over the group and often lead more effectively. Thus, prototypicality may be a key determinant of intragroup differentiation in the absence of an explicit hierarchy.

In addition to rank differentiation, **Forsyth** argued, subgroups may help coordinate group action. As **Haslam & Ellemers** pointed out, we did not devote space in the target article to discussing subgroups, and so again we appreciate the insightful contributions emerging from this exchange of views. We will attempt to address this issue briefly here, but further theoretical and empirical work would be most welcome.

The main benefit of subgroups is that they help coordinate complex action or large-scale operations (Kozlowski & Bell 2013). In a sense, subgroups may create an additional level of differentiation by providing members of that subgroup a distinct job, problem, or task. We conceptualize subgroups as functioning much in the same way as larger, umbrella groups in terms of the benefits of social identification and role differentiation – but also functioning within the larger group like differentiated individuals, in that they can focus on specialized tasks and improve group outcomes. Extending our theory, we predict that identification with the subgroup would confer basic benefits not only to the subgroup, but also to the overall group (Hornsey & Hogg 2000). On a football team, for example, identifying with the defense will help the defense but also help the whole team. Identifying both with the subgroup and overall group should reduce conflict between subgroups insofar as those groups view themselves serving complementary roles aimed at attaining a superordinate goal, rather than as competing groups. Beyond the benefits identification offers, our theory predicts that a subgroup in which individual selves were differentiated would perform better than a subgroup in which individual selves were not differentiated, such as a subgroup that assigned each member the same role rather than differentiating roles. Meanwhile, large groups may gain benefits by having differentiated, specialized subgroups that perform distinct tasks, contribute a particular kind of information, are accountable, and so forth.

R5. Bridges and opportunities

Several commentaries applied aspects of our theory to other areas or suggested outstanding empirical questions in manners that we had not anticipated but were quite thought-provoking. In this section, we discuss these bridges and opportunities.

One point made by **Kruger et al.** and by **McDermott** is that it is useful to consider just how specialized roles should be to achieve maximal group functioning. Kruger et al., for example, argued that division of labor may require some

redundancy in order to be effective. This is a great comment and suggests that differentiation can be overdone, to the point that it is counterproductive. Thus, it can be useful to have more than one person who knows how to complete a particular aspect of a task. If only one person knows how to perform the task, then the group cannot move forward if that person becomes unavailable. Hence, it is beneficial to have some redundancy of skills when using division of labor. Differentiation of selves does not necessarily mean that each group member is assigned to a completely nonredundant role. In many groups, it is necessary to have more than one person perform the same role. When roles are somewhat overlapping, then additional mechanisms are needed to bring out fully differentiated selves (e.g., accountability, public identifiability, reward). McDermott also mentioned that nonredundancy in roles can be highly problematic in high-functioning groups such as the military if a person in an extremely specialized role is killed during warfare. Future empirical work could profitably explore the optimal level of differentiation within a group. At which degree is a group too differentiated to function optimally?

Brown noted that many findings reported in our paper involved so-called WEIRD samples (Henrich et al. 2010a; the acronym stands for Western, educated, industrialized, rich, and democratic) and could be considered Western-centric. He argued, for example, that depersonalization actually may lead to many positive group outcomes, perhaps especially in less WEIRD samples (such as groups in collectivistic cultures). We are intrigued by this possibility and welcome methodologically strong research showing how groups can function better without differentiation of selves than with differentiation. This research would be useful in illuminating boundary conditions and might contain lessons that could be incorporated into our theory.

Another question that could be used to establish boundary conditions: Under what circumstances might a group not benefit from differentiation of selves? Perhaps whether differentiation of selves benefits groups depends in part on the goals of the group, such as discussed by **Talaifar & Swann**. In particular, they argued that differentiation may not be needed to achieve some group goals, such as in cases of identity fusion, in which people are strongly identified with the group and on that basis are willing to make extreme sacrifices for the group. People who are strongly identified with the group may be willing to make extreme sacrifices, even if there is no role differentiation. This is compatible with **McDermott's** suggestion that the military may provide an exception to the idea that differentiation helps group functioning. McDermott argues that military groups often need people to be somewhat interchangeable (this echoes the redundancy point, above; the potential danger of impairing group function because a specialist is killed is obviously greater in combat units than in most other groups). We see the logic behind that statement and acknowledge that historically, military groups with more soldiers were generally more successful in battles (e.g., **Morris 1965**). Nonetheless, it is useful to note that military units have evolved to be more and more differentiated and specialized. This process is presumably driven by pressure for the group to be as effective as possible. Factors that promote group identification and cohesiveness, such as uniforms, certainly are beneficial, but from our perspective there is a case to be

made for the usefulness of differentiation, even in military groups, **Zlatev et al.'s** point about rank differentiation is obviously highly applicable to military groups; it is doubtful that a fully egalitarian army (i.e., one without ranks or commanders) would function effectively in battle.

Several commenters (**Kruger et al.**; **Levine**; **Mojzisch et al.**) thought that the review would have benefited from organizing the literature review around an existing task typology (e.g., **McGrath 1984**; **Steiner 1972**). This could certainly be done. **Mojzisch et al.**, for example, suggested that the demands of a task may determine whether differentiation is needed. As an example, they noted that in a group of mountain climbers tethered together, the skill of the least-skilled climber determines the group's success. That statement is undoubtedly true, but it also may be true that differentiating selves within the group can improve the outcome relative to not differentiating selves. If the least-skilled climber feels responsible and accountable to the group as an individual, he or she may exert extra effort to climb quickly and accurately, which is consistent with evidence we cited in our review about the least-skilled swimmer in a team relay performing better when in a group but individually identified (**Osborn et al. 2012**).

Levine offered an alternative organization of our literature review around norms. As stated in his commentary, one norm could be "work hard, cooperate with others," which would encompass the performance and moral domains, and the other norm could be "express opinions regardless of what others say," which would cover the informational domain. We organized the literature around three broad categories reflecting different group outcomes. Those categories include: (1) performance task outcomes (effortful production of some end product), (2) informational process outcomes (group decision-making, judgment, etc.), and (3) moral control of group behaviors. With these kinds of papers, it is often a challenge to create the best organization for the literature review. We made the decision to organize the review around task outcomes (rather than task type or norm) because it aligns with our primary interest in how differentiation of selves affects various types of outcomes.

Brennan & Enns mentioned the need to distinguish between statistical effects (e.g., statistical facilitation) and social effects. Their commentary described the wise crowds phenomenon as a statistical effect rather than a social phenomenon. That is right, but groups can benefit by organizing their social interactions to capitalize on the statistical effect. As indicated in the example of the wisdom of crowds effect, social groups can improve their decision making by making use of statistical facilitation. Conversely, social interaction does not invariably improve outcomes, such as when it leads to biased decisions.

Several other commentaries noted questions for future empirical investigation. **McDermott**, for example, asked whether people may self-select into groups that include a certain amount of differentiation. Perhaps people with few unique skills may self-select into a relatively undifferentiated group or into a group with redundancy in roles. **Kruger et al.** suggested that the mechanisms that affect differentiation of selves may depend on individual differences. Extroverts, for example, may respond more to reward contingencies designed to promote differentiation of selves.

Sezer & Norton discussed the target article in terms of its implications for vicarious processes. Vicarious processes,

such as vicarious contagion, occur when a group member acquires or catches attitudes and preferences from another group member. These processes create group members that are increasingly similar over time. As Sezer & Norton highlighted, these processes can bring about negative consequences, especially when the attitudes or emotions being transferred among group members are undesirable. Differentiation of selves within groups may help decrease some of the potentially harmful consequences of vicarious contagion. Although their commentary considered vicarious contagion of negative behavior only, we assume that it also applies to behaviors, attitudes, and preferences that would benefit the group.

Several commentaries discussed applications of the target article to other lines of research. **Douven**, for example, commented on how agent-based simulation (a type of computational modeling) could be used to test certain aspects of our theory. **Barnier, Harris, & Sutton (Barnier et al.)**, like us, are interested in the question of when groups are more or less than the sum of their parts. Based on the collaborative recall literature from cognitive psychology and the distributed cognition literature from philosophy, their work suggests that knowledge must be integrated and differentiated to achieve optimal group outcomes. **Jacobson** commented on our assertion that background diversity is not always helpful for forming shared group identity by noting that it would be unethical to select for background homogeneity in hiring decisions. In contexts that value diversity, they are right, though presumably Jacobson was not asserting an ethical imperative to include men on the women's track team. The research we reviewed is descriptive rather than prescriptive. **Ben-Ze'ev & Krebs** applied our theory to when partners decide to dissolve romantic relationships, noting that partners who take on a unique role in the relationship may be more likely to stay than partners who do not. **Spiegel** applied our theory to resuscitation teams responding to emergency, finding support for our theory in a team situation involving stress and time pressure.

R6. Conclusion

Our theory aimed to address one of the perennial questions in social psychology: What factors lead to effective group functioning? We concluded that one major moderator of group outcomes is the differentiation of individual selves. Indeed, we suggest that selfhood may have evolved to facilitate adopting differing roles in groups. We are optimistic that our theory will continue to be refined in a way that contributes to integrating the literature on selfhood and groups and generates novel empirical work. The number of thought-provoking responses to our commentary has already benefitted those endeavors, and we are grateful for the insights of our esteemed colleagues.

References

[The letters "a" and "r" before author's initials stand for target article and response references, respectively]

- Abrams, D. & Hogg, M. A. (1988) Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology* 18:317–34. [MAH]
- Abrams, D. & Hogg, M. A. (1990) Social identification, self-categorization and social influence. *European Review of Social Psychology* 1:195–228. [MAH]
- Abrams, D. & Hogg, M. A. (2010) Social identity and self-categorization. In: *The SAGE handbook of prejudice, stereotyping and discrimination*, ed. J. F. Dovidio, M. Hewstone, P. Glick & V. M. Esses, pp. 179–93. SAGE. [MAH]
- Abrams, D., Randsley de Moura, G., Marques, J. M. & Hutchison, P. (2008) Innovation credit: When can leaders oppose their group's norms? *Journal of Personality and Social Psychology* 95:662–78. doi: 10.1037/0022-3514.95.3.662. [MAH]
- Abrams, D., Wetherell, M., Cochrane, S., Hogg, M. A. & Turner, J. C. (1990) Knowing what to think by knowing who you are: Self categorization and the nature of norm formation, conformity and group polarization. *British Journal of Social Psychology* 29:97–119. [aRFB]
- Ackerman, J. M., Goldstein, N. J., Shapiro, J. R. & Bargh, J. A. (2009) You wear me out: The vicarious depletion of self-control. *Psychological Science* 20(3):326–32. [OS]
- Alexander, R. D. (1974) The evolution of social behavior. *Annual Review of Ecology and Systematics* 5:325–83. [TCdB]
- Allport, F. H. (1924) *Social psychology*. Houghton Mifflin. [aRFB, DRF]
- Allport, F. H. (1962) A structural-nomic conception of behavior: Individual and collective. I. Structural theory and the master problem of social psychology. *Journal of Abnormal and Social Psychology* 64:3–30. doi: 10.1037/h0043563. [NSF, DRF]
- American Heart Association (2011) *Advanced Cardiovascular Life Support (ACLS) DVD Megacode and team resuscitation*. AHA. [RS]
- Ancona, D. G. & Caldwell, D. F. (1992) Demography and design: Predictors of new product team performance. *Organization Science* 3:321–41. [MPH]
- Anderson, C. & Brown, C. E. (2010) The functions and dysfunctions of hierarchy. *Research in Organizational Behavior* 30:55–89. doi: 10.1016/j.riob.2010.08.002. [JJZ]
- Anderson, C., Hildreth, J. A. D. & Howland, L. (2015) Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin* 141(3):574–601. doi: 10.1037/a0038781. [JJZ]
- Anicich, E. M., Swaab, R. I. & Galinsky, A. D. (2015) Hierarchical cultural values predict success and mortality in high-stakes teams. *Proceedings of the National Academy of Sciences* 112(5):1338–43. doi: 10.1073/pnas.1408800112. [JJZ]
- Ariely, D., Bracha, A. & Meier, S. (2009) Doing good or doing well? Image motivation and monetary incentives in behaving prosocially. *The American Economic Review* 99:544–55. doi: 10.1257/aer.99.1.544. [NSF]
- Armstrong, E. L., Fernandes, H. B. F. & Woodley, M. A. (2014) SD-IE and other differentiation effects in Italy and Spain. *Personality and Individual Differences* 68:189–94. [TCdB]
- Arrow, K. J. (1951/1963) *Social choice and individual values*. Wiley. [CB]
- Arrow, K. J. (1962) The economic implications of learning by doing. *The Review of Economic Studies* 29(3):155–73. [EK]
- Asch, S. (1952) *Social psychology*. Prentice-Hall. [aRFB]
- Asch, S. E. (1956) Studies of independence and conformity: I. A minority of one against a unanimous majority. *Psychological Monographs* 70(9) (Whole No. 416). [BHH]
- Babbage, C. (1832) On the economy of machinery and manufactures. *Philosophical Magazine Series* 3:208–13. doi: 10.1080/14786443208647876. [aRFB]
- Bahrami, B., Olsen, K., Latham, P. E., Roepstorff, A., Rees, G. & Frith, C. D. (2010) Optimally interacting minds. *Science* 329:1081–85. [AAB]
- Bales, R. F. (1951) *Interaction process analysis: A method for the study of small groups*. Addison-Wesley. [MPH]
- Baray, G., Postmes, T. & Jetten, J. (2009) When "I" equals "We": Exploring the relation between social and personal identity of extreme right-wing political party members. *British Journal of Social Psychology* 48:625–47. [MJH]
- Barkow, J. H. (1975) Prestige and culture: A biosocial interpretation. *Current Anthropology* 16(4):553–72. doi: 10.1086/201619. [JJZ]
- Barnard, C. I. (1938) *The functions of the executive*. Harvard University Press. [MPH]
- Barnier, A. J. (2010) Memories, memory studies, and my iPhone. *Memory Studies* 3(4):293–97. [AJB]
- Barnier, A. J., Priddis, A. C., Broekhuijsen, J., Harris, C. B., Keil, P. K., Cox, R., Congleton, A. R. & Addis, D. R. (2014) Reaping what they sow: The benefits of remembering together in intimate couples. *Journal of Applied Research in Memory and Cognition* 3(4), 261–65. [AJB]
- Barnier, A. J., Sutton, J., Harris, C. B. & Wilson, R. A. (2008) A conceptual and empirical framework for the social distribution of cognition: The case of memory [Special Issue]. *Cognitive Systems Research: Perspectives on Social Cognition* 9(1):33–51. [AJB]
- Basu, S., Dickhaut, J., Hecht, G., Towry, K. & Waymire, G. (2009) Recordkeeping alters economic history by promoting reciprocity. *PNAS Proceedings of the National Academy of Sciences of the United States of America* 106:1009–14. doi: 10.1073/pnas.0811967106. [aRFB]
- Batson, C. D., Kobryniewicz, D., Dinnerstein, J. L., Kampf, H. C. & Wilson, A. D. (1997) In a very different voice: Unmasking moral hypocrisy. *Journal of*

- Personality and Social Psychology* 72:1335–48. doi: 10.1037/0022-3514.72.6.1335. [NSF]
- Baumeister, R. F. (1982) A self-presentational view of social phenomena. *Psychological Bulletin* 91:3–26. doi: 10.1037/0033-2909.91.1.3. [NSF]
- Baumeister, R. F. (2005) *The cultural animal: Human nature, meaning, and social life*. Oxford University Press. [rSEA]
- Baumeister, R. F. (2011) The unity of self at the interface of the animal body and the cultural system. *Psychological Studies* 56:5–11. doi: 10.1007/s12646-011-0062-5. [rSEA]
- Beaman, A. L., Klentz, B., Diener, E. & Svanum, S. (1979) Self-awareness and transgressions in children: Two field studies. *Journal of Personality and Social Psychology* 37:1835–46. doi: 10.1037/0022-3514.37.10.1835. [aRFB]
- Beath, A., Christia, F. & Enikolopov, R. (2012) Direct democracy and resource allocation: Experimental evidence from Afghanistan (June 1, 2012) MIT Political Science Department Research Paper No. 2011–16. doi: 10.2139/ssrn.1935055. [aRFB]
- Bechtoldt, M. N., Choi, H.-S. & Nijstad, B. A. (2012) Individuals in mind, mates by heart: Individualistic self-construal and collective value orientation as predictors of group creativity. *Journal of Experimental Social Psychology* 48:838–44. [BAN]
- Bechtoldt, M. N., De Dreu, C. K. W., Nijstad, B. A. & Choi, H. (2010) Motivated information processing, social tuning, and group creativity. *Journal of Personality and Social Psychology* 99:622–37. doi: 10.1037/a0019386. [aRFB]
- Belsky, J., Steinberg, L. & Draper, P. (1991) Childhood experience, interpersonal development, and reproductive strategy: An evolutionary theory of socialization. *Child Development* 62:647–70. [TCdB]
- Benkart, C. L. (2000) Learning and forgetting: The dynamics of commercial aircraft production. *American Economic Review* 90(4):1034–54. [EK]
- Ben-Ze'ev, A. (2011) The nature and morality of romantic compromises. In: *Morality and the emotions*, ed. C. Bagnoli, pp. 95–114. Oxford University Press. [AB-Z]
- Ben-Ze'ev, A. & Goussinsky, R. (2008) *In the name of love: Romantic ideology and its victims*. Oxford University Press. [AB-Z]
- Blanton, H., & Christie, C. (2003) Deviance regulation: A theory of action and identity. *Review of General Psychology* 7:115–49. doi: 10.1037/1089-2680.7.2.115. [HB, rSEA]
- Blanton, H. & Hall, D. (2009) Punishing difference and rewarding diversity: A deviance regulation analysis of social structure. In: *The psychology of self-regulation (Sydney symposium in social psychology)*, ed. J. Forgas, R. Baumeister & D. Tice, pp. 273–88. Psychology Press. [HB]
- Bloom, M. (1999) The performance effects of pay dispersions on individuals and organizations. *Academy of Management Journal* 42:25–40. [SAH]
- Böckler, A., Knoblich, G. & Sebanz, N. (2012) Effects of co-actor's focus of attention on task performance. *Journal of Experimental Psychology: Human Perception and Performance* 38(6):1404–15. [AAB]
- Boehm, C. (1999) *Hierarchy in the forest: The evolution of egalitarian behavior*. Harvard University Press. [RMCD]
- Bond, C. F. (1982) Social facilitation: A self-presentational view. *Journal of Personality and Social Psychology* 42:1042–50. doi: 10.1037/0022-3514.42.6.1042. [aRFB]
- Bond, C. F. & Titus, L. J. (1983) Social facilitation: A meta-analysis of 241 studies. *Psychological Bulletin* 94:265–92. doi: 10.1037/0033-2909.94.2.265. [aRFB]
- Bond, R. & Smith, P. B. (1996) Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. *Psychological Bulletin* 119:111–37. doi: 10.1037/0033-2909.119.1.111. [aRFB, BHH]
- Bowles, S. (2009) Did warfare among ancestral hunter-gatherers affect the evolution of human social behaviors? *Science* 324(5932):1293–98. [RMCD]
- Boyd, R. & Richerson, P. J. (1985) *Culture and the evolutionary process*. University of Chicago Press. [rSEA]
- Boyd, R., Richerson, P. J. & Henrich, J. (2011) The cultural niche: Why social learning is essential for human adaptation. *Proceedings of the National Academy of Sciences* 108:10918–25. [BHH]
- Bratman, M. (1999) *Faces of intention*. Cambridge University Press. [AB-Z]
- Bray, R. M. & Sugarman, R. (1980) Social facilitation among interacting groups: Evidence for the evaluation-apprehension hypothesis. *Personality and Social Psychology Bulletin* 6:137–42. doi: 10.1177/014616728061021. [aRFB]
- Brennan, A. A., & Enns, J. T. (2015a) What's in a friendship? Partner visibility supports cognitive collaboration between friends. *PLoS one* 10(11): e0143469. [AAB]
- Brennan, A. A. & Enns, J. T. (2015b) When two heads are better than one: Interactive versus independent benefits of collaborative cognition. *Psychonomic Bulletin & Review* 22:1076–82. [AAB]
- Brennan, S. E., Chen, X., Dickinson, C. A., Neider, M. B. & Zelinsky, G. J. (2008) Coordinating cognition: The costs and benefits of shared gaze during collaborative search. *Cognition* 106:1465–77. [AAB]
- Brewer, M. B. (1991) The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin* 17:475–82. doi: 10.1177/0146167291175001. [aRFB, HB]
- Brewer, M. B. (2012) Optimal distinctiveness theory: Its history and development. In: *Handbook of theories of social psychology*, vol. 2, ed. P. A. M. Van Lange, A. W. Kruglanski & E. T. Higgins, pp. 81–98. Sage. [aRFB, DRF]
- Brewer, M. B. & Chen, Y.-R. (2007) Where (who) are collectives in collectivism? Toward conceptual clarification of individualism and collectivism. *Psychological Review* 114:133–51. [DRF]
- Brewer, M. B. & Kramer, R. M. (1986) Choice behavior in social dilemmas: Effects of social identity, group size, and decision framing. *Journal of Personality and Social Psychology* 50:543–49. doi: 10.1037/0022-3514.50.3.543. [aRFB]
- Brickner, M. A., Harkins, S. G. & Ostrom, T. M. (1986) Effects of personal involvement: Thought-provoking implications for social loafing. *Journal of Personality and Social Psychology* 51:763–69. [BAN]
- Brodbeck, F. C., Kerschreiter, R., Mojzisch, A., Frey, D. & Schulz-Hardt, S. (2002) The dissemination of critical, unshared information in decision-making groups: The effects of pre-discussion dissent. *European Journal of Social Psychology* 32:35–56. doi: 10.1002/ejsp.74. [aRFB]
- Bromley, D. G. (2001) A tale of two theories: Brainwashing and conversion as competing political narratives. In: *Misunderstanding cults*, ed. B. Zablocki & T. Robbins, pp. 318–48. University of Toronto Press. [DRF]
- Brown, R. (1988) *Group processes: Dynamics within and between groups*. Basil Blackwell. [SDR]
- Brown, R. (2000) *Group processes: dynamics within and between groups, second edition*. Blackwell. [RB]
- Brownstein, M. & Saul, J. (2015) Introduction. In: *Implicit bias and philosophy: Volume I*, ed. M. Brownstein & J. Saul, pp. 1–19. Oxford University Press. [AJJ]
- Budescu, D. V. & Maciejovsky, B. (2005) The effect of monetary feedback and information spillover on cognitive errors: Evidence from competitive markets. *Management Science* 51:1829–43. [DB]
- Bunderson, J. S. & Boumgarden, P. (2010) Structure and learning in self-managed teams: Why “bureaucratic” teams can be better learners. *Organization Science* 21(3):609–24. [DRF]
- Burgess, D., Ryn, M. v., Dovidio, J. & Saha, S. (2007) Reducing racial bias among health care providers: Lessons from social-cognitive psychology. *Journal of General Internal Medicine* 22:682–87. [AJJ]
- Cabeza de Baca, T. & Figueredo, A. J. (2014) The cognitive ecology of Mexico: Climatic and socio-cultural effects on life history strategy and general cognitive ability. *Intelligence* 47:63–71. doi: 10.1016/j.intell.2014.08.007. [TCdB]
- Cabeza de Baca, T., Figueredo, A. J. & Ellis, B. J. (2012) An evolutionary analysis of variation in parental effort: Determinants and assessment. *Parenting: Science and Practice* 12:94–104. [TCdB]
- Cable, D. M., Gino, F. & Staats, B. R. (2013) Breaking them in or eliciting their best? Reframing socialization around newcomers' authentic self-expression. *Administrative Science Quarterly* 58:1–36. doi: 10.1177/0001839213477098. [aRFB]
- Cabrera, Á. & Cabrera, E. F. (2002) Knowledge-sharing dilemmas. *Organization Studies* 23:687–710. doi: 10.1177/0170840602235001. [aRFB]
- Camacho, L. M. & Paulus, P. B. (1995) The role of social anxiousness in group brainstorming. *Journal of Personality and Social Psychology* 68:1071–80. doi: 10.1037/0022-3514.68.6.1071. [aRFB]
- Cantor, N. & Mischel, W. (1979) Prototypes in person perception. In: *Advances in experimental social psychology*, vol. 12, ed. L. Berkowitz, pp. 3–52. Academic Press. [MAH]
- Cantril, H. (1940) *The invasion from Mars*. Princeton University Press. [DRF]
- Chatman, J. A., Boisnier, A. D., Spataro, S. E., Anderson, C. & Berdahl, J. L. (2008) Being distinctive versus being conspicuous: The effects of numeric status and sex-stereotyped tasks on individual performance in groups. *Organizational Behavior and Human Decision Processes* 107:141–60. doi: 10.1016/j.obhdp.2008.02.006. [aRFB]
- Cohen, J. L. & Davis, J. H. (1973) Effects of audience status, evaluation, and time of action on performance with hidden-word problems. *Journal of Personality and Social Psychology* 27:74–85. doi: 10.1037/h0034447. [aRFB]
- Corriveau, K. H. & Harris, P. L. (2010) Preschoolers (sometimes) defer to the majority in making simple perceptual judgments. *Developmental Psychology* 46:437–45. [BHH]
- D'Innocenzo, L., Mathieu, J. E. & Kukenberger, M. R. (2014) A meta-analysis of different forms of shared leadership-team performance relations. *Journal of Management*. doi: 10.1177/0149206314525205. [ID-N]
- Darley, J. M. & Latané, B. (1968) Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology* 8:377–83. doi: 10.1037/h0025589. [aRFB]
- Davis, N. Z. (1973) The rites of violence: Religious riot in sixteenth century France. *Past and Present* 59:51–91. [SDR]
- Dawes, R. M., Van de Kragt, A. J. C. & Orbell, J. (1988) Not me or thee but we: The importance of group identity in eliciting cooperation in dilemma situations. *Acta Psychologica* 68:83–97. doi: 10.1016/0001-6918(88)90047-9. [aRFB]
- De Cremer, D. & Van Dijk, E. (2002) Reactions to group success and failure as a function of identification level: A test of the goal-transformation hypothesis in social dilemmas. *Journal of Experimental Social Psychology* 38:435–42. [aRFB]
- De Cremer, D. & Van Dijk, E. (2009) Paying for sanctions in social dilemmas: The effects of endowment asymmetry and accountability. *Organizational*

- Behavior and Human Decision Processes* 109:45–55. doi: 10.1016/j.obhdp.2009.01.004. [aRFB]
- De Cremer, D. & van Vugt, M. (1999) Social identification effects in social dilemmas: A transformation of motives. *European Journal of Social Psychology* 29:871–93. doi: 10.1002/(SICI)1099-0992(199911)29:7. [aRFB]
- De Cremer, D., Hoogervorst, N. & Desmet, P. (2012) Procedural justice and sanctions in social dilemmas: The moderating effects of group feedback and identification. *Journal of Applied Social Psychology* 42:1675–93. doi: 10.1111/j.1559-1816.2012.00914.x. [aRFB]
- De Cremer, D., Snyder, M. & Dewitte, S. (2001) The less I trust, the less I contribute (or not)? The effects of trust, accountability and self-monitoring in social dilemmas. *European Journal of Social Psychology* 31:93–107. doi: 10.1002/ejsp.34. [aRFB]
- De Cremer, D., Van Knippenberg, D., Van Dijk, E. & Van Leeuwen, E. (2008) Cooperating if one's goals are collective-based: Social identification effects in social dilemmas as a function of goal transformation. *Journal of Applied Social Psychology* 38:1562–79. doi: 10.1111/j.1559-1816.2008.00359.x. [aRFB]
- De Dreu, C. K. W. (2007) Cooperative outcome interdependence, task reflexivity and team effectiveness: A motivated information processing approach. *Journal of Applied Psychology* 92:628–38. [BAN]
- De Dreu, C. K. W., Nijstad, B. A. & van Knippenberg, D. (2008) Motivated information processing in group judgment and decision making. *Personality and Social Psychology Review* 12(1):22–49. doi: 10.1177/1088568307304092. [aRFB, BAN, ID-N, NSF]
- De Dreu, C. K. W. & van Knippenberg, D. (2005) The possessive self as a barrier to conflict resolution: Effects of mere ownership, process accountability, and self-concept clarity on competitive cognitions and behavior. *Journal of Personality and Social Psychology* 89:345–57. doi: 10.1037/0022-3514.89.3.345. [aRFB]
- De Dreu, C. K. W. & Weingart, L. R. (2003) Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology* 88(4):741–49. [ID-N]
- De Dreu, C. K. W. & West, M. A. (2001) Minority dissent and team innovation: The importance of participation in decision making. *Journal of Applied Psychology* 86:1191–1201. [BAN]
- De Kwaadsteniet, E. W. & van Dijk, E. (2010) Social status as a cue for tacit coordination. *Journal of Experimental Social Psychology* 46(3):515–24. doi: 10.1016/j.jesp.2010.01.005. [JJZ]
- de Kwaadsteniet, E. W., van Dijk, E., Wit, A., De Cremer, D. & de Rooij, M. (2007) Justifying decisions in social dilemmas: Justification pressures and tacit coordination under environmental uncertainty. *Personality and Social Psychology Bulletin* 33:1648–60. doi: 10.1177/0146167207307490. [aRFB]
- DeChurch, L. A. & Mesmer-Magnus, J. R. (2010) The cognitive underpinnings of effective teamwork: A meta-analysis. *Journal of Applied Psychology* 95:32. doi: 10.1037/a0017328. [aRFB]
- Deutsch, M. & Gerard, H. B. (1955) A study of normative and informational social influences upon individual judgment. *Journal of Abnormal and Social Psychology* 51:629–36. doi: 10.1037/h0046408. [aRFB]
- Diener, E. (1980) Deindividuation: The absence of self-awareness and self-regulation in group members. In: *The psychology of group influence*, ed. P. Paulus, pp. 209–42. Erlbaum. [SDR]
- Diener, E., Fraser, S. C., Beaman, A. L. & Kelem, R. T. (1976) Effects of deindividuation variables on stealing among Halloween trick-or-treaters. *Journal of Personality and Social Psychology* 33:178–83. doi: 10.1037/0022-3514.33.2.178. [aRFB]
- Douven, I. (2010) Simulating peer disagreements. *Studies in History and Philosophy of Science* 41:148–57. [ID]
- Douven, I. & Riegler, A. (2010) Extending the Hegselmann-Krause model I. *Logic Journal of the IGPL (Interest Group in Pure and Applied Logic)* 18:323–35. [ID]
- Douven, I. & Wenmackers, S. (in press) Inference to the best explanation versus Bayes' rule in a social setting. *British Journal for the Philosophy of Science*. doi: 10.1093/bjps/axv025. [ID]
- Dovidio, J. F. (2006) *The social psychology of prosocial behavior*. Erlbaum. [AJJ]
- Dovidio, J. F. (2010) *The SAGE handbook of prejudice, stereotyping and discrimination*. SAGE. [AJJ]
- Duffy, M. K., Scott, K. L., Shaw, J. D., Tepper, B. J. & Aquino, K. (2012) A social context model of envy and social undermining. *Academy of Management Journal* 55:643–66. [SAH]
- Earley, P. C. (1989) Social loafing and collectivism: A comparison of the United States and the People's Republic of China. *Administrative Science Quarterly* 34:565–81. [RB]
- Earley, P. C. (1993) East meets West meets Mideast: Further explorations of collectivistic and individualistic work groups. *Academy of Management Journal* 36:319–48. [RB]
- Efferson, C., Lalive, R., Richerson, P. J., McElreath, R. & Lubell, M. (2008) Conformists and mavericks: The empirics of frequency-dependent cultural transmission. *Evolution of Human Behavior* 29:56–64. [BHJH]
- Egan, P. M., Hirt, E. R. & Karpen, S. C. (2012) Taking a fresh perspective: Vicarious restoration as a means of recovering self-control. *Journal of Experimental Social Psychology* 48(2):457–65. [OS]
- Eggs, R. A., Haslam, S. A. & Reynolds, K. J. (2002) Social identity and negotiation: Subgroup representation and superordinate consensus. *Personality and Social Psychology Bulletin* 28:887–99. [SAH]
- Ellemers, N. (2012) The group self. *Science* 336:848–52. [SAH]
- Ellemers, N., De Gilder, D. & Haslam, S. A. (2004) Motivating individuals and groups at work: A social identity perspective on leadership and group performance. *Academy of Management Review* 29:459–78. [SAH]
- Ellemers, N., Pagliaro, S. & Barreto, M. (2013) Morality and behavioural regulation in groups: A social identity approach. *European Review of Social Psychology* 24:160–93. [SAH]
- Ellemers, N., Spears, R. & Doosje, B. (1997) Sticking together or falling apart: Ingroup identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology* 72:617–26. [SAH]
- Ellemers, N., Wilke, H. & Van Knippenberg, A. (1993) Effects of the legitimacy of low group or individual status on individual and collective status-enhancement strategies. *Journal of Personality and Social Psychology* 64(5):766–78. doi: 10.1037/0022-3514.64.5.766. [JJZ]
- Ellis, B. J., Figueredo, A. J., Brumbach, B. H. & Schlomer, G. L. (2009) Mechanisms of environmental risk: The impact of harsh versus unpredictable environments on the evolution and development of life history strategies. *Human Nature* 20:204–68. [TCdB]
- Emerson, R. M. (1962) Power-dependence relations. *American Sociological Review* 27(1):31–41. doi: 10.2307/2089716. [JJZ]
- Epstein, S. (1994) Integration of the cognitive and the psychodynamic unconscious. *American Psychologist* 49:709–24. [MPH]
- Esser, J. K. (1998) Alive and well after 25 years: A review of groupthink research. *Organizational Behavior and Human Decision Processes* 73:116–41. doi: 10.1006/obhd.1998.2758. [aRFB]
- Faber, N. S., Häusser, J. A. & Kerr, N. L. (2015) Sleep deprivation impairs and caffeine enhances my performance, but not always our performance: How acting in a group can change the effects of impairments and enhancements. *Personality and Social Psychology Review*. Advance online publication. doi: 10.1177/1088568315609487. [NSF]
- Faulmiller, N., Mojzisch, A., Kerschreiter, R. & Schulz-Hardt, S. (2012) Do you want to convince me or to be understood? Preference-consistent information sharing and its motivational determinants. *Personality and Social Psychology Bulletin* 38:1684–96. doi: 10.1177/0146167212458707. [NSF]
- Fehr, E. & Gächter, S. (2002) Altruistic punishment in humans. *Nature* 415:137–40. doi: 10.1038/415137a. [aRFB]
- Feinberg, J. M. & Aiello, J. R. (2006) Social facilitation: A test of competing theories. *Journal of Applied Social Psychology* 36:1087–109. doi: 10.1111/j.0021-9029.2006.00032.x. [aRFB]
- Fernandes, H. B. F. & Woodley, M. A. (2013) Strategic differentiation and integration among the 50 states of the USA. *Personality and Individual Differences* 55:1000–1002. [TCdB]
- Festinger, L. (1950) Informal social communication. *Psychological Review* 57(5):271–82. [HB]
- Festinger, L. (1954) A theory of social comparison processes. *Human Relations* 7(2):117–40. [HB]
- Field, J. M., Hazinski, M. F., Sayre, M. R., Chameides, L., Schexnayder, S. M., Hemphill, R., Samson, R. A., Kattwinkel, J., Berg, R. A., Bhanji, F., Cave, D. M., Jauch, E. C., Kudenchuk, P. J., Neumar, R. W., Peberdy, M. A., Perlman, J. M., Sinz, E., Travers, A. H., Berg, M. D., Billi, J. E., Eigel, B., Hickey, R. W., Kleinman, M. E., Link, M. S., Morrison, L. J., O'Connor, R. E., Shuster, M., Callaway, C. W., Cucchiara, B., Ferguson, J. D., Rea, T., D., & Vanden Hoek, T. L. (2010) 2010 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care science. Part 1: Executive summary. *Circulation* 122:S640–56 [RS]
- Figueredo, A. J. & Jacobs, W. J. (2010) Aggression, risk-taking, and alternative life history strategies: The behavioral ecology of social deviance. In: *Bio-psychosocial perspectives on interpersonal violence*, ed. M. Franas-Armenta & V. Corral-Verdugo, pp. 3–28. Nova Science Publishers. [TCdB]
- Figueredo, A. J., Patch, E. A. & Gómez Ceballos, E. (2015) A life history approach to the dynamics of social selection. In: *Evolutionary perspectives on social psychology*, ed. V. Zeigler-Hill, L. Welling & T. K. Shackelford, pp. 364–72. Springer International Publishing. [TCdB]
- Figueredo, A. J., Vásquez, G., Brumbach, B. H., Schneider, S. M. R., Sefcek, J. A., Tal, I. R., Hill, D., Wenner, C. J. & Jacobs, W. J. (2006) Consilience and life history theory: From genes to brain to reproductive strategy. *Developmental Review* 26:243–75. [TCdB]
- Figueredo, A. J., Woodley, M. A., Brown, S. D. & Ross, K. C. (2013) Multiple successful test of the strategic differentiation-integration effort (SD-IE) hypothesis. *Journal of Social, Evolutionary, and Cultural Psychology* 7:361–83. [TCdB]

- Finkel, E. J., Campbell, W. K., Brunell, A. B., Dalton, A. N., Scarbeck, S. J. & Chartrand, T. L. (2006) High-maintenance interaction: Inefficient social coordination impairs self-regulation. *Journal of Personality and Social Psychology* 91(3):456–75. [OS]
- Fiske, S. T. (2010) Interpersonal stratification: Status, power, and subordination. In: *Handbook of social psychology*, ed. S. T. Fiske, D. T. Gilbert & G. Lindzey, pp. 941–82. Wiley. doi: 10.1002/9780470561119.socpsy002026. [JJZ]
- Flynn, F. J., Reagans, R. E., Amanatullah, E. T. & Ames, D. R. (2006) Helping one's way to the top: Self-monitors achieve status by helping others and knowing who helps whom. *Journal of Personality and Social Psychology* 91(6):1123–37. doi: 10.1037/0022-3514.91.6.1123. [JJZ]
- Forsyth, D. R. (2014) *Group dynamics*. Wadsworth/Cengage. [DRF, rSEA]
- Frankfurt, H. G. (2004) *The reasons for love*. Princeton University Press. [AB-Z]
- Freud, S. (1922) *Group psychology and the analysis of the ego* (trans. J. Strachey). Hogarth Press and the Institute of Psycho-analysis. [DRF]
- Friedman, L. M. (2002) *Law in America: A short history*. Random House. [aRFB]
- Friesen, J. P., Kay, A. C., Eibach, R. P. & Galinsky, A. D. (2014) Seeking structure in social organization: Compensatory control and the psychological advantages of hierarchy. *Journal of Personality and Social Psychology* 106(4):590–609. doi: 10.1037/a0035620. [JJZ]
- Fukuyama, F. (2011) *The origins of political order: From prehuman times to the French Revolution*. Farrar, Straus, and Giroux. [aRFB]
- Gaertner, S. L. & Dovidio, J. F. (2000) *Reducing intergroup bias: The common ingroup identity model*. Psychology Press. [AJJ]
- Gallotti, M. & Frith, C. D. (2013) Social cognition in the we-mode. *Trends in Cognitive Science* 17:160–65. [PES]
- Galton, F. (1907) Vox populi. *Nature* 75:450–51. [AAB]
- Galvin, B. M., Lange, D. & Ashforth, B. E. (2015) Narcissistic organizational identification: Seeing oneself as central to the organization's identity. *Academy of Management Review* 40:163–81. doi: 10.5465/amr.2013.0103. [MPH]
- Gandevia, S. C. (2001) Spinal and supraspinal factors in human muscle fatigue. *Physiological Reviews* 81(4):1725–89. [EK]
- Geen, R. C. & Gange, J. J. (1977) Drive theory of social facilitation: Twelve years of theory and research. *Psychological Bulletin* 84:1267–88. doi: 10.1037/0033-2909.84.6.1267. [aRFB]
- Geertz, C. (1974) "From the native's point of view": On the nature of anthropological understanding. *Bulletin of the American Academy of Arts and Sciences* 28(1):26–45. [CB]
- George, J. M. (1990) Personality, affect, and behavior in groups. *Journal of Applied Psychology* 75:107–16. [ID-N]
- Gerber, A. S., Huber, C. A., Doherty, D. & Dowling, C. M. (2013) Is there a secret ballot? Ballot secrecy perceptions and their implications for voting behaviour. *British Journal of Political Science* 43:77–102. doi: 10.1017/S000712341200021X. [aRFB]
- Gersick, C. J. G. & Hackman, J. R. (1990) Habitual routines in task-performing groups. *Organizational Behavior and Human Decision Processes* 47:65–97. [MPH]
- Gigerenzer, G. (1998) Surrogates for theories. *Theory and Psychology* 8(2):195–204. [PES]
- Gilbert, D. (2007) *Stumbling on happiness*. Vintage. [AB-Z]
- Gilbert, M. (1989) *On social facts*. Princeton University Press. [AB-Z]
- Giner, S. (1976) *Mass society*. Martin Robertson. [SDR]
- Gino, F. & Galinsky, A. D. (2012) Vicarious dishonesty: When psychological closeness creates distance from one's moral compass. *Organizational Behavior and Human Decision Processes* 119(1):15–26. [OS]
- Gockel, C., Kerr, N. L., Seok, D.-H. & Harris, D. W. (2008) Indispensability and group identification as sources of task motivation. *Journal of Experimental Social Psychology* 44:1316–21. [AM]
- Goldman, L., & Hogg, M. A. (2016). Going to extremes for one's group: The role of prototypicality and group acceptance. *Journal of Applied Social Psychology* 46:544–53. doi: 10.1111/jasp.12382. [MAH]
- Goldstein, N. J. & Cialdini, R. B. (2007) The spyglass self: A model of vicarious self-perception. *Journal of Personality and Social Psychology* 92(3):402–17. [OS]
- Goldstein, N. J., Cialdini, R. B. & Criskevicius, V. (2008) A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of Consumer Research* 35:472–82. doi: 10.1086/586910. [aRFB]
- Goldstein, N. J. & Hays, N. A. (2011) Illusory power transference: The vicarious experience of power. *Administrative Science Quarterly* 56(4):593–21. [OS]
- Gómez, Á., Brooks, M. L., Buhrmester, M. D., Vázquez, A., Jeon, J. & Swann, W. B., Jr. (2011) On the nature of identity fusion: Insights into the construct and a new measure. *Journal of Personality and Social Psychology* 100:918–33. [ST]
- Goncalo, J. A. & Staw, B. M. (2006) Individualism-collectivism and group creativity. *Organizational Behavior and Human Decision Processes* 100:96–109. [BAN]
- González, R. & Brown, R. J. (2003) Generalization of positive attitude as a function of subgroup and superordinate group identifications in intergroup contact. *European Journal of Social Psychology* 33:195–14. [SAH]
- Good, K. J. (1973) Social facilitation: Effects of performance anticipation, evaluation, and response competition on free associations. *Journal of Personality and Social Psychology* 28:270–75. doi: 10.1037/h0035790. [aRFB]
- Gowdy, J. & Krall, L. (2016) The economic origins of ultrasociality. *Behavioral and Brain Sciences* 39:e92. doi: 10.1017/S0140525X1500059X. [PES]
- Green, M. C., Visser, P. S. & Tetlock, P. E. (2000) Coping with accountability cross-pressures: Low-effort evasive tactics and high-effort quests for complex compromises. *Personality and Social Psychology Bulletin* 26:1380–91. doi: 10.1177/0146167200263006. [aRFB]
- Greene, R. C. (1979) Effects of being observed on learning following success and failure experiments. *Motivation and Emotion* 3:355–71. doi: 10.1007/BF00994050. [aRFB]
- Gruenfeld, D. H., Mannix, E. A., Williams, K. Y. & Neale, M. A. (1996) Group composition and decision making: How member familiarity and information distribution affect process and performance. *Organizational Behavior and Human Decision Processes* 67:1–15. doi: 10.1006/obhd.1996.0061. [NSF]
- Gruenfeld, D. H. & Tiedens, L. Z. (2010) Organizational preferences and their consequences. In: *Handbook of social psychology*, ed. S. T. Fiske, D. T. Gilbert & G. Lindzey, pp. 1252–87. Wiley. doi: 10.1002/9780470561119.socpsy002033. [JJZ]
- Guerin, B. (1986) Mere presence effects in humans: A review. *Journal of Experimental Social Psychology* 22:38–77. doi: 10.1016/0022-1031(86)90040-5. [aRFB]
- Gunia, B. C., Sivanathan, N. & Galinsky, A. D. (2009) Vicarious entrapment: Your sunk costs, my escalation of commitment. *Journal of Experimental Social Psychology* 45(6):1238–44. [OS]
- Hackman, J. R. & Morris, C. G. (1975) Group tasks, group interaction process, and group performance effectiveness: A review and proposed integration. In: *Advances in experimental social psychology*, vol. 8, ed. L. Berkowitz, pp. 45–99. Academic press. [ID-N]
- Haley, N., Chou, E. Y., Cohen, T. R. & Livingston, R. W. (2012a) Status conferral in intergroup social dilemmas: Behavioral antecedents and consequences of prestige and dominance. *Journal of Personality and Social Psychology* 102(2):351–66. doi: 10.1037/a0025515. [JJZ]
- Haley, N., Chou, E. Y. & Galinsky, A. D. (2011) A functional model of hierarchy: Why, how, and when vertical differentiation enhances group performance. *Organizational Psychology Review* 1(1):32–52. doi: 10.1177/2041386610380991. [JJZ, rSEA]
- Haley, N., Chou, E. Y., Galinsky, A. D. & Murnighan, J. K. (2012b) When hierarchy wins: Evidence from the National Basketball Association. *Social Psychological and Personality Science* 3(4):398–406. doi: 10.1177/1948550611424225. [JJZ, rSEA]
- Hardin, G. (1968) The tragedy of the commons. *Science* 162:1243–48. doi: 10.1080/19390450903037302. [aRFB]
- Harding, S. G. (2004) *The feminist standpoint theory reader: Intellectual and political controversies*. Routledge. [AJJ]
- Hardy, C. L. & Van Vugt, M. (2006) Nice guys finish first: The competitive altruism hypothesis. *Personality and Social Psychology Bulletin* 32(10):1402–13. doi: 10.1177/0146167206291006. [JJZ]
- Harkins, S. G. (1987) Social loafing and social facilitation. *Journal of Experimental Social Psychology* 23(1):1–18. [ID-N, DRF]
- Harris, C. B., Barnier, A. J., Sutton, J. & Keil, P. C. (2014a) Couples as socially distributed cognitive systems: Remembering in everyday social and material contexts. *Memory Studies* 7(3):285–97. [AJB]
- Harris, C. B., Keil, P. C., Sutton, J., Barnier, A. & McIlwain, D. (2011) We remember, we forget: Collaborative remembering in older couples. *Discourse Processes* 48:267–303. [AJB]
- Harris, C. B., Paterson, H. M. & Kemp, R. I. (2008) Collaborative recall and collective memory: What happens when we remember together? [Special Issue]. *Memory: Theoretical and Empirical Approaches* 16:213–30. [AJB]
- Harris, C. B., Rasmussen, A. S. & Berntsen, D. (2014b) The functions of autobiographical memory: An integrative approach. *Memory* 22:559–81. [AJB]
- Harrison, D. A., Price, K. H. & Bell, M. P. (1998) Beyond relational demography: Time and the effects of surface and deep-level diversity on work group cohesion. *Academy of Management Journal* 41:96–107. [AM]
- Haslam, S. A. (2004) *Psychology in organizations: The social identity approach, second edition*. Sage. [SAH]
- Haslam, S. A. & Ellemers, N. (2005) Social identity in industrial and organizational psychology: Concepts, controversies and contributions. In: *International review of industrial and organizational psychology*, vol. 20, ed. G. P. Hodgkinson & J. K. Ford, pp. 39–118. Wiley. [SAH]
- Haslam, S. A. & Ellemers, N. (2011) Identity processes in organizations. In: *Handbook of identity theory and research*, vol. 2, ed. V. Vignoles, S. Schwartz & K. Luyckx, pp. 715–44. Springer. [SAH]
- Haslam, S. A., Eggin, R. A. & Reynolds, K. J. (2003) The ASPIRe model: Actualizing Social and Personal Identity Resources to enhance organizational outcomes. *Journal of Occupational and Organizational Psychology* 76:83–113. [SAH]
- Haslam, S. A., Oakes, P. J., McGarty, C., Turner, J. C. & Onorato, S. (1995) Contextual changes in the prototypicality of extreme and moderate outgroup members. *European Journal of Social Psychology* 25:509–30. [MAH]

- Haslam, S. A., Reicher, S. D. & Platow, M. J. (2011) *The new psychology of leadership: Identity, influence and power*. Psychology Press. [SAH]
- Hawking, D. N. & Booth, A. (2005) Unhappily ever after: Effects of long-term, low-quality marriages on well-being. *Social Forces* 84:451–71. [AB-Z]
- Hazelwood, D. L. & Brigham, J. C. (1998) The effects of juror anonymity on jury verdicts. *Law and Human Behavior* 22:695–713. doi: 10.1023/A:1025711024462. [aRFB]
- Healey, M. P., Vuori, T. & Hodgkinson, G. P. (2015) When teams agree while disagreeing: Reflexion and reflection in shared cognition. *Academy of Management Review* 40:399–22. doi: 10.5465/amr.2013.0154. [MPH]
- Heath, C. & Staudenmayer, N. (2000) Coordination neglect: How lay theories of organizing complicate coordination in organizations. *Research in Organizational Behavior* 22:153–93. doi: 10.1016/S0191-3085(00)22005-4. [JJZ]
- Heatherington, T. F. & Vohs, K. D. (1998) Why is it so difficult to inhibit behavior? *Psychological Inquiry* 9:212–16. [OS]
- Hegselmann, R. & Krause, U. (2002) Opinion dynamics and bounded confidence: Models, analysis, and simulations. *Journal of Artificial Societies and Social Simulation* 5. Available at: <http://jasss.soc.surrey.ac.uk/5/3/2.html>. [ID]
- Hegselmann, R. & Krause, U. (2005) Opinion dynamics driven by various ways of averaging. *Computational Economics* 25:381–405. [ID]
- Hegselmann, R. & Krause, U. (2006) Truth and cognitive division of labor: First steps towards a computer aided social epistemology. *Journal of Artificial Societies and Social Simulation* 9. Available at: <http://jasss.soc.surrey.ac.uk/9/3/10.html>. [ID]
- Hegselmann, R. & Krause, U. (2009) Deliberative exchange, truth, and cognitive division of labour: A low-resolution modeling approach. *Episteme* 6:130–44. [ID]
- Henchy, T. & Glass, D. C. (1968) Evaluation apprehension and the social facilitation of dominant and subordinate responses. *Journal of Personality and Social Psychology* 10:446–54. doi: 10.1037/h0026814. [aRFB]
- Henrich, J., Heine, S. J. & Norenzayan, A. (2010a) Most people are not WEIRD. *Nature* 466:29–29. [rSEA]
- Henrich, J., Heine, S. J. & Norenzayan, A. (2010b) The weirdest people in the world? *Behavioral and Brain Sciences* 33:61–135. doi: 10.1017/S0140525X0999152X. [RB]
- Herzog, S. M. & Hertwig, R. (2009) The wisdom of many in one mind: Improving individual judgments with dialectical bootstrapping. *Psychological Science* 20(2):231–37. [AAB]
- Heyes, C. (2013) What can imitation do for cooperation? In: *Cooperation and its evolution*, ed. K. Sterelny, R. Joyce, B. Calcott & B. Fraser, pp. 313–32. MIT Press. [BHH]
- Hinsz, V. B., Tindale, R. S. & Vollrath, D. A. (1997) The emerging conceptualization of groups as information processors. *Psychological Bulletin* 121:43–64. doi: 10.1037/0033-2909.121.1.43. [aRFB]
- Hirst, W. & Echterhoff, G. (2012) Remembering in conversations: The social sharing and reshaping of memories. *Annual Review of Psychology* 63:55–79. [AJB]
- Hodges, B. H. (2009) Ecological pragmatics: Values, dialogical arrays, complexity, and caring. *Pragmatics and Cognition* 17:628–52. [BHH]
- Hodges, B. H. (2014) Rethinking conformity and imitation: Divergence, convergence, and social understanding. *Frontiers in Psychology: Cognitive Science* 5:726. [BHH]
- Hodges, B. H. (in press) Conformity and divergence in interactions, groups and culture. In: *The Oxford handbook of social influence*, ed. S. Harkins, K. Williams & J. Burger. Oxford University Press. Advance online publication: doi: 10.1093/oxfordhb/9780199859870.013.3. [BHH]
- Hodges, B. H. & Geyer, A. (2006) A nonconformist account of the Asch experiments: Values, pragmatics, and moral dilemmas. *Personality and Social Psychology Review* 10:2–19. [BHH]
- Hodges, B. H., Meagher, B. R., Norton, D. J., McBain, R. & Sroubek, A. (2014) Speaking from ignorance: Not agreeing with others we believe are correct. *Journal of Personality and Social Psychology* 106:218–34. [BHH]
- Hoeningman, R., Bradley, E. & Lim, A. (2011) Cooperation in bike racing – when to work together and when to go it alone. *Complexity* 17(2):39–44. <http://doi.org/10.1002/cplx.20372> [EK]
- Hogg, M. A. (2005a) All animals are equal but some animals are more equal than others: Social identity and marginal membership. In: *The social outcast: Ostracism, social exclusion, rejection, and bullying*, ed. K. D. Williams, J. P. Forgas & W. von Hippel, pp. 243–61. Psychology Press. [MAH]
- Hogg, M. A. (2005b) The social identity perspective. In: *The handbook of group research and practice*, ed. S. Wheelan, pp. 133–57. Sage. [DRF]
- Hogg, M. A. (2006) Social identity theory. In: *Contemporary social psychological theories*, ed. P. J. Burke, pp. 111–36. Stanford University Press. [MAH]
- Hogg, M. A. (2007) Uncertainty-identity theory. In: *Advances in experimental social psychology*, vol. 39, ed. M. P. Zanna, pp. 69–126. Academic Press. [MAH]
- Hogg, M. A. (2012) Uncertainty-identity theory. In: *Handbook of theories of social psychology*, vol. 2, ed. P. A. M. Van Lange, A. W. Kruglanski & E. T. Higgins, pp. 62–80. Sage. [MAH]
- Hogg, M. A. (2014) From uncertainty to extremism: Social categorization and identity processes. *Current Directions in Psychological Science* 23:338–42. doi: 10.1177/0963721414540168. [MAH]
- Hogg, M. A. (2015) Constructive leadership across groups: How leaders can combat prejudice and conflict between subgroups. *Advances in Group Processes* 32:177–207. [MAH]
- Hogg, M. A. & Van Knippenberg, D. (2003) Social identity and leadership processes in groups. In: *Advances in experimental social psychology*, vol. 35, ed. M. P. Zanna, pp. 1–52. Academic Press. [MAH]
- Hogg, M. A. & Wagoner, J. A. (2017) Normative exclusion and attraction to extreme groups: Resolving identity-uncertainty. In: *Ostracism, social exclusion and rejection*, ed. K. D. Williams & S. A. Nida, pp. 207–23. Routledge. [MAH]
- Hogg, M. A., Abrams, D., Otten, S. & Hinkle, S. (2004) The social identity perspective intergroup relations, self-conception, and small groups. *Small Group Research* 35:246–76. doi: 10.1177/1046496404263424. [aRFB]
- Hogg, M. A., Terry, D. J. & White, K. M. (1995) A tale of two theories: A critical comparison of identity theory with social identity theory. *Social Psychology Quarterly* 58(4):255–69. [DRF]
- Hogg, M. A., Van Knippenberg, D. & Rast, D. E., III. (2012) The social identity theory of leadership: Theoretical origins, research findings, and conceptual developments. *European Review of Social Psychology* 23:258–304. [MAH]
- Hollander, E. (1958) Conformity, status, and idiosyncrasy credit. *Psychological Review* 65:117–27. doi: 10.1037/h0042501. [NSF]
- Holroyd, J. (2012) Responsibility for implicit bias. *Journal of Social Philosophy* 43(3):274–306. [AJJ]
- Horan, R. D., Bulte, E. & Shogren, J. F. (2005) How trade saved humanity from biological exclusion: An economic theory of Neanderthal extinction. *Journal of Economic Behavior and Organization* 58:1–29. doi: 10.1016/j.jebo.2004.03.009. [aRFB]
- Hornsey, M. J. & Hogg, M. A. (2000) Assimilation and diversity: An integrative model of subgroup relations. *Personality and Social Psychology Review* 4:143–56. [rSEA]
- Hornsey, M. J. & Jetten, J. (2004) The individual within the group: Balancing the need to belong with the need to be different. *Personality and Social Psychology Review* 8:248–64. [MJH]
- Hornsey, M. J., Jetten, J., McAuliffe, B. J. & Hogg, M. A. (2006) The impact of individualist and collectivist group norms on evaluations of dissenting group members. *Journal of Experimental Social Psychology* 42:57–68. [MJH]
- Hubbard, C. & Kane, T. (2013) *Balance: The economics of great powers from ancient Rome to modern America*. Simon & Schuster. [aRFB]
- Hüffmeier, J. & Hertel, G. (2011) When the whole is more than the sum of its parts: Group motivation gains in the wild. *Journal of Experimental Social Psychology* 47:455–59. doi: 10.1016/j.jesp.2010.12.004. [aRFB]
- Hülshager, U. R., Anderson, N. & Salgado, J. F. (2009) Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology* 94:1128. doi: 10.1037/a0015978. [aRFB]
- Ingham, A. G., Levinger, G., Graves, J. & Peckham, V. (1974) The Ringelmann effect: Studies of group size and group performance. *Journal of Experimental Social Psychology* 10:371–84. [BAN]
- Ioannidis, J. P. A. (2005) Why most published research is false. *PLOS Medicine* 2(8):e124. [PES]
- Ioannidis, J. P. A. (2014) How to make more published research true. *PLOS Medicine* 11(10):e1001747. [PES]
- Jackson, S. E. & Schuler, R. S. (1985) A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational Behavior and Human Decision Processes* 36:16–78. [MPH]
- Janis, I. L. (1972) *Victims of groupthink: A psychological study of foreign policy decisions and fiascoes*. Houghton Mifflin. [aRFB]
- Janis, I. L. & Mann, L. (1977) *Decision making: A psychological analysis of conflict, choice, and commitment*. Free Press. [ID-NP]
- Janssen, O. & Huang, X. (2008) Us and me: Team identification and individual differentiation as complementary drivers of team members' citizenship and creative behaviors. *Journal of Management* 34:69–88. doi: 10.1177/0149206307309263. [aRFB]
- Jaynes, J. (1976) *The origin of consciousness in the breakdown of the bicameral mind*. Houghton Mifflin Harcourt. [CB]
- Jehn, K. (1994) Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict. *International Journal of Conflict Management* 5:223–38. [AM]
- Jehn, K. (1995) A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly* 40:256–82. [AM]
- Jetten, J. & Hornsey, M. J. (2014) Deviance and dissent in groups. *Annual Review of Psychology* 65:461–85. [MJH]
- Jetten, J., Hogg, M. A. & Mullin, B.-A. (2000) In-group variability and motivation to reduce subjective uncertainty. *Group Dynamics: Theory, Research, and Practice* 4(2):184–98. Available at: <http://doi.org/10.1037/1089-2699.4.2.184>. [EK]

- Jetten, J., McAuliffe, B. J., Hornsey, M. J. & Hogg, M. A. (2006) Differentiation between and within groups: The influence of individualist and collectivist group norms. *European Journal of Social Psychology* 36:825–43. [MJH]
- Jetten, J., Postmes, T. & McAuliffe, B. J. (2002) “We’re all individuals”: Group norms of individualism and collectivism, levels of identification, and identity threat. *European Journal of Social Psychology* 32:189–207. [MJH]
- Jones, J. M., Dovidio, J. F. & Vietze, D. L. (2014) *The psychology of diversity beyond prejudice and racism*. Wiley-Blackwell. [AJJ]
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D. & Rosenthal, R. A. (1964) *Organizational stress: Studies in role conflict and ambiguity*. Wiley. [MPH]
- Kang, Y., Gray, J. R. & Dovidio, J. F. (2014) The nondiscriminating heart: Loving-kindness meditation training decreases implicit intergroup bias. *Journal of Experimental Psychology: General* 143(3):1306–13. [AJJ]
- Kaplan, H., Hill, K., Hurtado, A. M. & Lancaster, J. (2001) The embodied capital theory of human evolution. In: *Reproductive ecology and human evolution*, ed. P. T. Ellison, pp. 293–317. Aldine de Gruyter. [TCdB]
- Kaplan, H. S. & Gangestad, S. W. (2005) Life history theory and evolutionary psychology. In: *Handbook of evolutionary psychology*, ed. D. M. Buss, pp. 68–95. Wiley. [TCdB]
- Karau, S. J. & Williams, K. D. (1993) Social loafing: A meta-analytic review and theoretical integration. *Journal of Personality and Social Psychology* 65(4):681–706. [aRFB, RB, ID-N, BAN]
- Karau, S. J. & Williams, K. D. (1995) Social loafing: Research findings, implications, and future directions. *Current Directions in Psychological Science* 4:134–40. doi: 10.1111/1467-8721.ep10772570. [aRFB]
- Kerr, N. L. & Bruun, S. E. (1983) Dispensability of member effort and group motivation losses: Free-rider effects. *Journal of Personality and Social Psychology* 44:78–94. doi: 10.1037/0022-3514.44.1.78. [aRFB, BAN]
- Kerr, N. L., Messé, L. M., Park, E. S. & Sambolec, E. (2005) Identifiability, performance feedback and the Köhler effect. *Group Processes and Intergroup Relations* 8:375–90. doi: 10.1177/1368430205056466. [NSF]
- Kirkman, B. L. & Shapiro, D. L. (2001) The impact of cultural values on job satisfaction and organizational commitment in self-managing work teams: The mediating role of employee resistance. *Academy of Management Journal* 44:557–69. doi: 10.2307/3069370. [aRFB]
- Kitano, H. (2004) Biological robustness. *Nature Reviews Genetics* 5(11):826–37. Available at: <http://doi.org/10.1038/nrg1471>. [EK]
- Klein, O., Spears, R. & Reicher, S. (2007) Social identity performance: Extending the strategic side of SIDE. *Personality and Social Psychology Review* 11:28–45. [SDR]
- Köhler, O. (1926) Kraftleistungen bei Einzel- und Gruppenarbeit [Physical performance in individual and group work]. *Industrielle Psychotechnik* 3:274–82. [aRFB]
- Koriat, A. (2012) When are two heads better than one and why? *Science* 336:360. [AAB]
- Kouchaki, M. (2011) Vicarious moral licensing: The influence of others’ past moral actions on moral behavior. *Journal of Personality and Social Psychology* 101(4):702–15. [OS]
- Kozlowski, S. W. J. & Bell, B. S. (2013) Work groups and teams in organizations: Review update. In *Handbook of psychology: Vol. 12. Industrial and organizational psychology, second edition*, ed. N. Schmitt & S. Highhouse, pp. 412–69. Wiley. [DRF, rSEA]
- Krach, S., Cohrs, J. C., de Echeverria Loebell, N. C., Kircher, T., Sommer, J., Jansen, A. & Paulus, F. M. (2011) Your flaws are my pain: Linking empathy to vicarious embarrassment. *PLoS One* 6(4):e18675. [OS]
- Kramer, R. M. & Brewer, M. B. (1984) Effects of group identity on resource use in a simulated commons dilemma. *Journal of Personality and Social Psychology* 46:1044–57. doi: 10.1037/0022-3514.46.5.1044. [aRFB]
- Kravitz, D. A. & Martin, B. (1986) Ringelmann rediscovered: The original article. *Journal of Personality and Social Psychology* 50:936–41. doi: 10.1037/0022-3514.50.5.936. [aRFB, EK]
- Krebs, A. (2014) Between I and Thou – On the dialogical nature of love. In: *Love and its objects*, ed. C. Maurer, T. Milligan & K. Pacovská, pp. 7–24. Palgrave Macmillan. [AB-Z]
- Krebs, A. (2015) *Zwischen Ich und Du. Eine dialogische Philosophie der Liebe*. Suhrkamp. [AB-Z]
- Lamm, H. & Trommsdorff, G. (1973) Group versus individual performance on tasks requiring ideational proficiency (brainstorming): A review. *European Journal of Social Psychology* 3:361–88. doi: 10.1002/ejsp.2420030402. [aRFB]
- Lancaster, J. B. & Kaplan, H. S. (2009) The endocrinology of the human adaptive complex. In: *Endocrinology of social relationships*, ed. P. T. Ellison & P. G. Gray, pp. 95–119. Harvard University Press. [TCdB]
- Landau, M. (1969) Redundancy, rationality, and the problem of duplication and overlap. *Public Administration Review* 29(4):346–58. Available at: <http://doi.org/10.2307/973247>. [EK]
- Larson, J. R., Jr. (2010) *In search of synergy in small group performance*. Psychology Press. [DRF, AM]
- Latané, B. & Nida, S. (1981) Ten years of research on group size and helping. *Psychological Bulletin* 89:308–24. doi: 10.1037/0033-2909.89.2.308. [aRFB]
- Latané, B., Williams, K. & Harkins, S. (1979) Many hands make light the work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology* 37:822–32. doi: 10.1037/0022-3514.37.6.822. [aRFB, BAN]
- Lawrence, P. R. & Lorsch, J. W. (1967) *Organization and environment: Managing differentiation and integration*. Harvard Business School Press. [JJZ]
- Le Bon, G. (1896/1960) *The crowd: A study of the popular mind [La psychologie des foules]*. Viking Press. (Original work published in 1896.) [aRFB, DRF, SDR]
- Leary, M. R. & Forsyth, D. R. (1987) Attributions of responsibility for collective endeavors. In: *Group processes*, ed. C. Hendrick, pp. 167–88. Sage. [aRFB]
- LePine, J. A., Hollenbeck, J. R., Ilgen, D. R. & Hedlund, J. (1997) Effects of individual differences on the performance of hierarchical decision-making teams: Much more than g. *Journal of Applied Psychology* 82:803–11. [ID-N]
- Lerner, J. S. & Tetlock, P. E. (1999) Accounting for the effects of accountability. *Psychological Bulletin* 125:255–75. doi: 10.1037/0033-2909.125.2.255. [aRFB]
- Lerner, J. S. & Tetlock, P. E. (2003) Bridging individual, interpersonal, and institutional approaches to judgment and decision making: The impact of accountability on cognitive bias. In: *Emerging perspectives on judgment and decision research*, ed. J. S. Lerner & P. E. Tetlock, pp. 431–57. Cambridge University Press. [aRFB, rSEA]
- Levine, J. M. & Moreland, R. L. (1990) Progress in small group research. *Annual Review of Psychology* 41:585–634. doi: 10.1146/annurev.ps.41.020190.003101. [aRFB, PES]
- Lewandowsky, S., Griffiths, T. L. & Kalish, M. L. (2009) The wisdom of individuals: Exploring people’s knowledge about everyday events using iterated learning. *Cognitive Science* 33(6):969–98. [AAB]
- Lewin, K. (1952) Group decision and social change. In: *Readings in Social Psychology*, Revised edition, ed. G. E. Swanson, T. N. Newcomb & E. L. Hartley, pp. 459–73. Holt, Rinehart, & Winston. [aRFB]
- Lickel, B., Schmader, T., Curtis, M., Scarnier, M. & Ames, D. R. (2005) Vicarious shame and guilt. *Group Processes and Intergroup Relations* 8(2):145–57. [OS]
- Lieberman, M. D. (2007) Social cognitive neuroscience: A review of core processes. *Annual Review of Psychology* 58:259–89. [MPH]
- Linton, R. (1945) *The cultural background of personality*. Appleton-Century. [NSF]
- Lorge, I. & Solomon, H. (1955) Two models of group behavior in the solution of eureka-type problems. *Psychometrika* 20(2):139–48. [AAB]
- Lorinkova, N. M., Pearsall, M. J. & Sims, H. P. (2013) Examining the differential longitudinal performance of directive versus empowering leadership in teams. *Academy of Management Journal* 56:573–96. doi: 10.5465/amj.2011.0132. [aRFB, RS]
- Lu, L., Yuan, Y. C. & McLeod, P. L. (2012) Twenty-five years of hidden profiles in group decision making: A meta-analysis. *Personality and Social Psychology Review* 16:54–75. doi: 10.1177/1088868311417243. [aRFB]
- Lynn, M. & Oldenquist, A. (1986) Egoistic and nonegoistic motives in social dilemmas. *American Psychologist* 41:529–34. doi: 10.1037/0003-066X.41.5.529. [aRFB]
- MacCoun, R. J., Kier, E. & Belkin, A. (2006) Does social cohesion determine motivation in combat? An old question with an old answer. *Armed Forces and Society* 32(4):646–54. [RMcd]
- Maciejovsky, B. & Budescu, D. V. (2007) Collective induction without cooperation: Learning and knowledge transfer in cooperative groups and competitive auctions. *Journal of Personality and Social Psychology* 92:854–70. [DB]
- Maciejovsky, B. & Budescu, D. V. (2013) Markets as a structural solution to knowledge-sharing dilemmas. *Organizational Behavior and Human Decision Processes* 120:154–67. [DB]
- Maciejovsky, B., Sutter, M., Budescu, D. V. & Bernau, P. (2013) Teams make you smarter: Learning and knowledge transfer in auctions and markets by teams and individuals. *Management Science* 59:1255–70. [DB]
- Madirolas, G. & de Polavieja, G. G. (2014) Wisdom of the confident: Using social interactions to eliminate the bias in wisdom of the crowds. *Proceedings of the Collective Intelligence Conference at Massachusetts Institute of Technology*, June 10–12, 2014, Cambridge, MA. [aRFB]
- Magee, J. C. & Galinsky, A. D. (2008) Social hierarchy: The self-reinforcing nature of power and status. *The Academy of Management Annals* 2(1):351–98. doi: 10.1080/19416520802211628. [JJZ]
- Mann, L., Newton, J. W. & Innes, J. M. (1982) A test between deindividuation and emergent norm theories of crowd aggression. *Journal of Personality and Social Psychology* 42:260–72. doi: 10.1037/0022-3514.42.2.260. [aRFB]
- Mannix, E. & Neale, M. A. (2005) What differences make a difference? The promise and reality of diverse teams in organizations. *Psychological Science in the Public Interest* 6:31–55. doi: 10.1111/j.1529-1006.2005.00022.x. [aRFB]
- March, J. G. & Simon, H. A. (1958) *Organizations*. Wiley. [JJZ]
- Markus, H. R. & Kitayama, S. (1991) Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review* 98:224–83. [RB]
- Marques, J. M. & Páez, D. (1994) The “black sheep effect”: Social categorisation, rejection of ingroup deviates and perception of group variability. *European Review of Social Psychology* 5:37–68. [MAH]

- Marques, J. M., Abrams, D., Páez, D. & Hogg, M. A. (2001) Social categorization, social identification, and rejection of deviant group members. In: *Blackwell handbook of social psychology: Group processes*, ed. M. A. Hogg & R. S. Tindale, pp. 400–24. Blackwell. [MAH]
- Martens, R. & Landers, D. M. (1972) Evaluation potential as a determinant of coercion effects. *Journal of Experimental Social Psychology* 8:347–59. doi: 10.1016/0022-1031(72)90024-8. [aRFB]
- Masumoto, J. & Inui, N. (2013) Two heads are better than one: Both complementary and synchronous strategies facilitate joint action. *Journal of Neurophysiology* 109(5):1307–14. Available at: <http://doi.org/10.1152/jn.00776.2012>. [EK]
- Matsuda, N. (1985) Strong, quasi-, and weak conformity among Japanese in the modified Asch procedure. *Journal of Cross-Cultural Psychology* 16:83–97. [BHH]
- McAuliffe, B. J., Jetten, J., Hornsey, M. J. & Hogg, M. A. (2003) Individualist and collectivist norms: When it's OK to go your own way. *European Journal of Social Psychology* 33:57–70. [MJH]
- McCoy, S. K. & Major, B. (2007) Priming meritocracy and the psychological justification of inequality. *Journal of Experimental Social Psychology* 43(3):341–51. doi: 10.1016/j.jesp.2006.04.009. [JJZ]
- McDonald, M. M., Navarrete, C. D. & Van Vugt, M. (2012) Evolution and the psychology of intergroup conflict: The male warrior hypothesis. *Philosophical Transactions of the Royal Society B: Biological Sciences* 367(1589):670–79. [RMCD]
- McElreath, R. & Smaldino, P. E. (2015) Replication, communication, and the population dynamics of scientific discovery. *PLoS ONE* 10(8): e0136088. doi:10.1371/journal.pone.0136088. [PES]
- McGrath, J. E. (1984) *Groups: Interaction and performance*. Prentice Hall. [MPH, JML, BAN, rSEA]
- McGrath, J. E. (1991) Time, interaction, and performance (TIP): A theory of groups. *Small Group Research* 22(2):147–74. [MPH]
- McGuire, W. J. (2013) An additional future for psychological science. *Perspectives on Psychological Science* 8(4):414–23. [ID-N]
- McKelvey, W. & Kerr, N. H. (1988) Differences in conformity among friends and strangers. *Psychological Reports* 62:759–62. [BHH]
- McNeill, W. H. (1982) *The pursuit of power*. University of Chicago Press. [aRFB]
- McPhail, C. (1991) *The myth of the madding crowd*. Aldine de Gruyter. [DRF, SDR]
- Mead, G. H. (1934) *Mind, self, & society*. University of Chicago Press. [rSEA]
- Mead, G. H. (1934) *Mind, self and society: From the standpoint of a social behaviorist*. University of Chicago Press. [aRFB]
- Messick, D. M. & Brewer, M. B. (1983) Solving social dilemmas: A review. In: *Review of personality and social psychology, vol. 4*, ed. L. Wheeler & P. Shaver, pp. 11–44. Sage. [aRFB]
- Metzinger, T. (2009) *The ego tunnel: The science of the mind and the myth of the self*. Basic Books. [aRFB]
- Miller, J. (1982) Divided attention: Evidence for coactivation with redundant signals. *Cognitive Psychology* 14:247–79. [AAB]
- Moffett, M. W. (2013) Human identity and the evolution of societies. *Human Nature* 24:219–67. doi: 10.1007/s12110-013-9170-3. [aRFB]
- Mojzisch, A., Kerschreiter, R., Faulmüller, N., Vogelgesang, F. & Schulz-Hardt, S. (2014) The consistency principle in interpersonal communication: Consequences of preference confirmation and disconfirmation in collective decision-making. *Journal of Personality and Social Psychology* 106:961–77. doi:10.1037/a0036338. [NSF]
- Monin, B., Norton, M. I., Cooper, J. & Hogg, M. A. (2004) Reacting to an assumed situation vs. conforming to an assumed reaction: The role of perceived speaker attitude in vicarious dissonance. *Group Processes and Intergroup Relations* 7(3):207–20. [OS]
- Mooman, R. H. & Blakely, G. L. (1995) Individualism-collectivism as an individual difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior* 16:127–42. doi: 10.1002/job.4030160204. [aRFB]
- Morris, D. R. (1965) *The washing of the spears: The rise and fall of the Zulu nation*. Simon & Schuster. [aRFB, rSEA]
- Mueller, J. S. (2012) Why individuals in larger teams perform worse. *Organizational Behavior and Human Decision Processes* 117:111–24. doi: 10.1016/j.obhdp.2011.08.004. [aRFB]
- Mulder, M. B., Bowles, S., Hertz, T., Bell, A., Beise, J., Clark, G., Fazzino, I., Gurven, M., Hill, K., Hooper, P. L., Irons, W., Kaplan, H., Leonetti, D., Low, B., Marlowe, F., McElreath, R., Naidu, S., Nolin, D., Piraino, P., Quinlan, R., Schniter, E., Sear, R., Shenk, M., Smith, E. A., von Rueden, C. & Wiessner, P. (2009) Intergenerational wealth transmission and the dynamics of inequality in small-scale societies. *Science* 326(5953):682–88. [DRF]
- Mullen, B. (1986) Atrocity as a function of lynch mob composition: A self-attention perspective. *Personality and Social Psychology Bulletin* 12:187–97. doi: 10.1177/0146167286122005. [aRFB]
- Mullen, B. & Copper, C. (1994) The relation between group cohesiveness and performance: An integration. *Psychological Bulletin* 115:210–27. doi: 10.1037/0033-2909.115.2.210. [aRFB]
- Mullen, B., Johnson, C. & Salas, E. (1991) Productivity loss in brainstorming groups: A meta-analytic integration. *Basic and Applied Social Psychology* 12:3–23. doi: 10.1207/s15324834basp1201_1. [aRFB]
- Nadler, A., Goldberg, M. & Jaffe, Y. (1982) Effect of self-differentiation and anonymity in group on deindividuation. *Journal of Personality and Social Psychology* 42:1127–36. doi: 10.1037/0022-3514.42.6.1127. [aRFB]
- Nemeth, C. J. (1986) Differential contributions of majority and minority influence. *Psychological Review* 93:23–32. doi: 10.1037/0033-295X.93.1.23. [aRFB]
- Nemeth, C. J., Personnaz, B., Personnaz, M. & Goncalo, J. A. (2004) The liberating role of conflict in group creativity: A study in two countries. *European Journal of Social Psychology* 34:365–74. doi: 10.1002/ejsp.210. [aRFB]
- Nijstad, B. A., Berger-Selman, F. & De Dreu, C. K. W. (2014) Innovation in top management teams: Minority dissent, transformational leadership, and radical innovations. *European Journal of Work and Organizational Psychology* 23:310–22. [BAN]
- Nijstad, B. A. & De Dreu, C. K. W. (2012) Motivated information processing in organizational teams: Progress, puzzles, and prospects. *Research in Organizational Behavior* 32:87–111. [BAN]
- Nolan, J. P., Soar, J., Zideman, D. A., Biarent, D., Bossaert, L. L., Deakin, C., Kosterg, R. W., Wyllich, J. & Böttiger, B. on behalf of the ERC Guidelines Writing Group. (2010) European resuscitation council guidelines for resuscitation 2010. Section 1: Executive summary. *Resuscitation* 81:1219–76. [RS]
- Norton, M. I., Monin, B., Cooper, J. & Hogg, M. A. (2003) Vicarious dissonance: Attitude change from the inconsistency of others. *Journal of Personality and Social Psychology* 85(1):47–62. [OS]
- Nowak, M. A. & Sigmund, K. (2005) Evolution of indirect reciprocity. *Nature* 437:1291–98. doi: 10.1038/nature04131. [NSF]
- Olds, T. (1998) The mathematics of breaking away and chasing in cycling. *European Journal of Applied Physiology and Occupational Physiology* 77(6):492–97. Available at: <http://doi.org/10.1007/s004210050365>. [EK]
- Olken, B. (2010) Direct democracy and local public goods: Evidence from a field experiment in Indonesia. *American Political Science Review* 104:243–67. doi: 10.1017/S0003055410000079. [aRFB]
- Orbell, J. M. & Dawes, R. M. (1981) Social dilemmas. In: *Progress in applied social psychology, vol. 1*, ed. G. Stephenson & J. H. Davis, pp. 37–66. Wiley. [aRFB]
- Osborn, A. F. (1953) *Applied imagination*. Scribner's. [aRFB]
- Osborn, K. A., Irwin, B. C., Skogsberg, N. J. & Feltz, D. L. (2012) The Köhler effect: Motivation gains and losses in real sports groups. *Sport, Exercise, and Performance Psychology* 1:242–53. doi: 10.1037/a0026887. [aRFB, rSEA]
- Packer, D. J. (2008) On being both with us and against us: A normative conflict model of dissent in social groups. *Personality and Social Psychology Review* 12:50–72. [BHH]
- Packer, D. J. (2009) Avoiding groupthink: Whereas weakly identified members remain silent, strongly identified members dissent about collective problems. *Psychological Science* 20:546–48. [BHH, MJH]
- Packer, D. J. & Chasteen, A. L. (2010) Loyal deviance: Testing the normative conflict model of dissent in social groups. *Personality and Social Psychology Bulletin* 36:5–18. [BHH]
- Packer, D. J., Fujita, K. & Chasteen, A. L. (2014) The motivational dynamics of dissent decisions: A goal conflict approach. *Social Psychological and Personality Science* 5:27–34. [BHH]
- Packer, D. J. & Miners, C. T. H. (2014) Tough love: The normative conflict model of dissent. *Social and Personality Psychology Compass* 8:354–73. [BHH]
- Page, S. E. (2007) *The difference: How the power of diversity creates better groups, firms, schools, and societies*. Princeton University Press. [PES]
- Pareto, V. (1913) Il massimo di utilità per una collettività in sociologia. *Giornale degli economisti e rivista di statistica* 46(4):337–41. [CB]
- Pareto, V. (1916) *Trattato di sociologia generale*. G. Barbèra. [CB]
- Pashler, H. & Harris, C. R. (2012) Is the replicability crisis overblown? Three arguments examined. *Perspectives in Psychological Science* 7:531–36. [PES]
- Penner, L. A., Dovidio, J. F., Piliavin, J. A. & Schroeder, D. A. (2005) Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology* 56:365–92. doi: 10.1146/annurev.psych.56.091103.070141. [aRFB]
- Peters, K. O., Haslam, S. A., Ryan, M. K. & Fonseca, M. (2012) Working with subgroup identities to build organizational identification and support for organizational strategy: A test of the ASPIRe model. *Group and Organization Management* 38:128–44. [SAH]
- Petty, R. E., Harkins, S. G. & Williams, K. D. (1980) The effects of group diffusion of cognitive effort on attitudes: An information-processing view. *Journal of Personality and Social Psychology*, 38:81–92. doi: 10.1037/0022-3514.38.1.81. [aRFB]
- Pondy, L. R. (1967) Organizational conflict: Concepts and models. *Administrative Science Quarterly* 12(2):296–20. [ID-N]
- Popper, K. (1963) *Conjectures and refutations*. Routledge. [PES]
- Postmes, T. & Branscombe, N. R., eds. (2012) *Rediscovering social identity: Core sources*. Psychology Press. [SAH]
- Postmes, T. & Spears, R. (1998) Deindividuation and antinormative behavior: A meta-analysis. *Psychological Bulletin* 123:238–59. doi: 10.1037/0033-2909.123.3.238. [aRFB, DRF, SDR]
- Postmes, T., Spears, R. & Cihangir, S. (2001) Quality of decision making and group norms. *Journal of Personality and Social Psychology* 80:918–30. [MJH]

- Prentice-Dunn, S. & Rogers, R. W. (1982) Effects of public and private self-awareness on deindividuation and aggression. *Journal of Personality and Social Psychology* 43:503. doi: 10.1037/0022-3514.43.3.503. [aRFB]
- Prentice-Dunn, S. & Rogers, R. W. (1989) Deindividuation and the self-regulation of behavior. In: *The psychology of group influence, second edition*, ed. P. Paulus, pp. 87–109. Erlbaum. [SDR]
- Rajecki, D. W., Ickes, W., Corcoran, C. & Lerner, K. (1977) Social facilitation of human performance: Mere presence effects. *The Journal of Social Psychology* 102:297–310. doi: 10.1080/00224545.1977.9713277. [aRFB]
- Rapoport, A., Bornstein, G. & Erev, I. (1989) Intergroup competition for public goods: Effects of unequal resources and relative group size. *Journal of Personality and Social Psychology* 56:748–56. doi: 10.1037/0022-3514.56.5.748. [aRFB]
- Ratcliffe, S. (2011) *Concise Oxford Dictionary of Quotations*. Oxford University Press. [AJJ]
- Reicher, S. D. (2001) The psychology of crowd dynamics. In: *Blackwell handbook of social psychology: Group processes*, ed. M. A. Hogg & R. S. Tindale, pp. 182–208. Blackwell. [SDR]
- Reicher, S. D., Haslam, S. A. & Smith, J. R. (2012) Working towards the experimenter: Reconceptualizing obedience within the Milgram paradigm as identification-based followership. *Perspectives on Psychological Science* 7:315–24. [SAH]
- Reicher, S. D., Spears, R. & Postmes, T. (1995) A social identity model of deindividuation phenomena. *European Review of Social Psychology* 6:161–98. [MAH, SDR]
- Reicher, S. D. & Stott, C. (2011) *Mad mobs and Englishmen? Myths and realities of the 2011 riots*. Constable and Robinson. [SDR]
- Riegler, A. & Douven, I. (2009) Extending the Heugselmann–Krause model III: From single beliefs to complex belief states. *Episteme* 6:145–63. [ID]
- Ringelmann, M. (1913a) Recherches sur les moteurs animés: Travail de l'homme. *Annales de l'Institut National Agronomique* 12:1–40. [BAN]
- Ringelmann, M. (1913b) Research on animate sources of power: The work of man. *Annales de l'Institut National Agronomique, 2e serie-tome XII:1–40*. [aRFB, AAB]
- Rink, F. & Ellemers, N. (2007) Diversity as a basis for shared organizational identity: The norm congruity principle. *British Journal of Management* 18(s1):S17–27. [SAH]
- Rizzo, J. R., House, R. J. & Lirtzman, S. I. (1970) Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly* 15:150–62. [MPH]
- Roberts, K. H. (1990) Some characteristics of one type of high reliability organization. *Organization Science* 1(2):160–76. [EK]
- Robbins, T. (2003). *Jitterbug perfume*. Bantam. [AB-Z]
- Rogers, R. W. & Ketchen, C. M. (1979) Effects of anonymity and arousal on aggression. *Journal of Psychology: Interdisciplinary and Applied* 102:13–19. doi: 10.1080/00223980.1979.9915089. [aRFB]
- Ronay, R., Greenaway, K., Anicich, E. M. & Galinsky, A. D. (2012) The path to glory is paved with hierarchy: When hierarchical differentiation increases group effectiveness. *Psychological Science* 23(6):669–77. doi: 10.1177/0956797611433876. [JJZ]
- Samson, D., Apperly, I. A., Braithwaite, J. J., Andrews, B. J. & Scott, S. E. B. (2010) Seeing it their way: Evidence for rapid and involuntary computation of what other people see. *Journal of Experimental Psychology: Human Perception and Performance* 36(5):1255–66. [AAB]
- Satow, K. (1975) Social approval and helping. *Journal of Experimental Social Psychology* 11:501–509. doi: 10.1016/0022-1031(75)90001-3. [aRFB]
- Sayre, M. R., O'Connor, R. E., Atkins, D. L., Billi, J. E., Callaway, C. W., Shuster, M., Eigel, B., Montgomery, W. H., Hickey, R. W., Jacobs, I., Nadkarni, V. M., Morley, P. T., Semenko, T. I. & Hazinski, M. F. (2010) 2010 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care science. Part 2: Evidence evaluation and management of potential or perceived conflicts of interest. *Circulation* 122:S657–64. [RS]
- Schachter, S. (1951) Deviation, rejection, and communication. *The Journal of Abnormal and Social Psychology* 46:190–207. doi: 10.1037/h0062326. [aRFB, HB]
- Schachter, S. (1954) Interpretative and methodological problems of replicated research. *Journal of Social Issues* 10:52–60. doi: 10.1111/j.1540-4560.1954.tb01654.x. [aRFB]
- Schmidt, P. (2015) Campaigns against microaggressions prompt big concerns about free speech. *Chronicle of Higher Education* 61(41):A8. Available at: <http://chronicle.com/article/Campaigns-Against/231459/>. [AJJ]
- Schnarch, D. (1997) *Passionate marriage: Love, sex, and intimacy in emotionally committed relationships*. Norton. [AB-Z]
- Scholten, L., van Knippenberg, D., Nijstad, B. A. & de Dreu, C. K. W. (2007) Motivated information processing and group decision-making: Effects of process accountability on information processing and decision quality. *Journal of Experimental Social Psychology* 43:539–52. doi: 10.1016/j.jesp.2006.05.010. [aRFB]
- Schopler, J., Insko, C. A., Drigotas, S. M. & Wieselquist, J. (1995) The role of identifiability in the reduction of interindividual–intergroup discontinuity. *Journal of Experimental Social Psychology* 31:553–74. doi: 10.1006/jesp.1995.1025. [aRFB]
- Schulz-Hardt, S., Brodbeck, F. C., Mojzisch, A., Kerschreiter, R. & Frey, D. (2006) Group decision making in hidden profile situations: Dissent as a facilitator for decision quality. *Journal of Personality and Social Psychology* 91:1080–93. doi: 10.1037/0022-3514.91.6.1080. [aRFB, AM]
- Schwartz, S. H. & Gottlieb, A. (1976) Bystander reactions to a violent theft: Crime in Jerusalem. *Journal of Personality and Social Psychology* 34:1188–99. doi: 10.1037/0022-3514.34.6.1188. [aRFB]
- Schwartz, S. H. & Gottlieb, A. (1980) Bystander anonymity and reactions to emergencies. *Journal of Personality and Social Psychology* 39:418–30. doi: 10.1037/0022-3514.39.3.418. [aRFB]
- Scott, M. B. & Lyman, S. M. (1968) Paranoia, homosexuality and game theory. *Journal of Health and Social Behavior* 9:179–87. doi: 10.2307/2948402. [aRFB]
- Searle, J. (1990) Collective intentions and actions. In: *Intentions in communication*, ed. P. Cohen, J. Morgan & M. E. Pollack, pp. 401–15. MIT Press. [AB-Z]
- Sedikides, C., Gaertner, L., Luke, M. A., O'Mara, E. M. & Gebauer, J. E. (2013) A three-tier hierarchy of self-potency: Individual self, relational self, collective self. *Advances in Experimental Social Psychology* 48(1):235–95. [DRF]
- Semin, G. R. & Manstead, A. S. R. (1983) *The accountability of conduct: A social psychological analysis*. Academic Press. [aRFB]
- Shaw, J. D., Gupta, N. & Delery, J. E. (2002) Pay dispersion and workforce performance: Moderating effects of incentives and interdependence. *Strategic Management Journal* 23(6):491–512. doi: 10.1002/smj.235. [JJZ]
- Sherif, M. (1936) *The psychology of social norms*. Harper. [aRFB]
- Simmons, J. P., Nelson, L. D., Galak, J. & Frederick, S. (2011) Intuitive biases in choice versus estimation: Implications for the wisdom of crowds. *Journal of Consumer Research* 38:1–15. doi: 10.1086/658070. [aRFB]
- Simpson, B., Willer, R. & Ridgeway, C. L. (2012) Status hierarchies and the organization of collective action. *Sociological Theory* 30(3):149–66. doi: 10.1177/0735275112457912. [JJZ, rEA]
- Smaldino, P. E. (2014a) Group-level traits emerge. *Behavioral and Brain Sciences* 37(3):281–95. [ID-N]
- Smaldino, P. E. (2014b) The cultural evolution of emergent group-level traits. *Behavioral and Brain Sciences* 37:243–95. [PES]
- Smaldino, P. E. (in press) The evolution of the social self: Multidimensionality of social identity solves the coordination problems of a society. In: *Beyond the meme: Dynamical structures in cultural evolution*, ed. A. C. Love & W. C. Wimsatt. University of Minnesota Press. Chapter available at: http://smaldino.com/wp/wp-content/uploads/2015/06/Smaldino_SocialIdentityAndComplexitySocieties_2015.pdf. [PES]
- Smith, A. (1776/1991) *The wealth of nations*. Knopf. (Original work published in 1776.) [aRFB]
- Smith, B. N., Kerr, N. A., Markus, M. J. & Stasson, M. F. (2001) Individual differences in social loafing: Need for cognition as a motivator in collective performance. *Group Dynamics: Theory, Research, and Practice* 5:150–58. [BAN]
- Smith, P. B., Bond, M. H. & Kagitcibasi, C. (2006) *Understanding social psychology across cultures*. Sage. [BHH]
- Snyder, C. R. & Fromkin, H. L. (1980) *Uniqueness: The human pursuit of difference*. Plenum. [HB]
- Soll, J. B. (1999) Intuitive theories of information: Beliefs about the value of redundancy. *Cognitive Psychology* 38:317–46. [AAB]
- Spears, R. (2010) Group rationale, collective sense: Beyond intergroup bias. Invited position paper. *British Journal of Social Psychology* 49:1–20. [SDR]
- Spears, R. & Lea, M. (1994) Panacea or panopticon? The hidden power in computer-mediated communication. *Communication Research* 21:427–59. [SDR]
- Spencer-Rodgers, J., Hamilton, D. L. & Sherman, S. J. (2007) The central role of entitativity in stereotypes of social categories and task groups. *Journal of Personality and Social Psychology* 92:369. doi: 10.1037/0022-3514.92.3.369. [aRFB]
- Staats, B. R. & Gino, F. (2012) Specialization and variety in repetitive tasks: Evidence from a Japanese bank. *Management Science* 58:1141–59. doi: 10.1287/mnsc.1110.1482. [aRFB]
- Stanovich, K. E. & West, R. F. (2000) Advancing the rationality debate. *Behavioral and Brain Sciences* 23:701–26. [MPH]
- Stasser, G. (1999) The uncertain role of unshared information in collective choice. In: *Shared cognition in organizations: The management of knowledge*, ed. J. M. Levine, L. L. Thompson & D. M. Messick, pp. 49–69. Erlbaum. [aRFB]
- Stasser, G., Stewart, D. D. & Wittenbaum, G. M. (1995) Expert roles and information exchange during discussion: The importance of knowing who knows what. *Journal of Experimental Social Psychology* 31:244–65. doi: 10.1006/jesp.1995.1012. [aRFB, ID-N]

- Stasser, G. & Titus, W. (1985) Pooling of unshared information in group decision making: Biased information sampling during discussion. *Journal of Personality and Social Psychology* 48:1467–78. doi: 10.1037/0022-3514.48.6.1467. [aRFB, DB]
- Stasser, G. & Titus, W. (1987) Effects of information load and percentage of shared information on the dissemination of unshared information during group discussion. *Journal of Personality and Social Psychology* 53:81–93. doi: 10.1037/0022-3514.53.1.81. [aRFB]
- Stearns, S. C., Allal, N. & Mace, R. (2008) Life history theory and human development. In: *Foundations of evolutionary psychology*, ed. C. Crawford & D. Krebs, pp. 47–69. Erlbaum. [TCdB]
- Steiner, I. D. (1972) *Group process and productivity*. Academic Press. [JML, AM, BAN, rSEA]
- Stets, J. E. & Burke, P. J. (2000) Identity theory and social identity theory. *Social Psychology Quarterly* 63:224–37. [DRF]
- Stroebe, W. & Frey, B. S. (1982) Self-interest and collective action: The economics and psychology of public goods. *British Journal of Social Psychology* 21:121–37. doi: 10.1111/j.2044-8309.1982.tb00521.x. [aRFB]
- Suddendorf, T. (2013) *The gap: The science of what separates us from other animals*. Basic Books/Perseus. [rSEA]
- Surowiecki, J. (2004) *The wisdom of crowds: Why the many are smarter than the few and how collective wisdom shapes business, economies, societies, and nations*. Anchor. [aRFB, AAB]
- Sutton, J., Harris, C., Keil, P. & Barnier, A. (2010) The psychology of memory, extended cognition, and socially distributed remembering. *Phenomenology and the Cognitive Sciences* 9(4):521–60. [AJB]
- Swann, W. B. & Buhrmester, M. D. (2012) Self as functional fiction. *Social Cognition* 30:415–30. doi: 10.1521/soco.2012.30.4.415. [aRFB]
- Swann, W. B., Jr., Buhrmester, M., Gómez, Á., Jetten, J., Bastian, B., Vázquez, A., Ariyanto, A., Besta, T., Christ, O., Cui, L., Finchilescu, G., González, R., Goto, N., Hornsey, M., Sharma, S., Susianto, H. & Zhang, A. (2014) What makes a group worth dying for? Identity fusion fosters perception of familial ties, promoting self-sacrifice. *Journal of Personality and Social Psychology* 106:912–26. [ST]
- Swann, W. B., Jr., Gómez, Á., Huici, C., Morales, J. F. & Hixon, J. G. (2010) Identity fusion and self-sacrifice: Arousal as a catalyst of pro-group fighting, dying, and helping behavior. *Journal of Personality and Social Psychology* 99(5):824–41. [DRF]
- Swann, W. B., Jr., Gómez, A., Seyle, C. D., Morales, J. F. & Huici, C. (2009) Identity fusion: The interplay of personal and social identities in extreme group behavior. *Journal of Personality and Social Psychology* 96:995–1011. [ST]
- Swann, W. B., Jr., Jetten, J., Gómez, Á., Whitehouse, H. & Bastian, B. (2012) When group membership gets personal: A theory of identity fusion. *Psychological Review* 119:441–56. doi: 10.1037/a0028589. [MJH]
- Szymanski, K., Gaczynski, J. & Harkins, S. (2000) The contribution of the potential for evaluation to coaction effects. *Group Processes and Intergroup Relations* 3:269–83. doi: 10.1177/1368430200033003. [aRFB]
- Tajfel, H. & Turner, J. C. (1979) An integrative theory of intergroup conflict. In: *The social psychology of intergroup relations*, ed. W. G. Austin & S. Worchel, pp. 33–47. Brooks/Cole. [RB, SAH]
- Tajfel, H. & Turner, J. C. (1986) The social identity theory of intergroup behavior. In: *Psychology of intergroup relations*, ed. S. Worchel & W. G. Austin, pp. 7–24. Nelson Hall. [RB]
- Takano, Y. & Sogon, S. (2008) Are Japanese more collectivistic than Americans? Examining conformity in in-groups and the reference-group effect. *Journal of Cross-Cultural Psychology* 39:237–50. [BHH]
- Tata, J., Anthony, T., Lin, H., Newman, B., Tang, S., Millson, M. & Sivakumar, K. (1996) Proportionate group size and rejection of the deviate: Meta-analytic integration. *Journal of Social Behavior and Personality* 11:739–52. [aRFB]
- Tetlock, P. E. (1983) Accountability and the perseverance of first impressions. *Social Psychology Quarterly* 46:285–92. doi: 10.2307/3033716. [aRFB]
- Tetlock, P. E. (1992) The impact of accountability on judgment and choice: Toward a social contingency model. In: *Advances in experimental social psychology*, vol. 25, ed. M. P. Zanna, pp. 331–76. Academic Press. [aRFB]
- Tetlock, P. E., Skitka, L. & Boettger, R. (1989) Social and cognitive strategies for coping with accountability: Conformity, complexity, and bolstering. *Journal of Personality and Social Psychology* 57:632–40. doi: 10.1037/0022-3514.57.4.632. [aRFB, rSEA]
- Thaler, R. H. & Sunstein, C. R. (2008) *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press. [NSF]
- Theiner, G., Allen, C. & Goldstone, R. L. (2010) Recognizing group cognition. *Cognitive Systems Research* 11:378–95. [PES]
- Thibaut, J. W. & Kelley, H. H. (1959) *The social psychology of groups*. John Wiley. [MPH]
- Thompson, E. P. (1971) The moral economy of the English crowd in the eighteenth century. *Past and Present* 50:76–136. [SDR]
- Tiedens, L. Z. & Fragale, A. R. (2003) Power moves: Complementarity in dominant and submissive nonverbal behavior. *Journal of Personality and Social Psychology* 84(3):558–68. doi: 10.1037/0022-3514.84.3.558. [JJZ]
- Tiedens, L. Z., Unzueta, M. M. & Young, M. J. (2007) An unconscious desire for hierarchy? The motivated perception of dominance complementarity in task partners. *Journal of Personality and Social Psychology* 93(3):402–14. doi: 10.1037/0022-3514.93.3.402. [JJZ]
- Tomasello, M. (2009) *Why we cooperate*. MIT Press. [BHH]
- Tomasello, M. (2014) The ultra-social animal. *European Journal of Social Psychology* 44:187–94. [BHH]
- Triandis, H. C. (1989) The self and social behavior in differing cultural contexts. *Psychological Review* 96:506–20. [RB]
- Triplett, N. (1898) The dynamogenic factors in pacemaking and competition. *The American Journal of Psychology* 9:507–33. doi: 10.2307/1412188. [aRFB]
- Tuckman, B. (1965) Developmental sequence in small groups. *Psychological Bulletin* 63:384–99. doi: 10.1037/h0022100. [aRFB, DRF, rSEA]
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D. & Wetherell, M. S. (1987) *Rediscovering the social group: A self-categorization theory*. Blackwell. [RB, SAH, MAH]
- Turner, J. & Tajfel, H. (1982) *Social identity and intergroup relations*. Cambridge University Press. [aRFB, OS]
- Turner, R. H. & Killian, L. M. (1957) *Collective behavior*. Prentice-Hall. [SDR]
- Twenge, J. M. & Campbell, W. K. (2003) “Isn’t it fun to get the respect that we’re going to deserve?” Narcissism, social rejection, and aggression. *Personality and Social Psychology Bulletin* 29:261–72. doi: 10.1177/0146167202239051. [aRFB]
- Tylén, K., Weed, E., Wallentin, M., Roepstorff, A. & Frith, C. D. (2010) Language as a tool for interacting minds. *Mind and Language* 25(1):3–29. [AAB]
- Tyler, T. R. (2006) Psychological perspectives on legitimacy and legitimation. *Annual Review of Psychology* 57(1):375–400. doi: 10.1146/annurev.psych.57.102904.190038. [JJZ]
- Tyler, T. R. & Degoey, P. (1995) Collective restraint in social dilemmas: Procedural justice and social identification effects on support for authorities. *Journal of Personality and Social Psychology* 69:482–97. doi: 10.1037/0022-3514.69.3.482. [aRFB]
- Ulrich, R., Miller, J. & Schröter, H. (2007) Testing the race model inequality: An algorithm and computer programs. *Behavior Research Methods* 39(2):291–302. [AAB]
- Ungson, N. D. & Packer, D. J. (in progress) The complexity of loyalty conceptions, and their relation to whistleblowing. [BHH]
- Van de Kragt, A., Orbell, J. & Dawes, R., Braver, S. & Wilson, L. (1986) Doing well and doing good as ways of resolving social dilemmas. In: *Experimental social dilemmas*, ed. H. Wilke, D. Messick & C. Rutte, pp. 177–203. Verlag Peter Lang. [aRFB]
- Van Ginneken, J. (1992) *Crowds, psychology and politics, 1871–1899*. Cambridge University Press. [SDR]
- Van Lange, P. A. M. (2013) What we should expect from theories in social psychology: Truth, abstraction, progress, and applicability as standards (TAPAS). *Personality and Social Psychology Review* 17:40–55. doi: 10.1177/1088868312453088. [NSF]
- Van Lange, P. A. M., Joireman, J., Parks, C. D. & Van Dijk, E. (2013) The psychology of social dilemmas: A review. *Organizational Behavior and Human Decision Processes* 120:125–41. doi: 10.1016/j.obhdp.2012.11.003. [NSF]
- Van Lange, P. A. M., Liebrand, W. B. G., Messick, D. M. & Wilke, H. A. M. (1992) Introduction and literature review. In: *Social dilemmas: Theoretical issues and research findings*, ed. W. B. G. Liebrand, D. M. Messick & H. A. M. Wilke, pp. 3–28. Pergamon Press. [aRFB]
- Van Vugt, M. & De Cremer, D. (1999) Leadership in social dilemmas: The effects of group identification on collective actions to provide public goods. *Journal of Personality and Social Psychology* 76:587. doi: 10.1037/0022-3514.76.4.587. [aRFB]
- Van Vugt, M. & Hart, C. M. (2004) Social identity as social glue: The origins of group loyalty. *Journal of Personality and Social Psychology* 86:585. doi: 10.1037/0022-3514.86.4.585. [aRFB]
- Van Vugt, M., Hogan, R. & Kaiser, R. B. (2008) Leadership, followership, and evolution: Some lessons from the past. *American Psychologist* 63(3):182–96. doi: 10.1037/0003-066X.63.3.182. [JJZ]
- VanTuinen, M. & McNeel, S. P. (1975) A test of the social facilitation theories of Cottrell and Zajonc in a coaction situation. *Personality and Social Psychology Bulletin* 1:604–607. doi: 10.1177/014616727500100412. [aRFB]
- Vigil, J. M. (2009) A socio-relational framework of sex differences in the expression of emotion. *Behavioral and Brain Sciences* 32(5):375–90; discussion 391–428. Available at: <http://doi.org/10.1017/S0140525X09991075>. [EK]
- Waite, L. J. (1995) Does marriage matter? *Demography* 32:483–507. [AB-Z]
- Waite, L. J. (2000) Trends in men’s and women’s well-being in marriage. In: *The ties that bind: Perspectives on marriage and cohabitation*, ed. L. Waite, C. Bachrach, M. Hindin, E. Thomson & A. Thornton, pp. 368–92. Aldine de Gruyter. [AB-Z]
- Watson, P. C. (1968) Reasoning about a rule. *Quarterly Journal of Experimental Psychology* 20:273–81. [DB]

- Watson, R. I. (1973) Investigation into deindividuation using a cross-cultural survey technique. *Journal of Personality and Social Psychology* 25:342–45. doi: 10.1037/h0034218. [aRFB]
- Wegner, D. M. (1986) Transactive memory: A contemporary analysis of the group mind. In: *Theories of group behavior*, ed. B. Mullen & G. R. Goethals, pp. 185–208. Springer-Verlag. [aRFB]
- Wegner, D. M. (1987) Transactive memory: A contemporary analysis of the group mind. In *Theories of group behavior*, ed. B. Mullen & G. R. Goethals, pp. 185–208. Springer-Verlag. [AJB]
- Weick, K. E. & Roberts, K. H. (1993) Collective mind in organizations: Heedful interrelating on flight decks. *Administrative Science Quarterly* 38(3):357–81. [CB]
- Weisberg, M. (2007) Who is a modeler? *British Journal for the Philosophy of Science* 58(2):207–33. [PES]
- Weldon, E. & Gargano, G. M. (1988) Cognitive loafing: The effects of accountability and shared responsibility on cognitive effort. *Personality and Social Psychology Bulletin* 14:159–71. doi: 10.1177/0146167288141016. [aRFB]
- Weldon, E. & Mustari, E. L. (1988) Felt dispensability in groups of coactors: The effects of shared responsibility and explicit anonymity on cognitive effort. *Organizational Behavior and Human Decision Processes* 41:330–51. doi: 10.1016/0749-5978(88)90033-7. [aRFB]
- Weldon, M. S. & Bellinger, K. D. (1997) Collective memory: Collaborative and individual processes in remembering. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 23(5):1160–75. [AAB]
- Wenmackers, S., Vanpoucke, D. & Douven, I. (2012) Probability of inconsistencies in theory revision. *European Physical Journal B* 85:1–15. [ID]
- Wenmackers, S., Vanpoucke, D. & Douven, I. (2014) Rationality: A social-epistemology perspective. *Frontiers in Psychology* 5:581. doi: 10.3389/fpsyg.2014.00581. [ID]
- Wesselmann, E. D., Bagg, D. & Williams, K. D. (2009) “I feel your pain”: The effects of observing ostracism on the ostracism detection system. *Journal of Experimental Social Psychology* 45(6):1308–11. [OS]
- West, A. (1999) The flute factory: An empirical measurement of the effect of division of labor on productivity and production. *American Economist* 43:82–87. doi: 10.1177/056943459904300109. [aRFB, AAB]
- West, M. A. & Anderson, N. (1996) Innovation in top management teams. *Journal of Applied Psychology* 81:680–93. [ID-N]
- White, S. E., Dittrich, J. E. & Lang, J. R. (1980) The effects of group decision-making process and problem-situation complexity on implementation attempts. *Administrative Science Quarterly* 25:428–40. [AM]
- Whitehouse, H., McQuinn, B., Buhrmester, M. & Swann, W. B., Jr. (2014) Brothers in Arms: Libyan revolutionaries bond like family. *Proceedings of the National Academy of Sciences* 111:17783–85. [ST]
- Wildschut, T., Pinter, B., Vevea, J. L., Insko, C. A. & Schopler, J. (2003) Beyond the group mind: A quantitative review of the interindividual-intergroup discontinuity effect. *Psychological Bulletin* 129:698–722. doi: 10.1037/0033-2909.129.5.698. [aRFB]
- Willer, R. (2009) Groups reward individual sacrifice: The status solution to the collective action problem. *American Sociological Review* 74(1):23–43. doi: 10.1177/000312240907400102. [JJZ]
- Williams, K., Harkins, S. G. & Latané, B. (1981) Identifiability as a deterrent to social loafing: Two cheering experiments. *Journal of Personality and Social Psychology* 40:303–11. doi: 10.1037/0022-3514.40.2.303. [aRFB, BAN]
- Wittenbaum, G. M., Hollingshead, A. B. & Botero, I. C. (2004) From cooperative to motivated information sharing in groups: Moving beyond the hidden profile paradigm. *Communication Monographs* 71:286–310. doi: 10.1080/0363452042000299894. [NSF]
- Wittenbaum, G. M. & Park, E. S. (2001) The collective preference for shared information. *Current Directions in Psychological Science* 10:70–73. doi: 10.1111/1467-8721.00118. [aRFB]
- Wittenbaum, G. M. & Stasser, G. (1996) Management of information in small groups. In: *What's social about social cognition?: Research on socially shared cognition in small groups*, ed. J. L. Nye & A. M. Brower, pp. 3–28. Sage. [aRFB]
- Wittgenstein, L. (1953) *Philosophical investigations*. Blackwell. [MAH]
- Woodley, M. A. (2011) The cognitive differentiation-integration effort hypothesis: A synthesis between the fitness indicator and life history models of human intelligence. *Review of General Psychology* 15:228–45. [TCdB]
- Woodley, M. A. & Fernandes, H. B. F. (2014) Strategic and cognitive differentiation-integration effort in a study of 76 countries. *Personality and Individual Differences* 57:3–7. [TCdB]
- Woodley, M. A., Fernandes, H. B. F. & Madison, G. (2014) Strategic differentiation-integration effort amongst the 47 prefectures of Japan. *Personality and Individual Differences* 63:64–68. [TCdB]
- Woodley, M. A., Figueredo, A. J., Brown, S. D. & Ross, K. C. (2013) Four successful tests of the cognitive differentiation-integration effort hypothesis. *Intelligence* 41:832–42. [TCdB]
- Worchel, S., Rothberger, H., Day, E. A., Hart, D. & Butemeyer, J. (1998) Social identity and individual productivity within groups. *British Journal of Social Psychology* 37:389–413. [RB, AM]
- Wrangham, R. W. & Peterson, D. (1996) *Demonic males: Apes and the origins of human violence*. Houghton Mifflin Harcourt. [RMCD]
- Zaccaro, S. J. (1984) Social loafing: The role of task attractiveness. *Personality and Social Psychology Bulletin* 10:99–106. [BAN]
- Zajonc, R. B. (1965) Social facilitation. *Science* 149:269–74. doi: 10.1126/science.149.3681.269. [aRFB]
- Zajonc, R. B., Heingartner, A. & Herman, E. M. (1969) Social enhancement and impairment of performance in the cockroach. *Journal of Personality and Social Psychology* 13:83–92. [DRF]
- Zdaniuk, B. & Levine, J. M. (2001) Group loyalty: Impact of members' identification and contributions. *Journal of Experimental Social Psychology* 37:502–509. doi: 10.1006/jesp.2000.1474. [aRFB]
- Zimbardo, P. G. (1969) The human choice: Individuation, reason, and order versus deindividuation, impulse, and chaos. *Nebraska Symposium on Motivation* 17:237–307. [aRFB]
- Zitek, E. M. & Tiedens, L. Z. (2012) The fluency of social hierarchy: The ease with which hierarchical relationships are seen, remembered, learned, and liked. *Journal of Personality and Social Psychology* 102(1):98–115. doi: 10.1037/a0025345. [JJZ]