

## Motivating underdogs and favorites

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### ABSTRACT

A core question for managers and leaders is how to motivate individuals in intergroup competitions. We examine how an individual's effort is affected by whether one's group is considered the *underdog* or the *favorite* and the content of the motivational appeal they receive. Specifically, we first propose and test whether underdogs and favorites enter intergroup competitions with different motivational orientations (Study 1). We then demonstrate that motivational appeals that match these orientations lead to greater effort than appeals which do not (Studies 2–4), with goal commitment mediating this effect (Study 5). Finally, we present a meta-analytic integration of the findings, along with a discussion of the theoretical and managerial implications for individual effort in intergroup competitions.

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## 1. Introduction

Within the context of impending competitions, leaders often try to 'rally the troops' and motivate members to help their group succeed. Whether it takes the form of a coach giving an impassioned locker room speech before a game, a campaign manager asking for support to help a candidate in an election, or a CEO urging employees to give extra effort to combat fierce market competition, attempts to increase members' effort to help their group, organization, political party, etc. succeed are a natural feature of competitive contexts.

When groups face off in direct competition, there are often expectations about who will win and who will lose. These expectations can be based on a variety of factors, including formal rankings based on experts' judgment (e.g., NCAA basketball playoff brackets), who is predicted to win based on popular opinion (e.g., polling data in elections), prior outcomes (e.g., who won last time), or simply obvious differences in ability or resources. The terms *underdog* and *favorite* have been used in a number of social science disciplines to describe such instances of clear competitive expectations. Common among them is a general definition of underdogs as those who are expected to lose, whereas favorites are expected to win (Kim et al., 2008; Paul & Weinbach, 2005; Simon, 1954).

Given that intergroup competitions often involve clear performance expectations—and thus an underdog and favorite—could leaders use the expectations that are embedded in these terms to elicit behaviors to help their groups succeed? That is, might certain motivational appeals be more effective in pushing people to work hard depending on whether their group is considered the underdog or the favorite? In this research we propose that members of underdog and favorite groups experience different motivational orientations, and argue that the efficacy of leaders' motivational appeals will depend on whether such messages are congruent with their group's standing (i.e., whether their group is the underdog or favorite).

We test this general prediction across multiple studies which examine (1) the motivational orientations of underdogs and favorites and (2) how appeals can be tailored to match these orientations and thus better elicit effortful behaviors which can help their group succeed. Doing so provides several important theoretical and applied contributions. Theoretically, this research offers initial insights into the psychology of being an underdog versus favorite and contributes to research on the situational factors that can affect individual effort in competitive intergroup contexts. From an applied perspective, we offer a clear and potent takeaway for leaders and supervisors who manage groups considered to be underdogs or favorites—specifically, a simple shift in the

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motivational appeal one presents to a group prior to competition can affect individuals' effort.<sup>1</sup>

### 1.1. Individual effort in intergroup competition

It is well established that people want their group to compare favorably relative to others (Tajfel & Turner, 1986). As such, settings that promote performance comparisons between groups are argued to create 'social competition' (Turner, 1975), where people place increased value on helping their group perform well (Ellemers, de Gilder, & Haslam, 2004). One of the core tenets of the collective effort model (Karau & Williams, 2001) is that the more value people attach to their group performing well, the harder they will work. Therefore, performance comparisons between groups increase effortful behaviors aimed at helping the group perform well (e.g., Bornstein & Erev, 1997; James & Greenberg, 1989; Lount & Phillips, 2007; Ouwerkerk, de Gilder, & de Vries, 2000; Worchel, Rothgerber, Day, Hart, & Butemeyer, 1998), with this motivation being further enhanced when the comparison is part of an explicit competition (Erev, Bornstein, & Galili, 1993; Kistruck, Lount, Smith, Bergman, & Moss, 2016; Tauer & Harackiewicz, 2004; Wittchen, van Dick, & Hertel, 2011).

However, not all intergroup settings are created equal, and thus their impact on group members' effort can be affected by relational features between competing groups (e.g., Kilduff, Elfenbein, & Staw, 2010; Kistruck et al., 2016; Pettit & Lount, 2010). For instance, the nature of competition can be affected by prior history with the out-group. Kilduff et al. (2010) analysis of NCAA basketball teams showed that teams put forth more effortful-behaviors when competing against a rival in comparison to non-rival opponent. Further, Pettit and Lount (2010) found that students' effort when representing their school in an inter-university competition was affected by differences in the relative prestige between universities.

Consistent with the growing recognition that relational differences between groups can affect a person's cognition and behavior, we consider how the standing of one's group in terms of explicit performance expectations—i.e., underdog versus favorite—may differentially affect group members' concerns about the impending competition. Specifically, we develop theory on the underlying psychology of underdogs and favorites and use this to build predictions for how and why the efficacy of motivational appeals depends on whether the content of the appeal matches the underlying concerns of underdogs and favorites.

### 1.2. Underdog and favorite groups

For how common the terms underdog and favorite are to the vocabulary of intergroup competition, little is known about how these explicit expectations influence effortful behaviors by members of these competing groups. This is likely due, in part, to the fact that researchers have typically examined third parties' expectations of, and responses to, underdogs and favorites (Gibson, Sachau, Doll, & Shumate, 2002; Paharia, Keinan, Avery, & Schor, 2011; Simon, 1954), rather than considering the experience of underdogs and favorites themselves. For example, people are more likely to root for and support underdogs than favorites (Kim et al., 2008), perhaps out of a desire to see them win. Yet, at the same time, analyses of gambling behavior in sports shows a bias in favor of 'over betting' on the favorite (Paul & Weinbach, 2005), perhaps because people feel it is safe to assume the favorite will not 'let them down.'

Although not directly focused on underdogs and favorites, some work has examined how providing relative performance feedback—which could inform performance expectations—can shape group members' reactions to an upcoming comparison. Namely, learning that one's group performed better or worse as compared to another group can alter group member's physiological (Scheepers & Ellemers, 2005) and attitudinal reactions going into another performance comparison (Ouwerkerk & Ellemers, 2002). Implicit in the above is that group members' awareness of expectations surrounding an impending performance comparison can affect how they approach this intergroup setting.

### 1.3. The psychology of underdogs and favorites

Although it has become a taken-for-granted assumption that people have a strong desire to come out on top in competitive contexts, individuals can still approach such settings with different orientations, motivations, and goals (Scheepers & Ellemers, 2005; Ten Velden, Beersma, & De Dreu, 2009). We contend that favorites and underdogs approach intergroup competitions with different motivational orientations which begin with the differing expectations that are held for each. Indeed, the labels underdog and favorite are laden with the very expectations they describe (i.e., to lose and to win respectively) and it is well established that people are sensitive to, and often internalize, the expectations that others hold for them (Oz & Eden, 1994; Rosenthal & Jacobson, 1968; Steele & Aronson, 1995).

By definition, favorites are expected to win (Gibson et al., 2002). As such, favorites have little to gain by winning but much to lose if they are outperformed by the underdog. Said another way, favorites may feel that losing in a situation where a win is expected will cast their group in an especially negative light, whereas winning will offer only minimal benefits because it matches existing expectations. The psychological experience of being a favorite should therefore be characterized less by potential advancement—indeed, how much can be gained when winning is expected?—and far more by concerns about what might happen if they fail to meet the standard that is expected of them. That is, for favorites the goal of winning is seen as a minimum standard that must be met, and as such, winning becomes an obligation or duty that favorites *ought* to fulfill in order to secure their standing (Higgins, 1998). When winning is viewed in these terms, people translate the goal of winning (a positive outcome) into a focus on not losing (elimination of a negative outcome) (e.g., Molden, Lee, & Higgins, 2008).

In contrast, underdogs are, by definition, expected to lose (Kim et al., 2008; Nurmohamed, 2014). As such, underdogs have little to lose but much to gain if they perform better than the favorite. Said another way, underdogs may feel that winning in a situation where a loss is expected will cast their group in an especially positive light, whereas losing will come with few costs because it matches existing expectations. The psychological experience of being an underdog should therefore be characterized less by pressure to meet expectations—indeed, what is there to lose when losing is already expected?—and far more by potential gains and the advancement opportunities that are possible if they win. That is, for underdogs, the goal of winning is seen as a maximum standard that one hopes to achieve, and as such, winning becomes an aspiration or an *ideal* for underdogs to advance their standing (Higgins, 1987). When winning is viewed in these terms, people should be primarily concerned with obtaining a desired positive outcome.

As stated above, while the goal or standard that competitors have is typically to win, self-discrepancy theory (Higgins, 1987) suggests that competitors could see this same objective as either a duty/obligation (i.e., an *ought*) or as a hope/aspiration (i.e., an *ideal*). We contend that the expectations associated with being a favorite or underdog leads members of these groups to experience

<sup>1</sup> For convenience and readability, and following prior work (Brewer, 1979; Tajfel, 1970), we use the term 'group(s)' and 'intergroup' to encompass a number of social categories, including groups, organizations, or larger collectives (e.g., political parties). Thus, when we refer to intergroup competitions these could be between groups, organizations, etc. When we use the term 'effort' in intergroup competitions we refer to and measure individual-level effort on behalf of one's group.

competitive contexts in terms of *oughts* and *ideals* respectively, which we argue will lead to differences in regulatory focus (i.e., prevention vs. promotion mindsets).

Regulatory focus theory (Higgins, 1997, 1998) proposes that situations that arouse ought standards (as we propose is the case of favorites approaching a competition against an underdog), will activate a prevention focus (Higgins, Roney, Crowe, & Hymes, 1994; Molden & Higgins, 2004). A prevention focus is “concerned with safety, responsibilities, and obligations. It regulates the absence and presence of negative outcomes” (Higgins, 1998, p. 16). Because a win for favorites represents a minimum standard that must be met, favorites should be primarily concerned with securing their place. Consistent with this prevention focus, securing their place requires meeting the expectations that others have of them and avoiding the negatives associated with failing to meet these expectations.

In comparison, situations that arouse ideal standards (as we propose is the case of underdogs approaching a competition against a favorite), will activate a promotion focus (Higgins et al., 1994; Molden et al., 2008). A promotion focus is “concerned with accomplishments, hopes, and aspirations. It regulates the presence and absence of positive outcomes” (Higgins, 1998, p. 16). Because a win for underdogs represents a maximum standard that one hopes to achieve, underdogs should be primarily concerned with advancement. Consistent with this promotion focus, advancement means obtaining the positive outcomes associated with exceeding expectations.

#### 1.4. Motivating underdogs and favorites through regulatory fit

Assuming underdogs and favorites differ in their regulatory focus, how might these differing orientations influence how much effort individuals put forth to help their group? Regulatory focus theory does not propose that people with one orientation with exhibit greater effort than the other, rather the theory details that prevention and promotion focused individuals differ in their preferred manner of goal pursuit. Prevention focused individuals prefer to pursue goals in a vigilant manner (i.e., avoiding negative outcomes), whereas promotion focused individuals prefer to pursue goals in an eager manner (i.e., achieving positive outcomes).

Regulatory fit theory (Higgins, 2000, 2005) argues that people’s “motivational strength will be enhanced when the manner in which people work toward a goal sustains (rather than disrupts) their current regulatory orientation” (Spiegel, Grant-Pillow, & Higgins, 2004, p. 40). Best sustaining a goal involves matching one’s regulatory focus—prevention focused concerns in the case of favorites and promotion focused concerns in the case of underdogs—with situational or interpersonal factors that are consistent with or ‘fit’ this focus. Doing so infuses the goal with a greater sense of importance which bolsters commitment toward the goal (Higgins, Idson, Freitas, Spiegel, & Molden, 2003). As such, people should place more value on engaging in effortful behaviors in the service of attaining this goal when there is fit (Higgins, 2005).

Importantly, there are a number of methods to create fit in an effort to elicit greater motivation and performance. For instance, a ‘fit’ between a person’s regulatory focus and the instructions for how to complete a task (i.e., prevention focus with vigilance instructions; promotion focus with eagerness instructions) has been shown to raise the odds of task completion (Spiegel et al., 2004), increase persistence, and improve task performance (Hong & Lee, 2008). Further, research on persuasion has shown that a fit between a person’s existing regulatory orientation and the content of a message can make an appeal ‘feel right’, and increase endorsement of that message (Cesario, Grant, & Higgins, 2004; Lee & Aaker, 2004). This self-regulatory framework for message framing (Cesario, Corker, & Jelinek, 2013) advises that message senders should carefully craft their messages to fit a receiver’s regulatory focus.

Accordingly, managers and leaders motivational appeals before competition are most likely to be effective when the *content* of the appeal matches the existing regulatory concerns of their followers. Because we contend that favorites will be prevention focused (i.e., focused on securing their place) going into an intergroup competition, receiving an appeal focused on avoiding a negative outcome should enhance commitment toward this goal and in turn bolster motivation. In contrast, because we contend that underdogs will be promotion focused (i.e., seeking advancement) prior to competition, receiving an appeal focused on achieving a positive outcome should enhance commitment toward this goal and in turn bolster motivation. Therefore, we predict that the amount of effort put forth by underdogs’ versus favorites’ will depend on whether the motivational appeal ‘fits’ their current regulatory focus. Specifically, when a ‘fit’ occurs—i.e., an appeal given to favorites focused on avoiding a negative outcome (e.g., “Work your hardest so we do not lose!”) and an appeal given to underdogs focused on achieving a positive outcome (e.g., “Work your hardest so we win!”)—goal commitment and effort should be greater than when there is a misfit between the appeal and the group’s standing.

## 2. Overview of studies

In five studies we examine the psychology of underdogs and favorites and how effort in competitions is affected by the content of the motivational appeal they receive. Study 1 tests whether underdogs and favorites enter intergroup competitions with different motivational orientations. Studies 2–4 then test our primary prediction that a fit between standing (i.e., underdog or favorite) and motivational appeal (i.e., win vs. don’t lose) will lead to greater effort than misfit between standing and appeal. More specifically, Study 2 is a quasi-experiment which examined effortful behavioral intentions of Democrats and Republicans to support their party’s candidate in the 2012 United States (US) Presidential election. Studies 3 and 4 manipulate standing and motivational appeal in the laboratory and test the effect of appeal fit on the effortful behaviors of students representing their university in a competition. Study 4 also includes a control condition which allows us to examine the motivational impact of receiving an appeal that fits with the standing of one’s group compared to a generic appeal. Finally, Study 5 tests our assumption that increased goal commitment results from matching group standing to motivational appeal, and accounts for the relationship between fit and effort.

## 3. Study 1

### 3.1. Method

#### 3.1.1. Participants and design

One hundred and nine adults were recruited from Amazon’s Mechanical Turk (mTurk; see Buhrmester, Kwang, & Gosling, 2011). Four participants did not complete the written portion of the study (described below) and were excluded from the analyses. Accordingly, one hundred and five adults (51% Male;  $M_{age} = 35.74$  years [ $SD = 11.97$ ]) were included in the final sample. Participants were randomly assigned to either the *Favorite* or *Underdog* condition.

#### 3.1.2. Procedure

Participants were asked to imagine that they were part of a team, preparing to play a big game. They were informed that their team had faced this opponent once earlier in the season, and based on the outcome of that game and other games in the season, many people (including themselves) consider their team to be the *favorite* [*underdog*]. They were asked to imagine themselves in



the locker room with their coach and teammates minutes before the game and to spend a couple of minutes writing down their thoughts and feelings in this situation, focusing specifically on what it is like to be the *favorite* [*underdog*] in this competition.

### 3.2. Measures

#### 3.2.1. Regulatory focus

Participant responses were coded by two graduate student judges who were familiar with regulatory focus theory. Following prior research (Gino & Margolis, 2011; Wan, Hong, & Sternthal, 2009), the two judges independently evaluated the responses made by each participant and recorded the number of responses that implied a prevention or a promotion focus. For example, “I would feel embarrassed if we ended up losing this game” was coded as a prevention focus, and “I know my team can rise to the challenge and win” was coded as a promotion focus. The two judges had a high level of inter-rater reliability: Cohen's Kappa = .77,  $p < .001$ . Disagreements on classification were discussed between the two coders until agreement was reached.

### 3.3. Results and discussion

A two-way mixed ANOVA was conducted where group standing was the between-participants factor and the number of prevention and promotion responses was the within-participants factor. Both main effects were non-significant, indicating that favorites and underdogs did not differ in the number of responses provided ( $M_{\text{favorites}} = 1.65$ , vs.  $M_{\text{underdogs}} = 1.60$ ;  $F(1, 103) = 0.08$ ,  $p = 0.78$ )<sup>2</sup> nor was there a difference in the number of prevention vs. promotion responses ( $M_{\text{promotion}} = 1.69$  vs.  $M_{\text{prevention}} = 1.56$ ;  $F(1, 103) = 0.16$ ,  $p = 0.69$ ). Importantly, the two-way interaction was significant,  $F(1, 103) = 37.78$ ,  $p < 0.001$ .

To unpack the interaction, two separate within-participants ANOVAs were conducted to examine the effect of group standing on the number of responses that implied a prevention or a promotion focus. Results showed that participants in the underdog condition provided more promotion-oriented responses ( $M = 2.18$ ,  $SD = 1.16$ ) than prevention-oriented responses ( $M = 1.02$ ,  $SD = 0.97$ ),  $F(1, 54) = 33.09$ ,  $p < 0.001$ . The opposite pattern emerged for participants in the favorites condition; favorites reported more prevention-oriented responses ( $M = 2.16$ ,  $SD = 1.89$ ) than promotion-focused responses ( $M = 1.14$ ,  $SD = 1.01$ ),  $F(1, 49) = 11.64$ ,  $p = 0.001$ . In addition to comparing prevention and promotion responses within condition, we also compared the number of prevention and promotion responses across participants in the favorite and underdog conditions. Simple effect tests show that underdogs reported more promotion-focused responses than did favorites,  $t(103) = 4.89$ ,  $p < 0.001$ , whereas favorites reported more prevention-focused response than did underdogs,  $t(103) = 3.95$ ,  $p < 0.001$ .

Taken together, these results support our contention that underdogs and favorites enter competitions with different motivational orientations. Underdogs have more promotion-focused than prevention-focused concerns, whereas favorites have more prevention-focused than promotion-focused concerns.

## 4. Study 2

Having established that favorites are more prevention focused and underdogs more promotion focused, in Study 2 we provided a

first test of our main prediction in a real-world context (i.e., 2012 US Presidential Election). Specifically, we predict that a fit between standing (i.e., underdog vs. favorite) and motivational appeal will lead to greater effort than misfit.

Just over a month before the 2012 election, Democratic President Barack Obama, consistently led Republican challenger Mitt Romney, in public opinion polls. Each high profile poll conducted in September 2012 showed Obama with a single digit lead over Romney. Based on the data from these polls, the popular media and pundits alike described Barack Obama as the favorite. Conversely, Romney's underdog status was widely recognized; not only in objective polling numbers but more subjectively as well. Whether it was Romney strategically stating that he thought it “was good to be seen as the underdog,” his wife acknowledging in a Fox News television interview that she “definitely think[s] Mitt goes in as an underdog,” or prominent Republican supporters and those in his campaign proclaiming that he is “no doubt” the underdog (Exclusive: Scott Walker, 2012), Romney was publically and frequently referred to as the underdog in the 2012 presidential election (Lepore, 2012).

The current study was conducted October 1st–3rd, 2012—roughly a month before voting day for the 2012 presidential election. We did so to capitalize on this real world context where there was a clear underdog (i.e., the Republican) and favorite (i.e., the Democrat) in a setting of obvious importance to members and supporters of each political party. Indeed, the 2012 US election was one of the most ‘expensive’ election in US history (Berr, 2016), with the parties combining to spend almost \$7 billion dollars to influence voters.

We conducted a quasi-experiment where Republicans (i.e., the underdogs) and Democrats (i.e., the favorites) were asked to imagine they received an appeal from a campaign manager which was either framed in terms of achieving a positive outcome (i.e., “Let's win”) versus avoiding a negative outcome (i.e., “Let's not lose”). Following this appeal, they were asked how likely they would be to engage in a variety of effortful behaviors to help their political party in swing states in the upcoming election. This allowed us to test our prediction that peoples' willingness to work hard depends on whether the appeal they receive fits (or not) with their standing. Namely, we predicted that participants experiencing fit (i.e., Underdogs/Win + Favorites/Don't Lose) would report a greater willingness to display effortful behaviors to help their candidate than participants experiencing misfit (i.e., Underdogs/Don't lose + Favorites/Win).

### 4.1. Method

#### 4.1.1. Participants and design

Beginning on Oct 1st, 2012, the study was posted on Amazon's Mechanical Turk and open to self-identified Republicans and Democrats in the United States (US). We closed the study just prior to the 9:00 PM EDT start time of the first televised presidential debate on October 3rd, 2012, with 562 participants who self-identified as a Democrat or Republican participating in this window of time. Participants were assigned to one of four conditions in a quasi-experimental 2 (Standing: Favored vs. Underdog)  $\times$  2 (Appeal: ‘Win’ vs. ‘Don't lose’) between-participants design. Given the recent and well publicized polling numbers, participant's political affiliation determined whether the participant's party was the favorite (i.e., Democrats) or underdog (i.e., Republicans) in the upcoming presidential election. The manipulation of appeal was randomly assigned across both Democrats and Republicans.

Twelve participants (2%) failed at least one of our two attention checks (described below) and were excluded from our analyses, leaving 550 participants in the final sample (61% Male;  $M_{\text{age}} = 31.14$ ,  $SD = 11.27$ ; Democrats = 399; Republicans = 151).

<sup>2</sup> In addition to the non-significant difference between conditions on the number of responses, there was no difference in the number of words written between the favorites and underdogs conditions,  $F(1, 103) = 0.06$ ,  $p = 0.81$ .

Prior research on mTurk workers has shown this population to be more liberal than conservative in their political orientation (Berinsky, Huber, & Lenz, 2012; Huff & Tingley, 2015). The difference in the number of Democrats and Republicans completing our study is therefore expected and consistent with the mTurk worker pool.

#### 4.1.2. Procedure

All information presented to participants was factual with regards to the latest polls being reported in popular national news outlets at the time of the study. Participants were instructed to read carefully as they would not be able to return to the information once clicking the 'next' button. To further ensure participants read carefully, they were told that they would be asked a series of comprehension checks about what they read later in the study.

We reminded participants about the upcoming election scheduled for November 6th, 2012 and provided all participants with identical, factual polling numbers. To help make their candidate's current position salient, we explicitly stated whether their candidate was considered to be the *favorite* or the *underdog* in the upcoming election. Specifically:

Democrats read: "The latest opinion poll shows Democratic candidate Barack Obama leading Republican candidate Mitt Romney with 49% and 45% of the vote respectively. In general, the polls conducted throughout September show Obama with a consistent mid-single digit percentage lead, making him the slight favorite in November's election."

Republicans read: "The latest opinion poll shows Republican candidate Mitt Romney behind Democratic candidate Barack Obama with 45% and 49% of the vote respectively. In general, the polls conducted throughout September show Romney with a consistent mid-single digit percentage deficit, making him the slight underdog in November's election."

To manipulate the motivational appeal participants' received, we stressed that it was important that their party's candidate either 'win' or 'not lose' the election. Specifically:

Democrats in the 'Win' ['Don't lose'] condition read: "Despite Obama being the favorite, Democratic campaign managers continue to work hard in the 'swing' or 'toss up' states (e.g., Iowa, Florida, Virginia) to make sure Obama wins [does not lose]. With only weeks remaining, virtually all resources and energy from both campaigns are going toward these states as they are critical to the outcome of the general election. For Democratic supporters of the current favorite Obama, it is important that he wins [does not lose]."

Republicans in the 'Win' ['Don't lose'] condition read: "Despite Romney being the underdog, Republican campaign managers continue to work hard in the 'swing' or 'toss up' states (e.g., Iowa, Florida, Virginia) to make sure Romney wins [does not lose]. With only weeks remaining, virtually all resources and energy from both campaigns are going toward these states as they are critical to the outcome of the general election. For Republican supporters of the current underdog Romney, it is important that he wins [does not lose]."

After reading the information above, participants were asked to imagine that a campaign supporter solicited their help to ensure their party's candidate wins [does not lose].

**4.1.2.1. Effort.** Participants were asked how likely they would be to display a variety of effortful volunteer activities to aid their party in the election. Each of these activities would be directed toward the "swing states," so as to make their efforts meaningful. Specifically, on a 1 (*not at all likely*) to 7 (*extremely likely*) scale, participants were asked how likely they would be to: (1) Spend time making calls to registered Democrats/Republican voters to make sure they vote on election day; (2) Help organize a drive to put

signs supporting Obama/Romney in the yards or windows of willing residents; (3) Send personalized letters supporting Obama/Romney to voters; (4) Help mail bumper stickers supporting Obama/Romney; and (5) Volunteer to help organize transportation to voting booths for elderly or disabled Democratic/Republican voters on election day. The scale had a high internal reliability,  $\alpha = 0.92$ .<sup>3</sup>

**4.1.2.2. Control variables.** Because of the quasi-experimental nature of the study, we collected several control variables to help account for possible differences between Democrats and Republicans that might be associated with their willingness to display effortful behaviors. We measured the following demographic and socioeconomic variables: Age, Annual household income, Education, Gender (0 = Female; 1 = Male), Race (0 = Not-White; 1 = White), and Employment Status (0 = Not Employed; 1 = Employed). To account for any differences in engagement with US politics, we asked: "In general, how much do you follow US politics?" (1 = Not at all; 7 = Very much so). Lastly, we asked participants if they had already donated money to their party to support the 2012 election (0 = No; 1 = Yes).

**4.1.2.3. Attention checks.** Beyond stressing the need for participants to read carefully, we included two questions to help identify participants who were not paying attention. One question asked participants to report if, based on the information provided in the study, their candidate was currently the favorite or the underdog in the election. The other question asked participants to show they were paying attention by selecting the third option below a particular question.

## 4.2. Results

### 4.2.1. Effort

Participants' willingness to engage in effortful behaviors was analyzed in a two-way ANCOVA. Neither the main effects of standing, (Favorites  $M = 3.24$ ,  $SE = 0.076$  vs. Underdogs  $M = 3.10$ ,  $SE = 0.126$ ),  $F(1, 538) = 0.86$ ,  $p = 0.353$ , or motivational appeal were statistically significant (Win  $M = 3.25$ ,  $SE = 0.102$  vs. Don't Lose  $M = 3.09$ ,  $SE = 0.104$ ),  $F(1, 538) = 1.32$ ,  $p = 0.250$ . However, a significant interaction emerged,  $F(1, 538) = 8.31$ ,  $p = 0.004$ .<sup>4</sup>

Supporting our primary hypothesis, a follow-up simple effect test indicated that participants in our fit conditions (i.e., Favorites/Don't lose + Underdogs/Win) reported a greater willingness to display effortful behaviors ( $M_{fit} = 3.37$ ,  $SE = 0.090$ ) as compared to participants in our misfit conditions (i.e., Favorites/Win + Underdogs/Don't lose), ( $M_{misfit} = 3.03$ ,  $SE = 0.094$ ),  $F(1, 540) = 6.99$ ,  $p = 0.008$ ,  $d = 0.23$ .

We conducted two additional follow-up simple effect tests to examine the impact of fit vs. misfit for favorites (i.e., Democrats) and underdogs (i.e., Republicans). Favorites who received a 'don't lose' appeal reported more effort ( $M_{fit} = 3.43$ ,  $SE = 0.105$ ) as compared to those who received a 'win' appeal ( $M_{misfit} = 3.16$ ,  $SE = 0.109$ ),  $t(389) = 1.74$ ,  $p = 0.083$ ,  $d = 0.17$ , albeit marginally. The reverse pattern of data again emerged for underdogs; under-

<sup>3</sup> Participants were also asked if they would donate money (1 = Yes, 0 = No) to the campaign. Results for this dichotomous measure closely mirror those obtained with our pro-group behavior scale. Logistic regression showed no main effects ( $ps > 0.10$ ), and a significant interaction:  $B = -1.19$ ,  $SE = 0.50$ ,  $p = 0.018$ . A follow-up simple effect test indicated that a fit between standing and appeal (i.e., underdogs/win + Favorites/don't lose) yielded greater willingness to donate money than misfit (i.e., underdogs/don't lose + favorites/win), ( $M = 0.42$  vs.  $M = 0.32$ ),  $B = 0.61$ ,  $SE = 0.22$ ,  $p = 0.005$ ,  $d = 0.24$ .

<sup>4</sup> The interaction remains significant without control variables,  $F(1, 546) = 5.33$ ,  $p = 0.02$ , as does the follow-up simple effect of fit vs. misfit on effort,  $F(1, 548) = 4.07$ ,  $p = 0.04$ .

dogs who received a ‘win’ appeal reported more effort ( $M_{fit} = 3.25$ ,  $SE = 0.174$ ) as compared to underdogs who received a ‘don’t lose’ appeal ( $M_{misfit} = 2.66$ ,  $SE = 0.185$ ),  $t(141) = 2.32$ ,  $p = 0.022$ ,  $d = 0.38$ .

#### 4.3. Discussion

Taken together, the motivating effect of ‘win’ versus ‘don’t lose’ appeals differed depending on whether one’s group was the underdog or favorite. Consistent with our theorizing, individuals experiencing a fit between standing and appeal (i.e., Underdogs/Win + Favorites/Don’t Lose) reported a greater willingness to display effortful behaviors than individuals experiencing a misfit between standing and appeal (i.e., Underdogs/Don’t Lose + Favorites/Win).

There are, however, several limitations to this initial study. First, although we measure and include a number of relevant control variables to account for preexisting differences between Republicans and Democrats, the lack of random assignment to the underdog or favorite conditions remains a limitation. Further, political ideology has been argued by some to be related to a person’s regulatory focus (Jost, Glaser, Kruglanski, & Sulloway, 2003), and we did not assess this potential difference between parties. Lastly, effort was measured with intended behaviors in a hypothetical scenario and may not translate to actual effortful behaviors.

### 5. Study 3

In Study 3 we manipulated whether a participant’s group was an underdog or favorite in an inter-university competition and tested whether a fit between standing and appeal would result in greater effort than when there was a misfit.

#### 5.1. Method

##### 5.1.1. Participants and design

132 undergraduates from The Ohio State University (64% Male;  $M_{age} = 21.54$ ,  $SD = 1.84$ ) participated for extra credit. Participants were randomly assigned to a condition in a 2 (Standing: Underdog vs. Favorite)  $\times$  2 (Appeal: ‘Win’ vs. ‘Don’t lose’) between-participants design.

##### 5.1.2. Procedure

Participants arrived to the laboratory and were each seated at a private computer terminal. After completing their consent forms, participants were told that researchers at Ohio State University (OSU) and at Penn State University (PSU) were conducting a study to examine people’s abilities and skills on an upcoming task. The task was described as having implications for performance in the workplace. Participants were told that their individual performance would be combined with other OSU students and then directly compared against the performance of PSU students.<sup>5</sup>

To manipulate standing, participants in the favored [underdog] condition were told: “Earlier this year, we had students at Ohio State U. and Penn State U. complete a similar task to the one you will be doing today. Based on this previous task, Ohio State [Penn

State] students performed better. Given this prior performance, on this new task it is fair to say that OSU students should consider themselves favored [the underdog] in this comparison.”

To manipulate appeal, participants in the Win [Don’t lose] condition read: “It is important that you try your hardest so OSU students perform BETTER [don’t perform WORSE]. Please work your hardest so we WIN [DO NOT LOSE]!”

After receiving the manipulations, participants moved to the main task where they completed our dependent variable. Participants were reminded that their performance would be added together with other students at OSU in this inter-university competition. Specifically, they were asked to generate as many uses for a knife as possible in the time allotted. Participants were instructed to focus on listing a *high number* of uses, and were explicitly told not to be concerned with the quality or novelty of the uses. Stressing outcome quantity, rather than quality, is a critical feature of the instructions and consistent with other researchers who have reliably used the number of uses generated in a given time as a measure of effort (e.g., Harkins & Petty, 1982; Pettit & Lount, 2010; Smrt & Karau, 2011; Todd, Seok, Kerr, & Messé, 2006; Williams & Karau, 1991).

After five-minutes, the computer automatically advanced to the next screen where participants answered a comprehension check question with item anchors from 1 (*strongly disagree*) to 7 (*strongly agree*) for each of our manipulations: (1) “According to the instructions, OSU students performed better on a prior version of this task” and (2) “In the instructions, I was instructed not to lose.” After reporting demographic information, participants were checked for suspicion, debriefed, and thanked them for their participation.

#### 5.2. Results

##### 5.2.1. Comprehension checks

Participants in the favored condition recalled their university performing better in the prior comparison relative to participants in the underdog condition, ( $M = 6.02$  vs.  $M = 2.12$ ),  $F(1, 128) = 231.91$ ,  $p < 0.001$ . Participants in the ‘Don’t Lose’ condition reported being asked not to lose in their instructions to a greater degree than did those in the ‘Win’ condition, ( $M = 5.48$  vs.  $M = 3.72$ ),  $F(1, 128) = 25.11$ ,  $p < 0.001$ . Together, these results suggest the participants read and remembered the instructions they were given.

##### 5.2.2. Effort

We conducted a two-way ANOVA with the number of uses generated as the dependent variable. There was a non-significant main effect for appeal (Win:  $M = 14.97$ ,  $SD = 5.73$  vs. Don’t Lose:  $M = 15.88$ ,  $SD = 6.07$ ),  $F(1, 128) = 0.99$ ,  $p = 0.321$ , and a marginally significant main effect for standing (Favored:  $M = 16.34$ ,  $SD = 6.26$  vs. Underdog:  $M = 14.52$ ,  $SD = 5.42$ ),  $F(1, 128) = 3.51$ ,  $p = 0.063$ . However, there was a significant interaction,  $F(1, 128) = 4.97$ ,  $p = 0.027$ . Supporting our primary hypothesis, a follow-up simple effect test showed that participants in the fit conditions (i.e., Favorites/Don’t lose + Underdogs/Win) put forth more effort than participants in the misfit conditions (i.e., Favorites/Win + Underdogs/Don’t lose), ( $M_{fit} = 16.55$ ,  $SD = 6.49$  vs.  $M_{misfit} = 14.35$ ,  $SD = 5.10$ ),  $F(1, 130) = 4.69$ ,  $p = 0.032$ ,  $d = 0.38$ .

We conducted additional follow-up simple effect tests to examine the effect of fit vs. misfit for favorites and underdogs. For participants who were told that their university was favored in the competition, an appeal to ‘not lose’ elicited significantly more effort ( $M_{fit} = 18.03$ ,  $SD = 6.71$ ) than did an appeal to ‘win’ ( $M_{misfit} = 14.79$ ,  $SD = 5.48$ ),  $t(63) = 2.14$ ,  $p = 0.036$ ,  $d = 0.58$ . Although not significantly different, underdogs receiving a ‘win’ appeal tended to put forth more effort than underdogs receiving

<sup>5</sup> We choose Penn State (PSU) as the school that Ohio State (OSU) students were ostensibly competing against for several reasons. The schools are in the same college athletics conference (i.e., the BIG 10), and there are many similarities between the student bodies (e.g., size, selectiveness, rankings, average tests scores), which made the alleged competition relevant. In addition, we conducted a separate pilot study to measure OSU students’ perceptions of the relative prestige between the two schools, as prior work has shown this can affect effort in an inter-university competition (Pettit & Lount, 2010). OSU students ( $n = 148$ ) were asked to evaluate the relative prestige of PSU compared to OSU (1 = *very much lower*; 5 = *the same*; 9 = *very much higher*). OSU students did not see PSU’s prestige ( $M = 4.91$ ,  $SD = 1.06$ ) as significantly different than OSU’s, as this value did not differ from the midpoint of the scale i.e., “the same as OSU”,  $t(147) = 1.08$ ,  $p = 0.279$ .



a ‘don’t lose’ appeal ( $M_{fit} = 15.15$ ,  $SD = 6.06$  vs.  $M_{misfit} = 13.91$ ,  $SD = 4.73$ ),  $t(65) = 0.94$ ,  $p = 0.353$ ,  $d = 0.23$ .

### 5.3. Discussion

The results of Study 3 both support our prediction that a fit between appeal and standing can positively influence an individual’s effort and replicate the results of Study 2 with a behavioral measure of effort in a randomized experimental setting. However, neither study is able to isolate the direction of the effect. Specifically, without being able to compare the effects of fit vs. misfit relative to a control condition (i.e., where no tailored appeal is given), we cannot know whether message fit leads to greater effort than no tailored motivational appeal.

## 6. Study 4

In Study 4 we included a control condition for appeal to examine the direction of the effect. This allows us to examine (1) whether, as hypothesized, ‘fit’ between standing and appeal results in increased effort, and (2) if ‘misfit’ harms effort relative to the control condition. We also use a different behavioral measure of effort to ensure our results are not limited to the idea generation task in Study 3.

### 6.1. Method

#### 6.1.1. Participants and design

One hundred and ninety-four undergraduates from The Ohio State University (51% Male) participated for extra credit. Participants were randomly assigned to a condition in a 2 (Standing: Underdog vs. Favorite)  $\times$  3 (Appeal: ‘Win’ vs. ‘Don’t lose’ vs. Control) between-participants design.

#### 6.1.2. Procedure

The procedure of Study 4 closely mirrored Study 3, with two notable differences. First, we included a control condition where both favorites and underdogs read “As the favorite/underdog in this competition, it is important that you try your hardest” without the addition of the “win” / “don’t lose” present in the treatment conditions. Second, the effort task was a ‘slider task’ (Gill & Prowse, 2012), ostensibly measuring perceptual ability under time pressure. Participants were given a series of trials where they were shown a horizontal axis ranging from some number below 50 to some number above 50. They were given six minutes to click and drag a slider bar to the number 50 on as many trials as possible. Participants were told to focus on completing as many sliders as possible. Effort was calculated by adding the number of sliders that each participant successfully dragged to the number 50 in six minutes.

As described by Gill and Prowse (2012), the slider task offers important advantages in measuring effort. The slider task is simple to understand and does not require any pre-existing knowledge. Given this, the relationship between effort and the number of sliders completed is expected to be direct and monotonic. As in Study 3, participants were informed that their individual performance would be combined with other OSU students’ performance and then compared to PSU students’ performance on the same task.

### 6.2. Results

#### 6.2.1. Effort

We conducted a two-way ANOVA with sliders completed as the dependent variable. There was no main effect for appeal, (Win:  $M = 68.88$ ,  $SD = 10.70$  vs. Don’t Lose:  $M = 67.81$ ,  $SD = 13.52$  vs.

Control:  $M = 66.68$ ,  $SD = 12.96$ ),  $F(2, 188) = 0.52$ ,  $p = 0.60$ , or standing, (Favorites:  $M = 68.53$ ,  $SD = 10.81$  vs. Underdogs:  $M = 67.04$ ,  $SD = 13.86$ ),  $F(1, 188) = 0.694$ ,  $p = 0.41$ . However, a significant interaction emerged,  $F(2, 188) = 5.68$ ,  $p = 0.004$ . Replicating Studies 2 and 3, a simple effect test showed that participants in the fit conditions (i.e., Favorite/Don’t lose + Underdog/Win) completed more sliders ( $M_{fit} = 71.77$ ,  $SD = 9.67$ ) than participants in the misfit conditions (Favorite/Win + Underdog/Don’t lose) ( $M_{misfit} = 64.79$ ,  $SD = 13.37$ ),  $t(127) = 3.41$ ,  $p = 0.001$ ,  $d = 0.598$ .

To examine if there was a benefit of fit compared to not having a tailored appeal, we compared the slider performance of participants in the fit conditions with those in the control conditions (Favorite/Control message + Underdog/Control message). As anticipated, participants in the fit conditions completed more sliders than participants in the control conditions ( $M_{control} = 66.68$ ,  $SD = 12.96$ ),  $t(129) = 2.55$ ,  $p = 0.012$ ,  $d = 0.445$ . These results indicate a motivation increase; matching appeal to standing yields clear performance benefits. Finally, although there was a reduction in performance for participants in the misfit conditions as compared to those in the control conditions, this difference was not statistically significant,  $t(126) = -0.81$ ,  $p = 0.420$ ,  $d = 0.144$  (see Fig. 1). Taken together, these results are consistent with our argument that matching appeals to standing can elicit an increase in effort above and beyond when there is either no tailored appeal, or when there is misfit.

We conducted additional follow-up simple effect tests to examine the influence of fit vs. misfit vs. control for favorites and underdogs. Within the favorite conditions, favorites receiving a ‘don’t lose’ appeal put forth more effort ( $M_{fit} = 71.63$ ,  $SD = 9.81$ ) than favorites receiving a ‘win’ appeal ( $M_{misfit} = 65.76$ ,  $SD = 10.94$ ),  $t(63) = 2.20$ ,  $p = 0.029$ ,  $d = 0.565$ . The effort displayed by favorites in the control ( $M_{control} = 68.29$ ,  $SD = 11.12$ ) was between the two treatment conditions, but did not significantly differ from favorites who received a ‘don’t lose’,  $p = 0.207$ , or ‘win’ appeal,  $p = 0.332$ .

Within the underdog conditions, underdogs receiving a ‘win’ appeal ( $M_{fit} = 71.91$ ,  $SD = 9.68$ ) put forth more effort than underdogs receiving a ‘don’t lose’ appeal ( $M_{misfit} = 63.75$ ,  $SD = 15.75$ ),  $t(62) = 2.42$ ,  $p = 0.018$ ,  $d = 0.626$ . The effort displayed by underdogs in the control ( $M_{control} = 64.90$ ,  $SD = 14.71$ ) was again between the treatment conditions, however the difference was only statistically significant compared to ‘win’,  $p = 0.039$ , not compared to ‘don’t lose’,  $p = 0.736$ .

### 6.3. Discussion

The results of Study 4 support our prediction that matching appeals to standing can improve a person’s effort, as participants

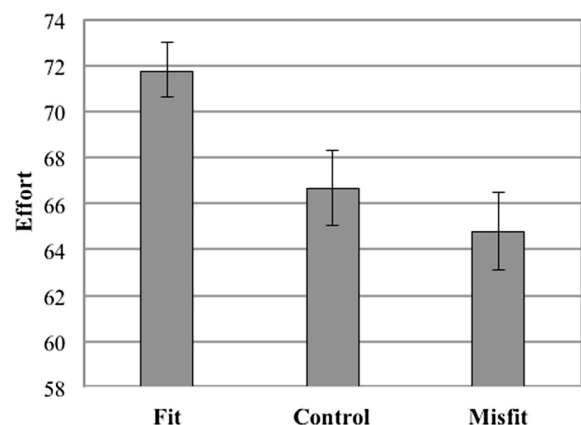


Fig. 1. Study 4 results of the fit vs. misfit vs. control on effort.

experiencing fit put forth more effort than participants who did not receive a tailored motivational appeal. Moreover, although participants in the misfit condition tended to display less effort than those not receiving a motivational appeal, this did not significantly differ, suggesting that a misfit between appeal and standing may not decrease motivation from baseline in competitive contexts.

## 7. Study 5

Studies 2–4 show that individuals put forth comparatively more effort during intergroup competitions when there is a fit between motivational appeal and standing than when there is a misfit. In Study 5 we test (1) our prediction that message fit leads to increased goal commitment, and (2) if this increase in goal commitment accounts for effortful behaviors. In other words, we conducted this study to determine whether, as anticipated, there would be an indirect effect for a fit between standing and appeal to effort through goal commitment.

### 7.1. Method

#### 7.1.1. Participants and design

Two hundred and fifty-three undergraduates from The Ohio State University (59% Male) participated for extra credit. Participants were randomly assigned to a condition in a 2 (Standing: Underdog vs. Favorite)  $\times$  2 (Appeal: 'Win' vs. 'Don't lose') between-participants design.

#### 7.1.2. Procedure

The general procedure, cover story, underdog/favorite and appeal manipulations followed that of Studies 3 and 4. However, immediately following the underdog/favorite and appeal manipulations, participants reported their level of goal commitment on four items from Klein, Cooper, Molloy, and Swanson (2014) (e.g., "How committed are you to helping OSU perform well?"; "To what extent have you chosen to be committed to OSU performing well?"; "To what extent do you care about OSU performing well?"; "How dedicated are you to helping OSU performing well?") on a 7-item scale from 1 (*not at all*) to 7 (*extremely*) ( $\alpha = 0.96$ ).

Participants then completed the same effort task as Study 3 (i.e., the slider task). After six minutes, the computer automatically advanced to the next screen where participants reported demographic information, were debriefed and thanked for their participation.

#### 7.1.3. Analytical approach

Consistent with contemporary approaches to mediation analyses (Hayes, 2013)—which no longer emphasize or recommend focusing on the total effect, direct effect, or the specific paths between the IV, mediator, and DV, prior to conducting our primary analyses—we focused on the indirect effect to test our proposed causal model (i.e., Appeal fit  $\rightarrow$  Goal commitment  $\rightarrow$  Effort). We do, however, also test and report the 'a-path' (i.e., Appeal fit  $\rightarrow$  Goal commitment), and the total effect (i.e., Appeal fit  $\rightarrow$  Effort).

### 7.2. Results

#### 7.2.1. Goal commitment

Analyses were conducted within a two-way ANOVA. There was no main effect for appeal (Win:  $M = 5.33$ ,  $SD = 1.24$  vs. Don't Lose:  $M = 5.46$ ,  $SD = 1.40$ ),  $F(1, 249) = 0.62$ ,  $p = 0.434$ , or standing (Favored:  $M = 5.51$ ,  $SD = 1.27$  vs. Underdog:  $M = 5.27$ ,  $SD = 1.36$ ),  $F(1, 249) = 2.41$ ,  $p = 0.122$ , on goal commitment; however, there was a significant interaction,  $F(1, 249) = 4.29$ ,  $p = 0.039$ . A follow-up simple effect test showed that, as anticipated, participants in

the fit conditions (i.e., Favorites/Don't lose + Underdogs/Win) reported greater goal commitment than participants in the misfit conditions (i.e., Favorites/Win + Underdogs/Don't lose), ( $M_{fit} = 5.56$ ,  $SD = 1.19$  vs.  $M_{misfit} = 5.23$ ,  $SD = 1.41$ ),  $F(1, 251) = 3.99$ ,  $p = 0.047$ ,  $d = 0.25$ . In examining this further, favorites reported significantly more goal commitment when they were given an appeal to 'not lose' ( $M_{fit} = 5.76$ ,  $SD = 1.18$ ) as compared to an appeal to 'win' ( $M_{misfit} = 5.29$ ,  $SD = 1.30$ ),  $t(126) = 2.12$ ,  $p = 0.036$ ,  $d = 0.29$ . The reverse pattern of data emerged for underdogs, although not significantly so—underdogs receiving a 'win' appeal ( $M_{fit} = 5.38$ ,  $SD = 1.17$ ) tended to report more goal commitment than underdogs receiving a 'don't lose' appeal ( $M_{misfit} = 5.16$ ,  $SD = 1.53$ ),  $t(123) = 0.87$ ,  $p = 0.386$ ,  $d = 0.16$ .

#### 7.2.2. Effort

We conducted a two-way ANOVA with sliders completed as the dependent variable. There was no main effect for appeal, (Win:  $M = 68.53$ ,  $SD = 12.02$  vs. Don't Lose:  $M = 68.34$ ,  $SD = 13.82$ ),  $F(1, 249) = 0.01$ ,  $p = 0.92$ , or standing, (Favorites:  $M = 69.24$ ,  $SD = 12.67$  vs. Underdogs:  $M = 67.62$ ,  $SD = 13.86$ ),  $F(1, 249) = 1.09$ ,  $p = 0.30$ . Participants in the fit conditions (i.e., Favorite/Don't lose + Underdog/Win) completed more sliders ( $M_{fit} = 69.18$ ,  $SD = 12.79$ ) than participants in the misfit conditions (Favorite/Win + Underdog/Don't lose) ( $M_{misfit} = 67.74$ ,  $SD = 12.98$ ), albeit not significantly  $F(1, 251) = 0.79$ ,  $p = 0.38$ ,  $d = 0.11$ . It is plausible that having participants respond to questions about their goal commitment, prior to completing the task (a feature not present in Studies 2–4), dampened the motivational benefit of appeal fit on effort.

#### 7.2.3. Mediation analysis

The mediation model showed that both the a-path (i.e., appeal fit  $\rightarrow$  goal commitment) and b-path (i.e., goal commitment  $\rightarrow$  effort) were positive and significant  $ps < 0.05$  (see Fig. 2). To examine whether goal commitment accounted for the relationship between fit vs. misfit and effort, we tested for an indirect effect using 95% bias-corrected confidence intervals with 5000 bias-corrected bootstraps (MacKinnon, Lockwood, & Williams, 2004). The confidence interval of the indirect effect did not contain zero (Lower CI = 0.08; Upper CI = 1.81), providing support for the hypothesized role of goal commitment.

## 8. Meta-analyses

Studies 2–5 each examined the overall influence of fit (i.e., Favorites/Don't Lose + Underdogs/Win) as compared to a misfit (i.e., Favorites/Win + Underdogs/Don't lose) on effort, allowing us to meta-analytically integrate the results. Following procedures detailed by Lipsey and Wilson (2001), we used unbiased (i.e. standardized) mean differences effect sizes and derived weighted mean effect sizes from the inverse variance weight calculations, whereby more weight is given to effect sizes from larger samples (Hedges & Olkin, 2014). Before presenting the results below, we caution against overgeneralizing. These results are based on a limited number of contexts and measures, and involve a small number of independent samples.

Our first analysis showed that participants in our fit conditions displayed greater effort than participants in our misfit conditions:  $Z = 4.19$ ,  $p < 0.001$ , 95% Lower CI = 0.139; Upper CI = 0.383,  $d = 0.261$ . We next examined the degree to which message fit promotes effort for both underdogs and favorites. Specifically, we meta-analyzed the effects of fit vs. misfit *within* underdogs and favorites to examine (1) if there is an overall positive motivational effect of fit for each, and (2) if the magnitude of the effect of fit differed for underdogs as compared to favorites. To do so, we conducted two meta-analyses which combined simple effects from





Fig. 2. Study 5 mediation results.

Studies 2–5 (i.e., one meta-analysis for the effect of fit for underdogs and another for favorites) and then compared these two effect sizes. For favorites, ‘don’t lose’ appeals yielded more effort than ‘win’ appeals,  $Z = 2.95$ ,  $p = 0.002$ , 95% Lower CI = 0.071; Upper CI = 0.382,  $d = 0.234$ . For underdogs; ‘win’ appeals yielded more effort than ‘don’t lose’ appeals,  $Z = 3.03$ ,  $p = 0.001$ , 95% Lower CI = 0.072; Upper CI = 0.470,  $d = 0.308$ . These results suggest that matching an appeal to standing has a significant positive effect on effort for both underdogs and favorites. Importantly, there was no difference in the magnitude of the two effect sizes,  $Z = 0.174$ ,  $p = 0.431$ , indicating that the overall positive effect of fit on effort was driven equally by underdogs and favorites.

## 9. General discussion

This research directly examined the psychology of underdogs and favorites in competitive intergroup contexts, and used this understanding to show how an individual’s effort on behalf of their group is affected by a combination of the relational features between groups and the content of the appeals used to motivate them. Specifically, individuals’ effort was sensitive to whether they were part of an underdog or favorite group *and* whether the motivational appeal they received focused on winning (e.g., ‘let’s win’) or not losing (e.g., ‘let’s not lose’). These results support our prediction that the relative efficacy of an appeal depends on whether it fits with the regulatory focus of members of favored and underdog groups. Specifically, participants experiencing a fit between standing and appeal (i.e., Underdogs/Win + Favorites/Don’t Lose) put forth more effort than those experiencing a misfit (i.e., Underdogs/Don’t Lose + Favorites/Win). Indeed, the results of Study 4 demonstrate a general motivation increase for participants experiencing a fit, as their efforts were greater than participants who did not receive a tailored motivational appeal. Finally, Study 5 further supports our theory by showing that goal commitment—an outcome of experiencing regulatory fit (Higgins et al., 2003)—mediates the relationship between appeal fit with standing on effort.

This work contributes to the literature on intergroup competition in a number of ways. First, we shed light on the underlying psychology of underdogs and favorites. We confirm our predictions by showing directly (Study 1) and indirectly (Studies 2–5) that underdogs and favorites differ in their regulatory concerns: underdogs tend to be more promotion focused whereas favorites tend to be more prevention focused. This knowledge then allows us to explain why motivational appeals that fit this regulatory focus elicit increases in goal commitment and individual-level effort during intergroup competition. The terms underdog and favorite are germane to the vocabulary of intergroup competition, and this research provides among the first insights in the psychology of the people who compose these groups.

Second, whereas recent work on intergroup comparisons has shown that who one is compared to matters (e.g., Kilduff et al., 2010; Kistruck et al., 2016; Pettit & Lount, 2010), our work presents insight into *how* relational differences between groups can be leveraged to promote effortful behaviors. We show that members’ willingness to display effortful behaviors is not just a function of

who one is compared against, but can also depend on, and be triggered by, the content of a motivational appeal. Therefore, scholars might consider members’ behavior during competition as a combination of the comparison group(s) and the motivational appeal members receive, and use this knowledge to build a more comprehensive understanding of the psychological and behavioral consequences of intergroup competition.

Third, a critical takeaway from our research is that low expectations of performance do not doom groups, nor do high expectations ensure consistently strong motivation and performance across the board. In contrast to this statement, the Pygmalion effect (Eden, 1990; McNatt & Judge, 2004; Rosenthal & Jacobson, 1968) and Golem effect (Oz & Eden, 1994; Reynolds, 2007) together suggest that high supervisor expectations lead to high employee motivation and performance and low supervisor expectations lead to lesser motivation and performance. Similarly, fear of confirming a negative stereotype about one’s group leads to reduced performance (i.e., stereotype threat [Steele & Aronson, 1995]) whereas activation of a positive stereotype about one’s group leads to increased performance (i.e., stereotype lift [Walton & Cohen, 2003]). Although this prior work is situated in a very different context than the one we studied (i.e., individual evaluation outside of an explicit intergroup competition), it does converge around the assumption that motivation and performance are driven, in part, by others’ expectations. We offer a theoretical addendum to the issue of expectations and motivation/performance, suggesting that managers and leaders can capitalize on knowledge of expectations about one’s group and recast their motivational appeals in ways that incite members to work hard on behalf of their group.

Fourth, this work provides a concise and actionable message for the leaders, managers, and supervisors who are tasked with promoting optimal performance in the groups and teams they oversee. Leaders need to consider the relational features of competitive contexts and then tailor their motivational appeals to match the situation. When one’s group is considered an underdog, appeals focused on winning will likely be more effective than appeals focused on not losing. When one’s group is considered the favorite, appeals focused on not losing will likely be more effective than those focused on winning.

### 9.1. Limitations and future directions

Although this research has begun to answer several new questions, it is but a first step and not without limitations. Underdogs and favorites can come in varied forms, and the pattern of results we observed in our intergroup competitions may not generalize to all cases. We see three general areas for future study: (1) research examining differences between the competitors, (2) research examining the motivational message or message provider, and (3) research examining the broader social context.

First, with regards to differences between competitors, the effectiveness of tailored appeals may depend on the magnitude of the difference in performance expectations. When the discrepancy in performance expectations is extreme and based on skills that cannot easily be developed or resources that are difficult to

procure, underdogs and favorites may be less affected by motivational appeals. For example, when it is almost certain the favored group will outperform the underdog—perhaps because of dramatic differences in ability—members of favored groups might reduce their contributions and efforts because they view them as less instrumental (Shepperd & Taylor, 1999). Similarly, if underdogs see winning as virtually impossible because of, for example, a dramatic difference in their resources compared to the favored group, even maximal effort may seem a futile and foolish endeavor (Kerr, 1983). Accordingly, for appeals to matter, a group may need to believe, at least on some level, that an ‘upset’—where the ultimate outcome violates expectations (i.e., underdog wins and favored loses)—is within the realm of possibility. Future research could then explore cases where differences in ability or resources are sizable enough that an upset seems implausible as a potential boundary condition.

In a similar vein, although clear expectations are inherent to the experience of underdogs and favorites, expectations can be informed in a variety of ways. For instance, expectations could be set by an expert third party, as in exact odds or the betting line at a casino. In these cases, the expectations themselves are crystallized in numerical format. In other cases, expectations could come from a history of prior performance with one another, or against a common opponent(s). In these cases expectations are inferred based on recent outcomes, such as ranking systems, standings, or other logs of prior performance. Somewhat less clear, but perhaps no less impactful, are competitions between previously unmatched opponents where differences in resources, size, or skill are obvious. Similar to the story of David and Goliath—arguably the most well-known tale of an underdog and favorite—competitors need not have met each other or a common opponent for strong expectations to form based on observable characteristics. The same would hold for a small, newcomer firm entering a market and competing with a large, incumbent firm for a client. Although each of the data sources above requires an inference on the part the competing groups, the size of this inferential leap and the ambiguity of data available to see one’s group as an underdog or favorite, can vary. Given this, greater conceptual clarity on what it means to be an underdog or favorite might be gleaned from considering the source(s) or basis of these expectations (Ellemers et al., 2004). And relatedly, might the efficacy of a motivational appeal depend on the source of these expectations? For instance, would an underdog [favorite] who lacks [has superior] ability/skill be motivated by the same type of appeal as an underdog [favorite] who lacks [has ample] resources?

Second, we feel it is worth examining how aspects about the messages or message providers influence the motivational impact that they have on underdogs and favorites. Although we show a clear motivational benefit of matching appeal to standing, it remains unclear how underdogs and favorites would react to receiving *both* types of appeals. That is, a leader or a manager may choose to stress the importance of both ‘winning’ and ‘not losing’ within the same communication. On the one hand, the combination of both fit and misfit may ‘weaken’ the overall benefit of tailored appeals, yielding a ‘slight’ motivation increase, but one not as strong as a pure fit. On the other hand, the differing orientations of favorites and underdogs may lead group members to pay better attention to, and be more affected by, appeals that are consistent with their group’s standing, and perhaps likely to ‘ignore’ the misfit message. This possibility is consistent with the lack of difference in effort between participants in the misfit conditions and those in the control conditions in Study 4.

Further, *who* the communication is coming from may also matter. For instance, the level of respect group members have for a person may impact how underdogs or favorites respond to their message. People with more respect tend to be more influential,

and both underdogs and favorites may exhibit more motivation regardless of what is communicated. Conversely, precisely because they are more influential, the benefit of fit and the interference of misfit might both be exaggerated compared to a message coming from a less respected person.

Third, related to the broader work context, although we focused on instances of direct competition between *two* groups, some intergroup contexts involve multiple groups trying to out-compete one another. As Garcia and Tor’s (2009) research on the N-effect in interpersonal competition shows, an increased number of competitors can dampen effort. Therefore, considering whether multiple competitors affect underdogs and favorites response to tailored motivational appeals is a worthy area of future work. On the one hand, a general reduction in members’ baseline engagement may simply reduce the influence of appeals on the willingness to display effortful behaviors. On the other hand, it may be precisely in settings whereby the social context dampens individual motivation that appropriately tailored appeals matter most.

Finally, we raise caution when linking individual effort to group performance, even though there is a temptation to make this intuitive leap. Although individual motivation is a central ingredient predicting downstream performance in groups (Kerr & Tindale, 2004; Steiner, 1972), this depends on the nature of the task and the demands required for success (Hackman, 1968; Larson, 2010). Given the context of our studies, we limit conjectures about performance on group tasks to those where there is a strong link between individual effort/contributions and group performance. We did not examine if greater individual effort translates to increased performance on complex tasks or where the task itself requires significant coordination among members (e.g., R&D teams, board of directions, musical groups). Accordingly, future work could explore whether the performance benefits of matching motivational appeals to team members’ underlying concerns depends on the complexity and coordination demands of the task.

## 10. Conclusion

The difference between leaving a competition as the victor, or instead facing defeat, is often shockingly small—sometimes just a few votes, points, dollars, inches, or even fractions of a second determine who wins and who loses. It is also obvious that those whose job it is to prepare teams before competition, and lead them during it, try to maximize the efforts of each person, regardless of whether they are expected to win or lose. The actionable takeaway for leaders and managers who face such situations is simple and direct: matching motivational appeals to group standing can help increase goal commitment and effort. Indeed, whether a group ultimately wins or loses may depend, in part, on the leader’s ability to do so.

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