

# Implications of the Protestant work ethic for cooperative and mixed-motive teams

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## Abstract

The investigation of teams and teamwork in cooperative (e.g., group brainstorming and team decision-making) and mixed-motive (e.g., negotiation) contexts has been carried out through a variety of lenses and disciplines. One lens that has not been used to rigorously theorize about and empirically investigate teams is that of ideologies. In this review, we juxtapose the study of a particular status-related ideology, the Protestant work ethic (PWE), in cooperative and mixed-motive contexts. We begin with an analysis of PWE, and then discuss 3 sets of empirical findings. In particular, we consider the association of PWE with (a) motivational orientations; (b) greater perceptions of personal control; and (c) justification of status differences. Given these associations, we theorize how PWE might affect cooperative and mixed-motive teamwork, suggesting that PWE will exert largely positive effects among cooperative teams, but will produce more varied effects among mixed-motive teams.

## Keywords

Groups/teams, job attitudes/beliefs/values, justice/fairness, motivation, power

The investigation of teams and teamwork has been carried out through a variety of lenses and disciplines. One lens that has not been used to rigorously investigate teams is that of ideologies, in particular, status ideologies, which are

systems of beliefs and values that explain existing status differences in society and prescribe how people can achieve high status within that society. We focus on the Protestant work ethic (PWE) as a status ideology that is

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pervasive and widely endorsed in many Western nations. In this review, we juxtapose the study of PWE with a critical look at two types of group environments/configurations: cooperative teams and mixed-motive negotiations.

We begin with an analysis of PWE. We follow this with a discussion of three sets of findings in the area of PWE. In particular, we consider how PWE is positively associated with: (a) motivational orientations such as achievement orientation, (b) higher perceptions of personal control, and (c) justification of status differences. For each set of findings, we theorize how PWE might relate to key outcomes and processes in cooperative and mixed-motive teamwork and the level of PWE that might optimize outcomes in each of these team environments. We speculate that PWE will largely function as a strength in cooperative teams and will, therefore, be associated with positive outcomes. However, we suggest that PWE in mixed-motive teams will also carry certain disadvantages. Thus, depending on the particular team situation or task, PWE may be associated with both positive and negative outcomes for mixed-motive teams.

### The protestant work ethic

Max Weber (1904–1905/1930), in *The Protestant Ethic and the Spirit of Capitalism*, was the first to coin the term Protestant ethic. His original argument was that within Reformed Protestantism, believers were driven to succeed at their work, or “calling,” because doing so demonstrated that they were among “God’s elect” and was evidence of an individual’s or group’s favored status. Contemporary psychological definitions commonly strip the term of these religious foundations and define PWE broadly “as a set or system of beliefs mainly, but not exclusively, concerning work” (Furnham, 1990, p. 33). PWE encompasses individuals’ beliefs about hard work and success, and their value of delay of gratification, asceticism, and antileisure (e.g., Christopher, Zabel, & Jones, 2008; Christopher, Zabel, Jones, & Marek,

2008). People who strongly endorse PWE believe that hard work is necessary for success, that there are negative consequences for not working hard, and that it is best to live life in an ascetic manner with little time spent on leisure.

### Measurement of PWE

A variety of self-report scales have been used to measure PWE (e.g., Blau & Ryan, 1997; Blood, 1969; Ho & Lloyd, 1984; Mirels & Garrett, 1971). The most commonly used scale is the Protestant Ethic Scale developed by Mirels and Garrett, which consists of 19 items. This scale indexes both the *belief* that hard work can lead to success and the *value* of an ascetic lifestyle and the denunciation of time spent in leisure. For example, items include: “Any man who is able and willing to work hard has a good chance of succeeding,” “People who fail at a job have usually not tried hard enough,” “Life would have very little meaning if we never had to suffer,” and “Our society would have fewer problems if people had less leisure time.”

PWE is most often studied as a single dimension. However, there is evidence that it might be more accurately conceptualized as consisting of multiple factors, which is consistent with Weber’s original thesis that PWE is a multidimensional construct. Recently developed scales such as Blau and Ryan’s Work Ethic Scale (1997) and Miller and colleagues Multidimensional Work Ethic Profile (Miller, Woehr, & Hudspeth, 2002), utilize scores on several subscales to index PWE. In addition, McHoskey (1994) factor analyzed the most commonly used PWE scale (Mirels & Garrett, 1971) and found four factors that he labeled as follows. The *success* factor is centered on the idea that people who are not successful did not work hard enough. The second factor, *asceticism* extols the benefits of a productive life, emphasizing self-denial and restraint. *Hard work*, the third factor, emphasizes the benefits of hard work and encompasses the idea that if an individual works hard he/she will be successful.

Finally, the *antileisure* factor is characterized by the dislike of leisure and relaxation and the belief that time spent on such activities is wasted.

In this review, we will primarily consider the overall concept of PWE, as consistent with the majority of the literature. However, we speculate that many of our theorized effects on cooperative and mixed-motive teams stem from the hard-work and success factors. Specifically, the effects related to motivation and persistence may be linked to the hard-work factor, the effects associated with justification of the status hierarchy may be linked to the success factor, and the effects associated with personal control and responsibility may be linked with both of these factors.

### *The role of PWE in society*

Importantly, PWE functions as a status ideology, that is, a system of beliefs and values that explains status differences between groups and individuals in a society and prescribes how status is gained within that society (Crandall, 1994; Jost, Burgess, & Mosso, 2001; Major, Kaiser, O'Brien, & McCoy, 2007). These ideologies are broadly known and often widely shared within a context (e.g., nation, region, ethnic group; Shweder, 1995). Like all status ideologies, PWE provides people with a sense of structure, the ability to predict their environments and ward off perceived threats, and helps them to maintain social relationships (Frey & Powell, 2005; Jost, Nosek, & Gosling, 2008; Levy, West, Ramirez, & Karafantis, 2006). Specifically, PWE implies that individuals' and groups' positions in the hierarchy are the result of their own hard work or lack thereof and are, therefore, deserved (e.g., Levin, Sidanius, Rabinowitz, & Federico, 1998; Major & O'Brien, 2005; McCoy & Major, 2007; Quinn & Crocker, 1999).

PWE and similar work ethics are widely distributed and highly prevalent in many Western societies (e.g., Giorgi & Marsh, 1990; Hayward & Kimmelmeier, 2011). For example,

responses to a European values survey revealed that a work ethic very similar to PWE exists in a variety of European countries and that endorsement of this ethic is associated with viewing work as a source of self-expression and self-fulfillment (Giorgi & Marsh, 1990). In addition, this work ethic is, on average, more strongly endorsed by people living in historically Protestant countries compared to those living in historically Catholic countries, but is only weakly related to individual piety among Protestants (Giorgi & Marsh, 1990; Hayward & Kimmelmeier, 2011). As a result of its prevalence, PWE would seem to exert a powerful influence on the behavior and outcomes of work teams in organizations in many Western societies.

It is also possible to relate PWE to cultural dimensions identified in previous work, such as those identified by Hofstede (1983). For example, believing in PWE provides justification for societal inequalities (i.e., status differences are the result of different amounts of hard work). As such, average levels of PWE endorsement may be higher in cultural contexts that are high in power distance. Additionally, the different factors of PWE aforementioned may show different relationships to cultural dimensions. For instance, Ghorpade, Lackritz, and Singh (2006) found that people who are high in individualism are more likely than those high in collectivism to endorse the success factor of PWE but not more likely to endorse the hardwork factor of PWE.

### **The meaning of team-level PWE**

At a team level of analysis, is it possible to conceptualize PWE in a variety of ways. Specifically, drawing on the typology developed by Klein and Kozlowski (2000), PWE can be either a shared property or a configural property. To the extent PWE is a value held by all team members to the same, or a very similar, degree, PWE would be a shared property amongst team members. In contrast, if it is held by some team members and not by others, or is held to different

degrees by various members, PWE would be a configural team property. As a configural property, PWE could reflect the lowest level of belief in PWE held by a team member, the highest level of belief in PWE held by a member, the variability of team members' beliefs, or some more complex combination of team members' beliefs.

In the present paper, we focus on PWE as a shared team property. Thus, in our theorizing and predictions, we are presuming relative homogeneity in team members' endorsement of PWE. High team PWE indicates that all team members endorse PWE and low PWE indicates that all team members do not endorse PWE. We have elected to take this focus for two reasons. First, we believe that homogeneity in PWE frequently occurs among teams as a result of a variety of factors and processes that often work to constrain variability in teams, including: sharing a larger organizational context, homogeneity in selection and self-selection into the team, and social interaction leading to shared mental models. Second, examining how a shared level of PWE endorsement impacts group processes and performance provides the necessary foundation upon which we can begin to build additional theoretical and empirical work on PWE in teams. Although an important topic for future research, a fully comprehensive discussion of the myriad forms team-level PWE takes and how each affects team outcomes is outside the scope of the current manuscript.

## Constructs related to PWE

Before launching into our discussion of PWE's implications for cooperative and mixed-motive teams, we would like to distinguish PWE from some sister constructs. In particular, we distinguish PWE from intrinsic versus extrinsic motivational orientation, personal efficacy and control, equity theory, and status-justifying ideologies (e.g., belief in a just world).<sup>1</sup>

Intrinsic versus extrinsic motivational orientation refers to the source of individuals' drive to perform a behavior. Those with an extrinsic orientation toward a given behavior are motivated to perform that behavior in order to either receive some reward or avoid punishment. In contrast, people with an intrinsic orientation toward a behavior are motivated to perform that behavior for its own sake—the source of motivation is in engaging in the behavior itself. It is possible to conceptualize people who strongly endorse PWE as holding an intrinsic motivation toward work. However, PWE is more than individuals' personal valuing of work. It is the strong value that *society* places on it. In addition, PWE also emphasizes the external rewards (e.g., success, higher status) that accompany hard work.

Theories of high perceptions of personal control or self-efficacy are also related to, but distinct from, PWE. People often believe that their life events are under their own personal control (i.e., they have an internal locus of control; Rotter, 1966). Similarly, people high in self-efficacy believe that they have the ability to enact a given behavior or produce a desired outcome (Bandura, 1977, 1997). In order for people to be motivated to pursue a goal, they must first hold sufficient self-efficacy and personal control beliefs. In fact, in Western contexts, people's perceptions of personal control are so strong that they "suffer" from the illusion of control, assuming that they have personal control over events when such control does not exist (Langer, 1975). Although PWE relies on and enhances individuals' perceptions of their own control or self-efficacy, it is distinct in that it speaks more broadly regarding the personal control that all people in society enjoy over their status. PWE is a system of beliefs about how the world works.

Equity theory, first proposed by Adams (1965), is the idea that people believe their inputs should be commensurate with their outcomes, as measured against the inputs and outcomes of others. When individuals perceive

inequity between their ratio of inputs to outcomes and others' ratios, they are motivated to resolve this by seeking additional outcomes, reducing their inputs, or demanding a change in others' ratios. In situations concerning work-related behaviors as inputs, equity theory predicts that individuals should be motivated to ensure the rewards they receive for their work are equitable with the rewards received by others. In contrast, PWE presumes that all people's hard work will lead to success. Although some degree of equity between input (i.e., work) and outcomes (i.e., success) might be implicit in PWE, motivation to work hard stems from the value inherent in work and from the belief that work is rewarded in society, not from the drive to maintain equity.

Finally, PWE also shares some overlap with other status-related ideologies that justify the status hierarchy. For example, in the United States, PWE is included in the conceptualization of the dominant ideology, which also consists of related status ideologies, including belief in a just world and belief in individual mobility (Kluegel & Smith, 1986; Major & O'Brien, 2005). Whereas these ideologies are often grouped together as all justifying the status quo, there are important differences between these ideologies in how they provide such justification (e.g., Lipkus, Dalbert, & Siegler, 1996). Belief in a just world emphasizes fairness and is the belief that one will reap the rewards or consequences consonant with one's behavior (e.g., "Good things happen to good people"). Belief in individual mobility, also known as permeability, emphasizes that gaining higher status is possible for all individuals (e.g., "Anyone can get ahead"). Neither of these status ideologies delineates *how* status is achieved, that is, what "good" behavior is or what actions lead to advancement. In contrast, PWE emphasizes that self-discipline and commitment to work will lead to success and higher status (e.g., "If you work hard you will succeed"). Thus, it not only explains why the status quo is just, but also stipulates how people and groups can move up or down the status hierarchy.

In summary, PWE shares some common arguments with the constructs of intrinsic motivation, personal control and efficacy, equity theory, and status-justifying ideologies. PWE is also distinct from these constructs in three important ways: (a) unlike many of the psychological constructs mentioned before, PWE is a more systemic construct shared by many in a given society; (b) unlike intrinsic motivation and personal control and efficacy, PWE encompasses a more chronic and global view towards work and life that individuals hold across situations and use to understand the behavior of others as well as themselves; and (c) relative to other status-justifying ideologies, PWE is more explicitly prescriptive, explaining how one's own and others' statuses can be improved (i.e., through hard work).

## **Cooperative and mixed-motive teams**

In the present paper, we consider the impact of PWE on cooperative teams and mixed-motive teams, given that organizational members are often party to both types of teams. These teams differ in the degree to which members see their goals or interests as aligned (e.g., Beersma et al., 2003). For the purpose of this review, we define a cooperative team as one that is composed of individuals who have a shared goal and aligned primary interests. Although team members may not realize that they share a similar goal, the essential condition is that they do not have opposing primary interests. Cooperative teams include creative teams who are committed to generating new and novel solutions and ideas, decision-making teams in which information may be distributed unevenly amongst team members, and problem-solving teams who have a shared goal of resolving an issue or finding a best answer. Examples in the existing literature include brainstorming teams, teams who have different but complementary information (such as a hidden-profile case), and teams attempting to solve a task that has a

demonstrable solution (such as a desert survival scenario).

We distinguish such cooperative teams from mixed-motive teams in which members have partially or completely conflicting interests and, therefore, have an incentive to both cooperate as well as compete. For example, in the classic prisoner's dilemma game, players are rationally better off by competing (i.e., defecting); however, if both parties compete, this results in a worse outcome than had both players trusted and cooperated with one another. Negotiating teams are also mixed-motive teams as members have different incentives and reward structures. In these teams, members do not have aligned interests and they are usually aware of the likely opposition of their goals.<sup>2</sup>

## **PWE and teamwork**

We speculate that there are three key features of PWE that have particular relevance for the study of cooperative and mixed-motive teams. Specifically, endorsement of PWE is associated with greater motivation and persistence, increased perceptions of personal control, and justification of status differences. In the next sections, we focus on these three aspects of PWE. We first examine motivation and persistence, focusing on how and when team members who endorse PWE will show greater intrinsic motivation and persistence and may be less influenced by the actions of their team members than those who do not. Second, we focus on the question of personal control. We describe how greater endorsement of PWE may lead team members to exaggerate the level and importance of their personal control. Third, we discuss PWE as an ideology that team members may use to explain status differences and examine how PWE may moderate the effects of hierarchy, diversity, and faultlines in cooperative and mixed-motive teams.

Overall, we suggest that these three features of PWE will exert largely positive main effects on outcomes among cooperative teams. Because

members are motivated, possess greater self-efficacy, and share an ideology, teams will be more task-focused, persistent, and cohesive. However, we expect PWE to produce more varied effects among mixed-motive teams, bolstering motivation and task-focus, but also increasing intrateam competitiveness and power struggles. We provide a summary of our predictions in these three areas in Tables 1, 2, and 3, respectively. We begin each of the following sections with an overview of the PWE research in that area and, subsequently, we speculate on the implications these findings may have for cooperative and mixed-motive teamwork.

## **Motivation and persistence**

Motivation and persistence has been a long-standing topic in both individual and group research. Motivation refers to the psychological processes that determine whether an individual will engage in a particular behavior and how intense and prolonged a given behavior will be (e.g., Bargh, Gollwitzer, & Oettingen, 2010). The question of what drives motivation and persistence has been a central concern in this work and several factors influence the degree to which people are motivated and persist in a given behavior (e.g., Bargh et al., 2010; Latham & Pinder, 2005). Some of the empirically tested drivers include individual-level factors (e.g., needs, personality, and values), contextual factors (e.g., national culture and job design), and an interaction of the two (e.g., person-organization fit). For example, the goal-setting literature emphasizes goals and aspirations as a key predictor of persistence and performance across a wide variety of tasks (Locke & Latham, 2002; Locke, Shaw, Saari, & Latham, 1981). Similarly, social psychologists, organizational theorists, and economists have preoccupied themselves with the question of social loafing or free-riding in teams where team members contribute less than they would if they were working alone, which leaves a minority of team members to carry out

**Table 1.** Motivation and persistence.

	<b>Influence of PWE</b>	<b>Optimal level of PWE</b>
<b>Cooperative teams</b>		
Social loafing	Teams are less likely to social loaf	High PWE
Social comparison	Team members less likely to be concerned with "sucker" effect	High PWE (particularly on the hard-work factor)
Absence of conflict	Teams may be more likely to engage in task-related conflict	High PWE
Depletion	Teams may be more likely to maintain high levels of task engagement	High PWE
Coordination loss	Unrelated to coordination loss	
<b>Mixed-motive teams</b>		
Discontinuity effect	Teams may be more sensitive to defection of other team	Low PWE (assuming defection is poor strategy)
Team negotiation effect	Teams may be more persistent, have higher goals, and process information more accurately	High PWE
Unmitigated communion effect	Negotiators may be less likely to be overly concerned with relationships, and more likely to ask questions and explore options, offers	High PWE

Note. PWE = Protestant work ethic.

a majority of the group's work (Latané, Williams, & Harkins, 1979).

As one might plausibly expect, PWE is positively associated with various traits and characteristics associated with motivation, including need for achievement (Furnham, 1987), measures of industriousness, ambitiousness, and intrinsic motivation (Furnham, 1990; Greenberg, 1978), and steady work rates and persistence (Eisenberger & Shank, 1985; Tang, 1990). For example, based on self-reported endorsement of PWE and Type A behavior, PWE is positively associated with the "hard-driving" dimension of Type A behavior (i.e., the motivation and achievement-oriented aspect; Furnham, 1990). In a study of people's attitudes towards commuting to work relative to engaging in work, Greenberg (1978) found that people who reported high levels of PWE preferred engaging in work over the commute,

whereas people who reported low PWE preferred the ride to work over actually working. In addition, people with high work ethic, as measured by the Survey of Work Values, were shown to work on an unsolvable task almost twice as long as people with low work ethic (Eisenberger & Shank, 1985). Interestingly, people with low work ethic who underwent "high effort" training in which they were rewarded for persistence at a difficult task also showed high levels of motivation, working on the unsolvable task as long as those with high work ethic.

Given these associations, it is perhaps not surprising that PWE is also related to actual performance differences. For example, Merrens and Garrett (1975) found that people who are high in PWE spent significantly more time working at a repetitive task and were significantly more productive than people low in

**Table 2.** Control and responsibility.

	<b>Influence of PWE</b>	<b>Optimal level of PWE</b>
<b>Cooperative teams</b>		
Risky choices	Teams may have higher aspirations and be more likely to engage in risk-taking	Varies as a function of desirability of risky option
Group efficacy	Teams may perceive greater group efficacy	High PWE
Responsibility for outcomes	Members may perceive more personal responsibility for group performance	High PWE
Interdependent task behavior	Members may want to maintain personal control	Low PWE
<b>Mixed-motive teams</b>		
Accountability and responsibility	Teams may feel high levels of accountability and responsibility leading to more aggressive behavior	Varies as a function of desirability of aggressive behavior
Power in negotiation	Negotiators may perceive greater personal control or influence	Varies as a function of size of zone of potential agreements
Perceptions in negotiation	Counterparts may perceive high PWE teams more negatively	Low PWE

Note. PWE = Protestant work ethic.

**Table 3.** Hierarchy and status differences.

	<b>Influence of PWE</b>	<b>Optimal level of PWE</b>
<b>Cooperative teams</b>		
Teams with a hierarchal structure	Members may be more comfortable with status differences, which will increase cooperation, coordination	High PWE
Teams with no established, clear hierarchy	Members may be more concerned with gaining status than task performance	Low PWE
Development of faultlines	PWE as a shared team property would be a dimension of similarity and reduce faultlines	High PWE
<b>Mixed-motive teams</b>		
Value-added tradeoffs	Teams may see issues in moral terms, leading to lower likelihood of tradeoffs	Low PWE

Note. PWE = Protestant work ethic.

PWE. In their investigation, people who scored either 1 standard deviation above or below the mean on PWE were asked to write "Xs" in circles using their nondominant hand and were

given 100 sheets containing 250 circles each. Participants who were high in PWE completed 1.5 more sheets than participants who were low in PWE. Poulton and Ng (1988) found similar

results in a field study examining college students' study habits. Greater endorsement of PWE was associated with more time spent on schoolwork and less time spent on leisure. In addition, people's performance over time and in response to feedback also varies as a function of their belief in PWE (Greenberg, 1977). People high in PWE showed high performance over three work periods regardless of whether they might receive a reward, indicating steady levels of high effort and intrinsic motivation. In contrast, people low in PWE showed declines in performance over three work periods and their performance was only high when they thought it might lead to a reward.

### *PWE and motivation in cooperative teams*

For cooperative teamwork, motivation is of paramount concern and lack of motivation (e.g., social loafing) is often at the root of faulty teamwork. Indeed, social loafing and free-riding, mentioned previously, are part of a broader class of threats to effective teamwork referred to as motivation loss (Steiner, 1972). Motivational losses have been documented on a wide variety of tasks including intellectual puzzles (Taylor & Faust, 1952), creativity tasks (Gibb, 1951), and perceptual judgment and complex reasoning tasks (Ziller, 1957).

Motivation loss in teams stems from a variety of factors (e.g., Karau & Williams, 1993; Latané et al., 1979). One cause is diffusion of responsibility such that people feel less accountable for a group task compared to one they perform individually. A reduced sense of self-efficacy, wherein people do not believe that their efforts will matter as much on a group task, also contributes to motivation loss. Another cause of motivation loss is known as "sucker aversion," which refers to the fact that people do not want to be duped by their groups into doing a majority of the work and not getting commensurate credit. Not surprisingly, scholars have examined a number of ways to minimize social loafing in teams. For example,

people who work on challenging tasks (Harkins & Petty, 1982), think they are more skilled than others in the group (Williams & Karau, 1991), are more identified with their group in terms of cohesion (Karau & Williams, 1997), or feel that their efforts will be monitored (Williams, Harkins, & Latané, 1981) are all less likely to loaf.

Recent research suggests that people who strongly endorse PWE are also less likely to engage in social loafing than those who report weaker endorsement (Smrt & Karau, 2011). Specifically, individuals who varied in the degree to which they endorsed PWE were asked to complete an idea generation task on which they worked either coactively or collectively. Those with low levels of PWE showed the usual social loafing tendency where they worked harder when completing the task coactively than collectively. In contrast, those who strongly endorsed PWE did not loaf, indicating high levels of motivation to work on group tasks.

The positive association of PWE with motivation on group tasks may be primarily due to one specific factor of PWE—the hard-work factor (i.e., that hard work leads to success). Abele and Diehl (2008) had participants complete a collective task with a partner, actually a confederate, in which only the pair's combined performance was scored. In the sucker-effect condition, the partner was portrayed as capable of contributing on the task, but did not do so; therefore, the participant was at risk of having his/her work on the task exploited. In the control condition, the partner was portrayed as less capable than the participant. Overall scores on the PWE scale were not associated with motivation; instead scores on the specific factors of PWE differentially predicted loss of motivation. Participants who highly endorsed the hard-work factor contributed to the collective task equally across these two conditions, regardless of whether they were vulnerable to being "a sucker." In contrast, participants who highly endorsed either an ethical factor (i.e.,

work is a moral value) or an equity factor (i.e., work is the basis for reward distribution) were unwilling to compensate for their partner's lack of effort, showing lower effort at the collective task in the sucker-effect condition relative to the control condition.

Many cooperative teams engage in idea generation and brainstorming as a central task. The somewhat paradoxical, but highly replicated result of studies of brainstorming is that teams are distinctly less creative than individuals (see Diehl & Stroebe, 1987). Motivation loss in teams may be one of the reasons for this performance difference. Studies of brainstorming have found that teams come up with over 75% of their ideas in the first 50% of the time they work together, suggesting that they become quickly depleted (Howard, Dekoninck, & Culley, 2010). This decline can be overcome when groups set high quantity goals, restate problem, and encourage those not making a contribution to engage (Paulus & Dzindolet, 1993; Paulus, Nakui, Putman, & Brown, 2006). As mentioned before, people high in PWE showed steady high performance over three work periods while those low in PWE showed declines in performance over these periods (Greenberg, 1977). Thus, teams with members high in PWE, may be less likely to become depleted.

Importantly, cooperative teams also suffer performance losses because of coordination problems. For instance, the finding that groups are less creative than individuals is explained by coordination losses as well as motivation losses. Groups whose members are high in PWE might be more task-focused, but this greater focus may not be sufficient to ward off coordination loss. Instead, to minimize coordination losses, groups may need to discuss how they work together or have actual experience working with one another. For example, in their studies of transactive memory, Liang, Moreland, and Argote (1995) found that groups who had trained together were more likely to perform well together because they developed a tacit

understanding of the task and members' skills. Therefore, we conjecture that the greatest benefits of PWE in producing increased team performance will emerge in the form of minimizing motivational loss rather than coordination loss.

Finally, another reason why some cooperative groups underperform is because they are reluctant to disagree with one another. Indeed, one of the biggest threats to cooperative teams is excessive like-mindedness or an absence of conflict, specifically the absence of task conflict. The conflict literature distinguishes task conflict from relationship conflict. Briefly, task conflict concerns disagreements about what work should be done; whereas relationship conflict emanates from personal grievances between group members (Jehn, 1995). Whereas relationship conflict is consistently associated with lower team performance, task conflict does not appear to have a detrimental effect and, some argue, may actually benefit teams (de Wit, Greer, & Jehn, 2012). The failure of team members to engage in task conflict by raising opposing viewpoints or challenging one another is a leading cause of faulty decision-making. We suggest that teams composed of members high in PWE may be more comfortable engaging in productive task conflict than teams who are low in PWE, who may instead be more concerned with maintaining positive relations. Indeed, individuals who are high in Protestant relational ideology, a construct similar to PWE, show less attention to relational concerns in work settings (Sanchez-Burkes, 2002).

### *PWE and motivation in mixed-motive teams*

Whereas motivation loss and coordination loss are two primary threats for the performance of cooperative teams, mixed-motive team environments present more complex issues. To consider how and why PWE may affect the outcomes observed in mixed-motive team environments, we focus on three rather robust outcomes in the

mixed-motive team research: the team discontinuity effect, the team negotiation effect, and the unmitigated communion effect.

Compared to individuals, teams behave in a more competitive fashion. Known as the *discontinuity effect*, the empirical observation is that teams are more likely to opt for competitive choices than are individuals (Cohen, Wildschut, & Insko, 2010; Insko et al., 1994). One plausible reason is diffusion of responsibility, such that team members do not feel as personally responsible for making competitive choices as individuals feel when they make their own decisions. Empirical research provides support for a “fear and greed” explanation, such that *interacting with* a group heightens concerns that the other side will act competitively, and that *acting as* a group heightens concerns of maximizing self-interest (Wildschut, Insko, & Pinter, 2007). Thus, the fear explanation argues that teams may defect (i.e., not cooperate with others) because they fear that others will exploit them. Conversely, the greed explanation argues that teams may defect because they are opportunistic. An initial comparison suggested that greed provides a more important motive for noncooperation in a social dilemma than fear. However, Bruins, Liebrand, and Wilke (1989) found that both fear and greed predict defection in team negotiation.

Given that fear and greed both reflect a concern with task outcomes, we theorize that teams who are high in PWE will be more sensitive to both than those low in PWE. Specifically, we suggest a nuanced prediction in terms of the costs versus benefits of PWE in team negotiation. On the one hand, due to the PWE prescription that success should result from work rather than exploitation of others, we expect that teams high in PWE may not display greed. On the other hand, teams with high PWE will be more concerned with success in a dilemma task and will not want to be exploited as unfairness in outcomes may be particularly aversive. Thus, we expect high PWE teams may make more self-interested choices than low

PWE teams only if the context leads the team to regard the other side as competitive.

The team negotiation effect refers to the empirical observation that holding constant the task and other factors, teams are better able to discover, craft, and implement mutually beneficial, “win-win” negotiation agreements as compared to individuals (Thompson, Peterson, & Brodt, 1996). On the surface, this effect seems to be the opposite of the discontinuity effect. However, the discontinuity effect involves how teams make decisions to either trust and cooperate versus distrust and compete, and the team negotiation effect concerns how teams are able to see the potential for mutual value creation. Specifically, teams form more accurate judgments about the other party’s interests, ask more relevant questions, and engage in heuristic trial and error. A key reason why teams engage in these behaviors and do better than individuals is that they are more persistent, have higher goals, and process information more accurately. For these reasons, we might expect that teams of negotiators high in PWE might be more likely to put in the cognitive work required to formulate accurate judgments.

Another finding in the mixed-motive literature on negotiations concerns the unmitigated communion effect, which is the fact that people feel anxious about relationships and this leads to excessive agreeableness and accommodation, even within populations of successful business executives (Amanatullah, Morris, & Curhan, 2008). For example, people who hold communal goals (Curhan, Elfenbein, & Kilduff, 2009; Curhan, Elfenbein, & Xu, 2006) and negotiate with friends (Fry, Firestone, & Williams, 1983; Valley, Neale, & Mannix, 1995) are more likely to reach suboptimal outcomes. In contrast, negotiators who have high aspirations are better positioned to perform well (Galinsky & Mussweiler, 2001; Galinsky, Mussweiler, & Medvec, 2002; Thompson, 1995). In negotiations in which both parties are high in unmitigated communion, they both

accommodate by making excessive concessions and paradoxically, this leads to worse collective outcomes than had negotiators pursued their economic goals (Amanatullah et al., 2008). We predict that negotiators who are high in PWE may be less likely to succumb to the unmitigated communion effect. Specifically, they may be better able to neatly avoid lose-lose outcomes in mixed-motive negotiation environments because they will be more task-focused and achievement-oriented, and more likely to ask questions, make offers, invite counteroffers, and explore options.

### **Personal control and responsibility**

Personal control, and the responsibility that follows from it, is another topic central to social psychologists and organizational theorists, which has been studied from a variety of perspectives. Encompassed under this umbrella is research demonstrating the consequences associated with seeing oneself as possessing control over one's environment and outcomes (e.g., Bandura, 1997; Rotter, 1966), the tendency for people to believe they have personal control over outcomes even when they do not (e.g., Langer, 1975), and the perception of personal control or "self-determination" as a fundamental psychological need (e.g., Deci & Ryan, 1985). The picture that emerges from this work is one in which actual or perceived control over oneself and one's outcomes is widely desired and beneficial for achievement and well-being (e.g., Bandura, 1997).

As mentioned before, having an internal locus of control, or perceiving personal control over one's life events and outcomes, is strongly related to PWE (e.g., MacDonald, 1972; Mirels & Garrett, 1971). People who highly endorse PWE are more likely to perceive that their own efforts and abilities, relative to external factors such as fate or luck, have largely determined their life outcomes (Feather, 1983; Waters, Bathis, & Waters, 1975). Endorsement of PWE

is also associated with the belief that others are responsible for their outcomes (e.g., Christopher & Schlenker, 2005; Furnham, 1990; MacDonald, 1972; Waters et al., 1975). For example, Christopher and Schlenker (2005) found that people who endorse PWE are more likely to hold a target person responsible for his/her outcomes in a variety of achievement-oriented situations (e.g., applying for a job or taking a college course). People who endorse PWE are also more susceptible to outcome bias, meaning they are likely to believe that individuals' outcomes correspond to some underlying personal characteristic, which further heightens perceptions of personal responsibility. Christopher and Jones (2004) examined this idea by having people high and low in PWE read vignettes describing either an affluent or a nonaffluent target person and then rate this person on a variety of traits. Compared to individuals low in belief in PWE, those who strongly believed in PWE rated the affluent (i.e., more successful) target person as possessing more positive personality characteristics than the nonaffluent target.

### *PWE and control in cooperative teams*

One type of cooperative teamwork involves decision-making, and in particular, decision-making under risk. As with individuals, groups have also been shown to be more risk-averse in the domain of gains and risk-seeking in the domain of losses (Milch, Weber, Appelt, Handgraaf, & Krantz, 2009). However, groups also tend to make more risk-seeking decisions than do individuals with respect to gambles versus sure things (Milch et al., 2009). How might PWE affect risky choice in teams? We speculate that PWE will increase risk-taking in teams, particularly if taking the risk will bring a team closer to meeting their ultimate goals.

Research has also found that some groups feel more efficacious than others (i.e., higher group efficacy, group potency, or collective efficacy) and this higher efficacy predicts persistence and performance (Guzzo, Yost,

Campbell, & Shea, 1993). A meta-analysis of 6,128 groups revealed that groups with higher collective efficacy performed better than groups with lower collective efficacy (Stajkovic, Lee, & Nyberg 2009). We predict that teams high in PWE might have higher collective efficacy, believing that their actions and behaviors will have desirable effects, which may help drive better performance.

The association of PWE with greater perceptions of personal control may also shape outcomes in cooperative teams because members will feel more responsible for team performance. Indeed, when group members perceive themselves to have control over and responsibility for the group's performance, they show motivation gains (e.g., Hertel, Kerr, & Messé, 2000; Williams & Karau, 1991). For example, high-ability individuals who find the group task important will work harder in their teams because they expect that without their input the group will fail (Williams & Karau, 1991). In addition, even low-ability team members also show motivation gains when group performance is mainly determined by the weakest member (i.e., the Köhler effect; Hertel et al., 2000). Given the association between PWE and personal control, teams with members who strongly endorse PWE may be more likely to show these motivational gains. Such gains would complement the overall high levels of motivation and persistence reviewed before.

The interdependent nature of teamwork is also paramount. Group members are often interdependent with each other and are forced to coordinate their behavior and to compromise to reach a group decision—both instances in which people must relinquish some forms of control. Given the connection between PWE and personal control, groups with high PWE may find some group work more frustrating and less desirable than individual work. Specifically, for groups whose members strongly endorse PWE, ceding some degree of control to others may be problematic and lead to lower intrinsic motivation and lower identification with the group.

### *PWE and control in mixed-motive environments*

Within the mixed-motive literature, the concept of control has been studied through two different lenses: one body of literature examining accountability and constituency pressure and a second, separate literature focusing on control, in terms of one's best alternative to a negotiated agreement. With regard to accountability and constituency pressure, these factors are used to instill self-interest in negotiators, making them focus more on their own gains. The general finding is that people who feel that they are accountable to a superior, constituency, or audience engage in more aggressive behavior at the bargaining table (Ben-Yoav & Pruitt, 1984; Carnevale, Pruitt, & Seilheimer, 1981). Individuals and groups who strongly endorse PWE may already hold high perceptions of personal or group control and responsibility. That is, even without external accountability, high PWE may be associated with a greater focus on success and more assertive behavior.

The research on control and negotiation has primarily been studied in terms of the attractiveness of a negotiator's outside options, where possessing attractive alternatives provides a negotiator with greater control or power in a negotiation. Given that strongly endorsing PWE is associated with increased perceptions of personal control, negotiators who endorse PWE may be more likely to hold out for attractive outcomes in negotiations. We theorize that the effect of this increased likelihood to hold out will vary as a function of the size of the bargaining zone, or zone of possible agreements (ZOPA). When the bargaining zone is large, negotiators may create a better outcome if they do not prematurely settle for a suboptimal outcome. If negotiators who are high in PWE are more likely to hold out for more attractive outcomes, then PWE will have beneficial effects in these situations by preventing a suboptimal outcome. However, when the bargaining zone is small, we predict that

PWE may have deleterious effects. Specifically, by holding out for more attractive outcomes negotiators may reject viable solutions and risk impasse.

In addition, negotiators who are high in PWE might be perceived more negatively than their negotiation counterparts. For example, Morris, Larrick, and Su (1999) found that when negotiators had highly attractive outside options to a negotiation, they were more likely to hold out for better terms. This “tough” behavior resulted in their partner drawing more negative conclusions about their personality, namely they were regarded as disagreeable, when in fact, they simply had better outcomes—an example of the fundamental attribution error (Ross, 1977). If negotiators high in PWE are likely to hold out, then they may also be perceived as disagreeable.

## Hierarchy and status differences

In all teams, organizations, and societies, there is some inequality in the amount of tangible and intangible goods that different members receive. Sets of shared beliefs, termed “status ideologies,” explain this inequality, prescribe rules for gaining higher status or resources, and frequently justify the status quo (Jost & Banaji, 1994; Major, 1994; Major & Schmader, 2001). Thus, status ideologies are both descriptive and prescriptive. On the one hand, they help individuals to make sense of their worlds, providing them with expectations and interpretations of their environments (Frey & Powell, 2005; Koltko-Rivera, 2004; Levy, Chiu, & Hong, 2006). On the other hand, they also provide guidelines for how a person’s status can be improved.

Because PWE holds people and groups responsible for their status, endorsement of PWE is also related to justification of status differences between individuals and groups (e.g., Levin et al., 1998; McCoy & Major, 2007; O’Brien & Major, 2005; Quinn & Crocker, 1999) and to more negative attitudes toward

lower status groups who are presumed to deserve their lower status (e.g., Biernat, Vescio, & Theno, 1996; Furnham, 1990; Heaven, 1990; Katz & Hass, 1988). For example, individuals who are high in PWE blame the unemployed for their lack of jobs (Furnham, 1982) and are more likely to oppose charity services such as a proposed homeless shelter (Somerman, 1993). Stronger belief in PWE is also associated with higher levels of benevolent and hostile sexism among both males and females (Christopher & Mull, 2006) and more negative attitudes toward the poor (MacDonald, 1972), homosexuals (Malcomson, Christopher, Franzen, & Keyes, 2006), and African Americans (among European Americans; Katz & Hass, 1988).

In fact, some have argued that groups and individuals that are high status bolster or promote beliefs like PWE as a seemingly principled way to maintain their favored position within the current status hierarchy (Jackman, 1994; Jackman & Muha, 1984; Jost & Hunyady, 2002). For example, Federico and Sidanius (2002) found that European Americans appeal to PWE as a basis for opposing affirmative action policies aimed at helping racial and ethnic minority groups.

## PWE and hierarchy in cooperative teams

Hierarchy exists within a group if members are ordered along a valued dimension, such that those who are higher in the hierarchy have greater status (i.e., respect, recognition, and prestige) than those who are lower in the hierarchy (Fiske, 2010). Differences in status are often, but not always, accompanied by differences in power (i.e., control over valued resources; Fiske, 2010; Magee & Galinsky, 2008). Recent work demonstrates that hierarchy and status differences within teams can be beneficial (e.g., Halevy, Chou, & Galinsky, 2011; Halevy, Chou, Galinsky, & Murnighan, 2012). We theorize that among hierarchically structured groups, having high PWE will be advantageous. As a status-justifying ideology,

PWE is associated with perceiving status differences as fair. Thus, we speculate that members of high PWE teams will be more likely to accept their status positions on the team, which will help to coordinate their work.

However, it is also possible that a team does not have a clear hierarchy. In these situations, team members—even in cooperative teams—may engage in an implicit battle for status and influence (e.g., Barchas & Fisek, 1984; Bendersky & Hays, 2012; Greer & van Kleef, 2010). This often occurs on a microlevel, through expressions and eye contact (Berger, Rosenholtz, & Zelditch, 1980; Mazur, 1985). We predict that this battle over status will be more likely in high PWE teams and will detract from team performance. This is consistent with literature showing that teams composed of members with a high sense of power and control are more likely to have conflicts and perform worse (e.g., Chattopadhyay, Finn, & Ashkanasy, 2010; Greer, Caruso, & Jehn, 2011; Groysberg, Polzer, & Elfenbein, 2011; Kwaadsteniet & van Dijk, 2010; Porath, Overbeck, & Pearson, 2008).

One dimension of teams that is associated with status differences is diversity, which we define as any attribute or characteristic that can be used to identify objective or subjective differences between people within a group, organization, or society (van Knippenberg & Schippers, 2007; Williams & O'Reilly, 1998). Dimensions of either perceived or actual difference between group members are not always accompanied by differences in status. For example, members may have attended different undergraduate universities, however, they may not be given respect or control on the basis of their alma maters.

Research on faultlines and diversity more generally reveals that it can have positive as well as negative effects (Kearney & Gebert, 2009; Kearney, Gebert, & Voelpel, 2009; Kooij-de Bode, van Knippenberg, & van Ginkel, 2008; Phillips & Loyd, 2006; Phillips, Mannix, Neale, & Gruenfeld, 2004; Phillips, Northcraft, &

Neale, 2006; Sawyer, Houlette, & Yeagley, 2006). For example, Phillips et al. (2004) found that diversity may be beneficial in the common information dilemma, but this may be limited to when there is a solo low-status member who possesses the unique information. Additionally, Sawyer et al. (2006) demonstrated that even with solo low-status members, information exchange is not always enhanced. Moreover, research on faultlines suggests that groups with faultlines may be more likely to make suboptimal decisions than homogeneous groups (Lau & Murnighan, 1998). A faultline exists when group members differ from one another in at least two ways that are correlated (e.g., a mixed-gender group in which the men are engineers and the women are HR managers).

Given our conceptualization of PWE as a shared value held by team members, we believe that high team PWE will help groups to benefit from member diversity. Specifically, people's level of endorsement of this ideology may be relatively visible so that shared belief in PWE might help to bridge faultlines or dampen their impact. Consider, for example, a work group in which the entry-level employees are generation Y and the middle- and upper managers are baby boomers. A faultline exists between generation and employee role. However, if all members of the work group share a high level of PWE endorsement, then this may help members avoid interpersonal conflict.

### *PWE and hierarchy in mixed-motive groups*

Success in mixed-motive negotiations often involves making tradeoffs (Thompson, 2011). When individuals are able to discover issues that one party cares more about than another party, a value-added tradeoff is possible. For example, suppose that a two-party negotiation contains the issues of price, payment terms, and quality. Although both parties care a lot about price, if one party is more concerned about payment terms and the other is more concerned about quality, then a value-added tradeoff is

possible in a settlement in which the first party gets the payment terms she desires and the second party gets the quality that is best for him.

However, such Pareto-optimal agreements require that negotiators have a largely economic view of issues and can make tradeoffs. Indeed, to the extent that parties regard issues as sacred, or nonfungible, this may preclude tradeoffs (Tetlock, Peterson, & Lerner, 1996). Parties who are high in PWE may have moral views of issues that go beyond mere economics, thus preventing value-added tradeoffs. For example, parties who strongly endorse PWE are likely to believe that people's outcomes should be commensurate with their inputs and will be averse to any situation in which groups' or individuals' outcomes are not equitable.

## **Conclusion**

We have examined how belief in the Protestant work ethic, or PWE, might affect the performance of cooperative and mixed-motive teams. Because PWE focuses on tasks, work, and outcomes, it is of paramount importance in the analysis of organizational teams and is distinct from constructs that may appear to be closely related, as we described before. The goal of our review was to generate theory-driven hypotheses about how PWE might affect the process and performance of organizational teams.

We focused on three key features of PWE that have particular relevance for the study of teams. Specifically, we examined the association of PWE and heightened motivation, perceptions of personal control, and justification of status differences. Across each of these, we theorized how PWE might relate to team processes and performance in both cooperative and mixed-motive settings (see Tables 1, 2, and 3, for overviews of these predictions). Overall, we suggest that PWE will have largely positive effects on outcomes for cooperative teams, but will produce more varied effects among mixed-motive teams. Among cooperative teams, those high in PWE will have members who are more

motivated, possess greater self-efficacy, and share an ideology that explains status differences as fair. Thus, members will be more task-focused, persistent, and cohesive. In contrast, among mixed-motive teams, PWE may have both positive and negative effects. High PWE may offer rewards in terms of higher team motivation and task focus. However, it may also convey drawbacks if high PWE teams behave too aggressively and or take unwise risks due to increased perceptions of personal control and greater focus on success and equity.

Importantly, the three key features of PWE are likely to interact with each other and with team characteristics to shape outcomes. Therefore, we expect that there are exceptions to our proposed main effects, which produce apparent contradictions in the positivity versus negativity of PWE's influence. For example, although cooperative teams largely benefit from high PWE, we expect boundary conditions exist. As we mention before, if the team context is such that members are asked to relinquish control, then PWE may be a liability as members may exhibit lower intrinsic motivation as a result of having their sense of control reduced. Similarly, if the team does not have a clear hierarchy, then PWE may lead to performance decrements as members are more focused on establishing a hierarchy than engaging in the group's work. Future theoretical and empirical work is needed to more fully understand these and other boundary conditions.

It is important to keep in mind three considerations. First, it is likely that people in groups will sometimes vary in how much they endorse PWE and that organizational cultures will also vary in how much they promote PWE. Team member differences in PWE might interact to produce deleterious or advantageous outcomes. Similarly, the degree to which the organizational culture promotes PWE may also interact with a team's level of PWE in shaping the performance of that work team. Second, in our review, we have tended to conceptualize PWE as a relatively stable individual difference

that expresses itself in teams. However, environmental and cognitive stimuli might temporarily activate, or suppress, PWE in individuals and groups. A final consideration is how PWE might evolve over time. Studies have suggested, for example, that people's chronic moods tend to grow more homogenous in groups as they interact over time, with more dominant, higher status members having more influence (Anderson & Thompson, 2004). Thus, future research may want to consider the dynamic development of PWE in organizational groups.

Given its prevalence in Western society, it is unremarkable that PWE has been the subject of much empirical and theoretical work in psychology. However, given the ubiquity of teams in organizations who collaborate on cooperative tasks as well as contend in mixed-motive situations when incentives are not perfectly aligned, it is remarkable how little is known about PWE in teams. In this article, we have used the extant theoretical and empirical work on cooperative and mixed-motive teams to derive some hypotheses about PWE in such groups. PWE may powerfully shape team processes and performance. Our hope is that this paper inspires future theoretical and empirical research on team PWE and lays the groundwork for a comprehensive understanding of the optimal level of PWE in organizational teams.

## Notes

1. No doubt there are other closely related constructs; this is not an exhaustive list.
2. We distinguish between cooperative and mixed-motive teams as the literature on negotiation and mixed-motive decision-making divides itself as such. However, this distinction is more one of tradition in the literature rather than a stark contrast.

## References

- Abele, S., & Diehl, M. (2008). Finding teammates who are not prone to sucker and free-rider effects: The Protestant work ethic as a moderator of motivation losses in group performance. *Group Processes & Intergroup Relations*, *11*(1), 39–54.
- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267–299). New York, NY: Academic Press.
- Amanatullah, E. T., Morris, M. W., & Curhan, J. R. (2008). Negotiators who give too much: Unmitigated communion, relational anxieties, and economic costs in distributive and integrative bargaining. *Journal of Personality and Social Psychology*, *95*, 723–738.
- Anderson, C., & Thompson, L. (2004). Affect from the top down: How powerful individuals' positive affect shapes negotiations. *Organizational Behavior & Human Decision Processes*, *95*(2), 125–139.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W.H. Freeman.
- Barchas, P. R., & Fisek, M. H. (1984). Hierarchical differentiation in newly formed groups of rhesus and humans. . In P. R. Barchas (Ed.), *Social hierarchies: Essays toward a sociophysiological perspective* (pp. 23–44). Westport, CT: Greenwood.
- Bargh, J. A., Gollwitzer, P. M., & Oettingen, G. (2010). Motivation. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 268–316). New York, NY: Wiley.
- Beersma, B., Hollenbeck, J. R., Humphrey, S. E., Moon, H., Conlon, D. E., & Ilgen, D. R. (2003). Cooperation, competition, and team performance: Toward a contingency approach. *Academy of Management Journal*, *46*, 572–590.
- Bendersky, C., & Hays, N. A. (2012). Status conflict in groups. *Organization Science*, *23*, 323–340.
- Ben-Yoav, O., & Pruitt, D. G. (1984). Accountability to constituents: A two-edged sword. *Organizational Behavior and Human Performance*, *34*, 282–295.
- Berger, J., Rosenholtz, S. J., & Zelditch, M. (1980). Status organizing processes. *Annual Review of Sociology*, *6*, 479–508.
- Biernat, M., Vescio, T. K., & Theno, S. A. (1996). Violating American values: A “value congruence”

- approach to understanding outgroup attitudes. *Journal of Experimental Social Psychology*, 32(4), 387–410.
- Blau, G., & Ryan, J. (1997). On measuring work ethic: A neglected work commitment facet. *Journal of Vocational Behavior*, 51(3), 435–448.
- Blood, M. (1969). Work values and job satisfaction. *Journal of Applied Psychology*, 53(6), 456–459.
- Bruins, J. J., Liebrand, W. B., & Wilke, H. A. (1989). About the salience of fear and greed in social dilemmas. *European Journal of Social Psychology*, 19, 155–161.
- Carnevale, P., Pruitt, D. G., & Seilheimer, S. D. (1981). Looking and competing: Accountability and visual access in integrative bargaining. *Journal of Personality and Social Psychology*, 40(1), 111–120.
- Chattopadhyay, P., Finn, C. P., & Ashkanasy, N. M. (2010). Affective responses to professional dissimilarity: A matter of status. *Academy of Management Journal*, 53, 808–826.
- Christopher, A. N., & Jones, J. R. (2004). Affluence clues and first impressions: The moderating impact of the Protestant work ethic. *Journal of Economic Psychology*, 25(2), 279–292.
- Christopher, A. N., & Mull, M. S. (2006). Conservative ideology and ambivalent sexism. *Psychology of Women Quarterly*, 30(2), 223–230.
- Christopher, A. N., & Schlenker, B. R. (2005). The Protestant work ethic and attributions of responsibility: Applications of the triangle model. *Journal of Applied Social Psychology*, 35(7), 1502–1515.
- Cohen, T. R., Wildschut, T., & Insko, C. A. (2010). How communication increases interpersonal cooperation in mixed-motive situations. *Journal of Experimental Social Psychology*, 46(1), 39–50.
- Crandall, C. S. (1994). Prejudice against fat people: Ideology and self-interest. *Journal of Personality and Social Psychology*, 66(5), 882–894.
- Curhan, J. R., Elfenbein, H. A., & Kilduff, G. J. (2009). Getting off on the right foot: Subjective value versus economic value in predicting longitudinal job outcomes from job offer negotiations. *Journal of Applied Psychology*, 94(2), 524–534.
- Curhan, J. R., Elfenbein, H. A., & Xu, H. (2006). What do people value when they negotiate? Mapping the domain of subjective value in negotiation. *Journal of Personality and Social Psychology*, 91(3), 493–512.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.
- De Wit, F. R. C., Greer, L. L., & Jehn, K. A. (2012). The paradox of intergroup conflict: A meta-analysis. *Journal of Applied Psychology*, 97(2), 360–390.
- Diehl, M., & Stroebe, W. (1987). Productivity loss in brainstorming groups: Toward the solution of a riddle. *Journal of Personality and Social Psychology*, 53(3), 497–509.
- Eisenberger, R., & Shank, D. M. (1985). Personal work ethic and effort training affect cheating. *Journal of Personality and Social Psychology*, 49(2), 520–528.
- Feather, N. T. (1983). Some correlates of attributional style: Depressive symptoms, self-esteem, and Protestant ethic values. *Personality and Social Psychology Bulletin*, 9(1), 125–135.
- Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 941–982). New York, NY: John Wiley & Sons.
- Federico, C. M., & Sidanius, J. (2002). Racism, ideology, and affirmative action revisited: The antecedents and consequences of “principled objections” to affirmative action. *Journal of Personality and Social Psychology*, 82(4), 488–502.
- Frey, R., & Powell, L. (2005). Beyond left–right ideology in the study of justice perceptions: Interdependent and independent distributive worldviews in Jamaica and New Zealand. *Journal of Cross-Cultural Psychology*, 36(1), 117–146.
- Fry, W. R., Firestone, I. J., & Williams, D. L. (1983). Negotiation process and outcome of stranger dyads and dating couples. Do lovers lose? *Basic and Applied Social Psychology*, 4, 1–16.
- Furnham, A. (1982). The Protestant work ethic and attitudes towards unemployment. *Journal of Occupational Psychology*, 55, 277–286.
- Furnham, A. (1987). Predicting Protestant work ethic beliefs. *European Journal of Personality*, 1, 93–106.

- Furnham, A. (1990). *The Protestant work ethic: The psychology of work beliefs and values*. London, UK: Routledge.
- Galinsky, A. D., & Mussweiler, T. (2001). First offers as anchors: The role of perspective-taking and negotiator focus. *Journal of Personality and Social Psychology, 81*(4), 657–659.
- Galinsky, A. D., Mussweiler, T., & Medvec, V. H. (2002). Disconnecting outcomes and evaluations: The role of negotiator focus. *Journal of Personality and Social Psychology, 83*(5), 1131–1140.
- Ghorpade, J., Lackritz, J., & Singh, G. (2006). Correlates of the Protestant ethic of hard work: Results of a diverse ethno-religious sample. *Journal of Applied Social Psychology, 36*(10), 2449–2473.
- Gibb, J. R. (1951). The effects of group size and of threat reduction upon creativity in a problem solving group. *American Psychologist, 6*, 324.
- Giorgi, L., & Marsh, C. (1990). The Protestant work ethic as a cultural phenomenon. *European Journal of Social Psychology, 20*, 499–517.
- Greenberg, J. (1977). The Protestant work ethic and reactions to negative performance evaluations on a laboratory task. *Journal of Applied Psychology, 62*, 682–690.
- Greenberg, J. (1978). Equity, equality, and the Protestant ethic: Allocating rewards following fair and unfair competition. *Journal of Experimental Social Psychology, 14*, 217–226.
- Greer, L. L., Caruso, H. M., & Jehn, K. A. (2011). The bigger they are, the harder they fall: Linking team power, conflict, congruence, and team performance. *Organizational Behavior and Human Decision Processes, 116*, 116–128.
- Greer, L. L., & van Kleef, G. A. (2010). Equality versus differentiation: The effects of power dispersion on social interaction. *Journal of Applied Psychology, 95*, 1032–1044.
- Groysberg, B., Polzer, J. T., & Elfenbein, H. (2011). Too many cooks spoil the broth: How high-status individuals decrease group effectiveness. *Organization Science, 22*, 722–737.
- Guzzo, R. A., Yost, P. R., Campbell, R. J., & Shea, G. P. (1993). Potency in groups: Articulating a construct. *British Journal of Social Psychology, 32*(1), 87–106.
- Halevy, 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*, 32–52.
- Halevy, N., Chou, E., Galinsky, A., & Murnighan, J. K. (2012). When hierarchy wins: Evidence from the National Basketball Association. *Social Psychological and Personality Science, 3*, 398–406.
- Harkins, S. G., & Petty, R. E. (1982). Effects of task difficulty and task uniqueness on social loafing. *Journal of Personality and Social Psychology, 43*(6), 1214–1229.
- Hayward, R. D., & Kimmelmeier, M. (2011). Weber revisited: A cross-national analysis of religiosity, religious culture, and economic attitudes. *Journal of Cross-Cultural Psychology, 42*, 1406–1420.
- Heaven, P. C. L. (1990). Human values and suggestions for reducing unemployment. *British Journal of Social Psychology, 29*, 257–264.
- Hertel, G., Kerr, N. L., & Messé, L. A. (2000). Motivation gains in performance groups: Paradigmatic and theoretical developments on the Köhler effect. *Journal of Personality and Social Psychology, 79*(4), 580–601.
- Ho, R., & Lloyd, J. I. (1984). Development of an Australian work ethic scale. *Australian Psychologist, 19*(3), 321–332.
- Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management & Organization, 13*(1–2), 46–74.
- Howard, T., Dekoninck, E., & Culley, S. (2010). The use of creative stimuli at early stages of industrial product design. *Research in Engineering Design, 21*(4), 263–274.
- Insko, C. A., Shopler, J., Graetz, K. A., Drigotas, S. M., Currey, D. P., Smith, S. L., . . . Bornstein, G. (1994). Interindividual–intergroup discontinuity in the prisoner’s dilemma game. *Journal of Conflict Resolution, 38*(1), 87–116.
- Jackman, M. R. (1994). *The velvet glove: Paternalism and conflict in gender, class, and race relations*. Berkeley: University of California Press.

- Jackman, M. R., & Muha, M. J. (1984). Education and intergroup attitudes: Moral enlightenment, superficial democratic commitment, or ideological refinement. *American Sociological Review*, 49(6), 751–769.
- Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 40(2), 256–282.
- Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology*, 33, 1–27.
- Jost, J. T., Burgess, D., & Mosso, C. (2001). Conflicts of legitimation among self, group, and system: The integrative potential of system justification theory. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (pp. 363–388). New York, NY: Cambridge University Press.
- Jost, J. T., & Hunyady, O. (2002). The psychology of system justification and the palliative function of ideology. *European Review of Social Psychology*, 13, 111–153.
- Jost, J. T., Nosek, B. A., & Gosling, S. D. (2008). Ideology: Its resurgence in social, personality, and political psychology. *Perspectives of Psychological Science*, 3, 126–136.
- Karau, S. J., & Williams, K. D. (1993). Social loafing: A meta-analytic review and theoretical integration. *Journal of Personality and Social Psychology*, 65, 681–706.
- Karau, S. J., & Williams, K. D. (1997). The effects of group cohesiveness on social loafing and social compensation. *Group Dynamics: Theory, Research, and Practice*, 1(2), 156–168.
- Katz, I., & Haas, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology*, 55(6), 893–905.
- Kearney, E., & Gebert, D. (2009). Managing diversity and enhancing team performance: The promise of transformational leadership. *Journal of Applied Psychology*, 94, 77–89.
- Kearney, E., Gebert, D., & Voelpel, S. (2009). When and how diversity benefits teams: The importance of team members' need for cognition. *Academy of Management Journal*, 52, 581–598.
- Klein, K. J., & Kozlowski, S. W. (2000). From micro to meso: Critical steps in conceptualizing and conducting multilevel research. *Organizational Research Methods*, 3, 211–236.
- Kluegel, J. R., & Smith, E. R. (1986). *Beliefs about inequality: Americans' views of what is and what ought to be*. New York, NY: Aldine de Gruyter.
- Koltko-Rivera, M. E. (2004). The psychology of worldviews. *Review of General Psychology*, 8(1), 3–58.
- Kooij-de Bode, H. J. M., van Knippenberg, D., & van Ginkel, W. P. (2008). Ethnic diversity and distributed information in group decision making: The importance of information elaboration. *Group Dynamics*, 12, 307–320.
- Kwaadsteniet, E. W., & van Dijk, E. (2010). Social status as a cue for tacit coordination. *Journal of Experimental Social Psychology*, 46, 515–524.
- Langer, E. J. (1975). The illusion of control. *Journal of Personality and Social Psychology*, 32(2), 311–328.
- Latané, B., Williams, K., & Harkins, S. (1979). Many hands make the light work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology*, 37, 822–832.
- Latham, G. P., & Pinder, C. C. (2005). Work motivation theory and research at the dawn of the twenty-first century. *Annual Review of Psychology*, 56, 485–516.
- Lau, D. C., & Murnighan, J. K. (1998). Demographic diversity and faultlines: The compositional dynamics of organizational groups. *Academy of Management Review*, 23(2), 325–340.
- Levin, S., Sidanius, J., Rabinowitz, J. L., & Federico, C. (1998). Ethnic identity, legitimizing ideologies, and social status: A matter of ideological asymmetry. *Political Psychology*, 19(2), 373–404.
- Levy, S. R., Chiu, C.-Y., & Hong, Y.-Y. (2006). Lay theories and intergroup relations. *Group Processes & Intergroup Relations*, 9(1), 5–24.
- Levy, S. R., West, T. L., Ramirez, L., & Karafantis, D. M. (2006). The Protestant work ethic: A lay theory with dual intergroup implications. *Group Processes & Intergroup Relations*, 9(1), 95–115.

- Liang, D. W., Moreland, R. L., & Argote, L. (1995). Group versus individual training and group performance: The mediating role of transactive memory. *Personality and Social Psychology Bulletin*, 21(4), 384–393.
- Lipkus, I. M., Dalbert, C., & Siegler, I. C. (1996). The importance of distinguishing the belief in a just world for self versus for others: Implications for psychological well-being. *Personality and Social Psychology Bulletin*, 22(7), 666–677.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705–717.
- Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance: 1969–1980. *Psychological Bulletin*, 90(1), 125–152.
- MacDonald, A. (1972). More on the Protestant ethic. *Journal of Consulting and Clinical Psychology*, 39(1), 116–122.
- Magee, J. C., & Galinsky, A. D. (2008). 8 social hierarchy: The self-reinforcing nature of power and status. *The Academy of Management Annals*, 2(1), 351–398.
- Major, B. (1994). From social inequality to personal entitlement: The role of social comparisons, legitimacy appraisals, and group membership. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 26, pp. 293–355). Beverly Hills, CA: Sage.
- Major, B., Kaiser, C. R., O'Brien, L. T., & McCoy, S. K. (2007). Perceived discrimination as worldview threat or worldview confirmation: Implications for self-esteem. *Journal of Personality and Social Psychology*, 92(6), 1068–1086.
- Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56, 393–421.
- Major, B., & Schmader, T. (2001). Legitimacy and construal of social disadvantage. In J. Jost & B. Major (Eds.), *Psychology of legitimacy: Emerging perspectives on ideology, justice and intergroup relations* (pp. 176–204). Cambridge, UK: Cambridge University Press.
- Malcomson, K. M., Christopher, A. N., Franzen, T., & Keyes, B. J. (2006). The Protestant work ethic, religious beliefs and homonegative attitudes. *Mental Health, Religion & Culture*, 9(5), 435–447.
- Mazur, A. (1985). A biosocial model of status in face-to-face primate groups. *Social Forces*, 64(2), 377–402.
- McCoy, S. K., & Major, B. (2007). Priming meritocracy and the psychological justification of inequality. *Journal of Experimental Social Psychology*, 43(3), 341–351.
- McHoskey, J. W. (1994). Factor structure of the Protestant work ethic scale. *Personality and Individual Differences*, 17(1), 49–52.
- Merrens, M. R., & Garrett, J. B. (1975). The Protestant ethic scale as a predictor of repetitive work performance. *Journal of Applied Psychology*, 60(1), 125–127.
- Milch, K. F., Weber, E. U., Appelt, K. C., Handgraaf, M. J. J., & Krantz, D. H. (2009). From individual preference construction to group decisions: Framing effects and group processes. *Organizational Behavior and Human Decision Processes*, 108(2), 242–255.
- Miller, M. J., Woehr, D. J., & Hudspeth, N. (2002). The meaning and measurement of work ethic: Construction and initial validation of a multidimensional inventory. *Journal of Vocational Behavior*, 60(3), 451–489.
- Mirels, H., & Garrett, J. (1971). Protestant ethic and a personality variable. *Journal of Consulting and Clinical Psychology*, 36(1), 40–44.
- Morris, M. W., Larrick, R. P., & Su, S. K. (1999). Misperceiving negotiation counterparts: When situationally determined bargaining behaviors are attributed to personality traits. *Journal of Personality and Social Psychology*, 77(1), 52–67.
- Paulus, P. B., & Dzindolet, M. T. (1993). Social influence processes in group brainstorming. *Journal of Personality and Social Psychology*, 64(4), 575–586.
- Paulus, P. B., Nakui, T., Putman, V. L., & Brown, V. R. (2006). Effects of task instructions and brief breaks on brainstorming. *Group Dynamics: Theory, Research, and Practice*, 10(3), 206–219.
- Phillips, K. W., & Loyd, D. L. (2006). When surface and deep-level diversity collide: The effects on dissenting group members. *Organizational Behavior and Human Decision Processes*, 99(2), 143–160.

- Phillips, K. W., Mannix, E. A., Neale, M. A., & Gruenfeld, D. H. (2004). Diverse groups and information sharing: The effects of congruent ties. *Journal of Experimental Social Psychology, 40*(4), 497–510.
- Phillips, K. W., Northcraft, G., & Neale, M. (2006). Surface-level diversity and decision making in groups: When does deep-level similarity help? *Group Processes and Intergroup Relations, 9*, 467–482.
- Porath, C. L., Overbeck, J. R., & Pearson, C. M. (2008). Picking up the gauntlet: How individuals respond to status challenges. *Journal of Applied Social Psychology, 38*, 1945–1980.
- Poulton, R. G., & Ng, S. H. (1988). Relationships between Protestant work ethic and work effort in a field setting. *Applied Psychology: An International Review, 37*(3), 227–233.
- Quinn, D. M., & Crocker, J. (1999). When ideology hurts: Effects of belief in the Protestant ethic and feeling overweight on the psychological well-being of women. *Journal of Personality and Social Psychology, 77*(2), 402–414.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 173–220). New York, NY: Academic Press.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monograph, 609*, 1–28.
- Sanchez-Burkes, J. (2002). Protestant relational ideology and (in)attention to relational cues in work settings. *Journal of Personality and Social Psychology, 83*, 919–929.
- Sawyer, J. E., Houlette, M. A., & Yeagley, E. L. (2006). Decision performance and diversity structure: Comparing faultlines in convergent, crosscut, and racially homogeneous groups. *Organizational Behavior and Human Decision Processes, 99*(1), 1–15.
- Shweder, R. A. (1995). The confessions of a methodological individualist. *Culture and Psychology, 1*, 115–122.
- Smrt, D. L., & Karau, S. J. (2011). Protestant work ethic moderates social loafing. *Group Dynamics: Theory, Research, and Practice, 15*(3), 267–274.
- Somerman, F. B. (1993). Value, attitude, and belief determinants of willingness to accept a facility for the homeless. *Journal of Social Distress and the Homeless, 2*(3), 177–192.
- Stajkovic, A. D., Lee, D., & Nyberg, A. J. (2009). Collective efficacy, group potency, and group performance: Meta-analyses of their relationships, and test of a mediation model. *Journal of Applied Psychology, 94*(3), 814–828.
- Steiner, I. D. (1972). *Group process and productivity*. New York, NY: Academic Press.
- Tang, T. L.-P. (1990). Factors affecting intrinsic motivation among university students in Taiwan. *The Journal of Social Psychology, 130*(2), 219–230.
- Taylor, D. W., & Faust, W. L. (1952). Twenty questions: Efficiency in problem solving as a function of size in group. *Journal of Experimental Psychology, 44*, 360–368.
- Tetlock, P. E., Peterson, R. S., & Lerner, J. S. (1996). Revising the value pluralism model: Incorporating social content and context postulates. In C. Seligman, J. M. Olson, & M. P. Zanna (Eds.), *The psychology of values: The Ontario symposium* (Vol. 8, pp. 25–51). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Thompson, L. (1995). The impact of minimum goals and aspirations on judgments of success in negotiations. *Group Decision and Negotiation, 4*(6), 531–524.
- Thompson, L. (2011). *Making the team* (4th ed.). Upper Saddle River, NJ: Pearson.
- Thompson, L., Peterson, E., & Brodt, S. E. (1996). Team negotiation: An examination of integrative and distributive bargaining. *Journal of Personality and Social Psychology, 70*(1), 66–79.
- Valley, K. L., Neale, M. A., & Mannix, E. A. (1995). Friends, lovers, colleagues, strangers: The effects of relationships on the process and outcome of dyadic negotiations. *Research on Negotiation in Organizations, 5*, 65–94.
- Van Knippenberg, D., & Schippers, M. C. (2007). Work group diversity. *Annual Review of Psychology, 58*, 515–541.
- Waters, L., Bathis, N., & Waters, C. (1975). Protestant ethic attitudes among college students. *Educational and Psychological Measurement, 35*, 447–450.

- Weber, M. (1930). *The Protestant ethic and the spirit of capitalism* (T. Parsons, Trans.). New York, NY: Scribner/Simon & Schuster. (Original work published 1904–1905).
- Wildschut, T., Insko, C. A., & Pinter, B. (2007). Interindividual–intergroup discontinuity as a joint function of acting as a group and interacting with a group. *European Journal of Social Psychology, 37*, 390–399.
- Williams, K. D., Harkins, S., & Latané, B. (1981). Identifiability as a deterrent to social loafing: Two cheering experiments. *Journal of Personality and Social Psychology, 40*, 303–311.
- Williams, K. D., & Karau, S. J. (1991). Social loafing and social compensation: The effects of expectations of co-worker performance. *Journal of Personality and Social Psychology, 61*, 570–581.
- Williams, K. Y., & O'Reilly, C. A. (1998). Demography and diversity in organizations: A review of 40 years of research. *Research in Organizational Behavior, 20*, 77–140.
- Christopher, A. N., Zabel, K. L., & Jones, J. R. (2008). Conscientiousness and work ethic ideology: A facet-level analysis. *Journal of Individual Differences, 29*(4), 189–198.
- Christopher, A. N., Zabel, K. L., Jones, J. R., & Marek, P. (2008). Protestant ethic ideology: Its multifaceted relationships with just world beliefs, social dominance orientation, and right wing authoritarianism. *Personality and Individual Differences, 45*, 473–477.
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