

“We built it” in the past, but “let’s build it together” in the future: The roles of temporal framing
and social justice orientation in shaping attributions for personal success

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Abstract

Political debates over how to address economic inequality are often rooted in rhetoric about whether or not success is self-made. Attributions for personal successes invoke self-relevant motivational processes and may pose barriers to ideological consensus on economic policy. This research examined the relationship between attributions for personal successes and social justice orientation (an ideological orientation toward providing for the economic welfare of others) as well as the impact of two contextual factors: past/future-framing and thinking about political discourse about inequality. Temporal framing was expected to shift the motivational incentives available for acknowledging the role of external factors; although it may feel good to take personal credit for *past* successes already achieved, there may be stronger incentives to acknowledge the situational factors that shape uncertain *future* successes. Studies 1-4 found that individuals low in social justice orientation were reluctant to make external attributions for their past achievements, but that thinking about poverty and successes they hoped to achieve in the future increased their external attributions to levels observed among people high in social justice orientation. The willingness to make greater external attributions for future successes appeared to be motivationally-driven: it yielded affective benefits (Study 5), was seen as desirable (Study 6), and emerged when personal financial vulnerability was primed (Study 7). Attributional shifts were in turn associated with greater support for social justice. These findings suggest that thinking about successes not yet attained may establish a sort of Rawlsian “veil of ignorance” that can encourage individuals to recognize the power of situations and the needs of others.

Keywords: Attribution; Social Justice; Economic Inequality; Temporal Framing; Self-Enhancement

“We Built It” in the Past, But “Let’s Build it Together” in the Future: The Roles of Temporal Framing and Social Justice Orientation in Shaping Attributions for Personal Success

If you’ve been successful, you didn’t get there on your own. You didn’t get there on your own. I’m always struck by people who think, well, it must be because I was just so smart. There are a lot of smart people out there. It must be because I worked harder than everybody else. Let me tell you something – there are a whole bunch of hardworking people out there. If you were successful, somebody along the line gave you some help....

Barack Obama, July 13, 2012, Roanoke, VA

Former U.S. President Barack Obama delivered the words above to an enthusiastic crowd during his 2012 re-election campaign. Six weeks later, “We Built It” was the theme that pervaded the 2012 Republican National Convention. Every major speaker mentioned the theme and expressed outrage at the President’s suggestion that people’s successes are attributable in part to others’ support. President Obama’s broader argument – that successful individuals should pay higher taxes to give back to a societal system that helped them succeed – was lost amidst the furor at what was perceived to be an assault on the principle of self-reliance. The passion with which each side of the 2012 exchange advocated for its position was a vivid demonstration of the longstanding fissure in political discourse in the United States over economic inequality. Since 2011, Senator Elizabeth Warren has used similar rhetoric to call attention to the situational factors that help shape success in advocating for policies aimed at reducing economic inequality, while opponents of such policies have cast the policies as reflecting an “entitlement mentality” that would “punish success” and impede the American dream.

Many psychological factors likely contribute to the ideological impasse over addressing inequality, but few factors seem as central or as animating (to both sides) as beliefs about self-reliance, or beliefs about the extent to which success can be secured through one’s own efforts and abilities versus a broader set of factors. Despite extensive interest in links between causal

attribution and political ideologies, the majority of research on political ideology has focused on attributions for *other people's failure* (e.g., poverty) and less work has examined attributions for *one's own successes*. This has rendered extant theories unable to explain why disagreement over the causes of *personal success* tends to evoke such passion among individuals on both sides of the ideological spectrum. As a subset of self-reliance beliefs, attributions for personal successes are highly important for self-regulation and self-esteem, guiding how we pursue our most valued goals (Dweck & Yeager, 2019) and how we react to our greatest triumphs (Weiner et al., 1979). The link between self-reliance beliefs and political ideologies, therefore, should be rooted at least in part in beliefs about the self rather than solely in beliefs about others.

The present research examined the relationship between personal success attributions and *social justice orientation* – a fundamental dimension underlying political ideology that specifically captures ideology regarding the distribution of resources across society (Janoff-Bulman & Carnes, 2013). This research also examined whether ideological differences in personal attributions are sensitive to the *temporal framing* of achievements – a contextual factor that may alter the incentives available for generating attributions. Individuals may be motivated to believe that they attained success on their own *in the past* (as such attributions could serve as important source of positive affect), but may be more willing to believe that situational factors will help them succeed *in the future* (as such attributions may make success seem more attainable). Identifying motivational factors capable of shifting the attributions of individuals low or high in social justice orientation could implicate self-relevant motivational processes as barriers to efforts to ameliorate economic inequality, and could point toward ways to bridge ideological divides on this critical issue. Ultimately, this research offers a new motivational perspective on the relationship between causal attributions and ideology. In contrast to other

prominent perspectives that offer accounts of ideological differences in attributions based on the role attributions play in justifying either A) existing social structures (Jost et al., 2004), B) beliefs about fairness (Lerner, 1980), or C) individuals' own political values (Skitka et al., 2002), the present perspective introduces the *pursuit of positive feelings about personal successes* as a novel factor that helps explain the link between attribution and ideology.

Ideology and Causal Attribution: The Person or the Situation

Drawing a fundamental distinction between attributions to internal/dispositional versus external/situational factors (Kelley, 1973; Jones & Harris, 1967), research on causal attribution has identified attributional tendencies such as the fundamental attribution error (Gilbert & Malone, 1995) and the actor-observer bias (Jones & Nisbett, 1987). These tendencies are further qualified by a self-serving attributional bias (Miller & Ross, 1975), in which individuals attribute personal successes internally and personal failures externally (relative to attributions for other people's successes and failures). This robust self-serving bias (Malle, 2006; Zuckerman, 1979) has been found to stem from self-enhancement motivation (i.e., taking credit for success and deflecting blame for failure in order to feel good about the self; Campbell & Sedikides, 1999). The present perspective builds on the critical insight stemming from this work that people adopt distorted perceptions of the causes of events to pursue positive feelings about the self, and considers whether this motivation may act in concert with ideology.

A large literature has emerged on ideological differences in attributions (e.g., Cozzarelli et al., 2001; Farwell & Weiner, 2000; Gromet et al., 2015; Piff et al., 2020; Shirazi & Biel, 2005; Skitka & Tetlock, 1992, 1993; Zucker & Weiner, 1993). This work has focused largely on attributions for other people's outcomes, examining whether political liberals and conservatives hold different beliefs about the causes of other people's lack of success. The work has identified

clear ideological differences in attributions for poverty: conservatives are more likely to endorse internal causes for poverty (i.e., lack of effort, ability) whereas liberals are more likely to endorse external causes (i.e., social causes, chance; see Sahar, 2014; Weiner et al., 2011 for reviews).

Less research has examined the relationship between ideology and attributions for personal outcomes. Political conservatives (vs. liberals) tend to more strongly endorse the protestant work ethic (the generalized belief that hard work can bring about success; Feather, 1984; Furnham, 1984), score higher in national survey items assessing internal locus of control (Pew Research Center, 2008), and believe more strongly in free will (Everett et al., 2020; Carey & Paulhus, 2013). Experimentally inducing a focus on internal (vs. external) causes of personal success can encourage favorable attitudes toward conservative policies (Bryan et al., 2008). These studies constitute the extant research examining the relationship between constructs related to personal success attributions and constructs related to ideology.

Although attributions for personal success (vs. attributions for others' lack of success) are less proximal to socially-relevant outcomes and have received relatively less empirical attention in research on ideology, they may be critical for understanding ideological divides because of their centrality to the self and their susceptibility to well-documented motivational processes (Malle, 2006; Weiner et al., 1979).¹ Personal success attributions may be highly reflective of individuals' *core beliefs* about self-reliance, and may thus feed into socially-relevant ideologies. For example, individuals may emphasize the internal causes of others' suffering not only to

¹ Focusing on successes, rather than failures, provides a construct that is not characterized in large part by excuse-making, as attributions for failure tend to be (Basgall & Snyder, 1988; Snyder & Higgins, 1988). Additionally, research suggests that the self-serving bias is more robust for successes than for failures (Duval & Silvia, 2002). The political discourse about self-reliance similarly focuses on explanations for personal success far more than on explanations personal failure. Attributions for personal successes thus represents a self-relevant construct that is not confounded with excuse-making, and provided the cleanest opportunity to study variability in attributional beliefs related to self-enhancement processes.

justify withholding assistance but also to uphold a core belief in self-reliance that helps them feel better about their own personal successes; indeed, *not* believing in self-reliance, and *not* believing that societal aid should be withheld from disadvantaged individuals could threaten the positive feelings that accompany thinking about one's own past achievements. Thus it was expected that even though personal attributions are a few steps removed from social outcomes, they should nonetheless be related to ideological positions regarding economic inequality and could be uniquely positioned to shed light on motivational processes linking attribution and ideology.

Social Justice Orientation

This research adopted social justice orientation as its ideological variable of interest. Social justice orientation is considered to be a group-based moral motive oriented toward providing for the welfare of one's group (Jost & Kay, 2010). The conceptualization of social justice orientation used in this article is grounded in a theoretical model of the fundamental motives underlying political ideology that draws a distinction between approach-oriented and avoidance-oriented group-based morality (Janoff-Bulman, 2009; Janoff-Bulman & Carnes, 2013). According to research derived from the model, social justice is approach-oriented (focusing on providing for group well-being) and is associated with liberal ideology, whereas social order is avoidance-oriented (focusing on group cohesion and protection from threat) and is associated with conservative ideology (Janoff-Bulman & Carnes, 2013). Strong, reliable associations emerge between social justice orientation and traditional measures of liberal-conservative political ideology, typically ranging from $r = -.45$ to $r = -.55$. Social justice orientation has been found to be distinct from other ideological variables, including social dominance orientation and right wing authoritarianism (Janoff-Bulman et al., 2008). Social

justice orientation is *group-based* in that it derives from a sense of communal responsibility for group members. It differs from interpersonal fairness (an “individualizing” moral foundation; Graham et al., 2011; Haidt, 2012) in its focus on deindividuation and minimizing inequality across society (Brickman et al., 1981), and represents liberals’ group-based morality (Janoff-Bulman & Carnes, 2013). Based in the fundamental approach-avoidance distinction, social justice and social order parsimoniously capture core psychological differences in group-based morality between not only liberals and conservatives, but also libertarians (who are low on both social justice and social order) and communitarians (who are high on both social justice and social order).

Perhaps most importantly for purposes of the present research, social justice is the dimension that uniquely captures differences in ideology regarding the distribution of resources across society. Social justice, but not social order, is associated with attitudes toward economic policies concerning resource distributions and inequities (e.g., welfare programs, tax cuts for the wealthy), whereas social order, but not social justice, is associated with attitudes toward social values policies concerning group norms and lifestyles (e.g., abortion, gay marriage; Janoff-Bulman et al., 2008). Thus, social justice orientation specifically captures the economic aspect of political ideology that was most relevant to this research, without picking up on social/lifestyle values, which were not relevant here. Because social justice both helps to map the political space and characterizing ideologies about the distribution of societal resources, it was adopted as the focal ideological variable in this investigation.

Investigating Contextual Influences

In addition to predicting that social justice orientation would be associated with making greater external attributions for personal successes, this research investigated the impact of

motivationally-relevant contexts in which attributional thinking is regularly embedded, assessing the extent to which the attributions of individuals high and low in social justice orientation are susceptible to change. Of particular interest was whether any contexts might reduce ideological tendencies in attribution (i.e., *increase* situational attributions among individuals low in social justice or *decrease* situational attributions among individuals high in social justice), which could provide insight into why such tendencies emerge. Further, given that Americans grossly overestimate the amount of economic mobility in the United States (Davidai & Gilovich, 2015; Kraus & Tan, 2015), identifying factors that increase recognition of the situational causes of success may also help bring Americans' perceptions into greater alignment with reality.

Past Versus Future Time-Frame

First, the temporal framing of achievements was considered. One can consider what it took to accomplish something in the past or what it will take to accomplish something in the future. A student graduating from college, for example, can reflect on what it *took* to succeed in college, or what it *will take* to succeed in the next step in their career.² A growing literature illustrates past-future differences in mental processing across various domains (e.g., Caruso, 2010; Caruso et al., 2008; Gilbert & Wilson, 2007; Helzer & Gilovich, 2012; O'Brien, 2015; Schacter, Addis, & Buckner, 2007; Seligman et al., 2013; Van Boven & Ashworth, 2007). Interestingly, emotional or motivational explanations are offered for many of these framing effects. Completed and anticipated events make salient very different sets of feelings and

² One can of course also consider what it takes to achieve personal success in an abstract sense, independent of either time-frame, but such attributions would not involve a specific event and would be less likely to strongly implicate the self. Attributions for concrete events that are important to the self must almost by necessity lie either in the past or in the future. There are likely very few instances in which individuals generate attributions for outcomes being decided in the "present." It is possible to reflect on the cause of success at the precise moment that success falls within reach – but by this point, the attainment of success essentially lies in the past.

incentives. Given their proximity to self-relevant motivational processes, personal successes attributions were expected to be sensitive to the impact of different temporal frames.

Past Time-Frame. A large body evidence indicates that when it comes to important *past successes*, individuals tend to make self-serving attributions, downplaying the role of situational factors and taking personal credit for their achievements (Malle, 2006). Prior work has shown that these self-serving attributions have motivational *origins* (they are sensitive to threats to the self; Campbell & Sedikides, 1999) and that they have the intended *impact* of increasing positive affect and self-esteem (McFarland & Ross, 1982; Weiner et al., 1979). For example, upon successfully completing a task, individuals led to focus on internal (vs. external) explanations for success report greater positive affect (Riemer, 1975). Thus, it is clear that there is a powerful incentive to make self-reliant attributions for past successes; doing so can boost positive affect and self-esteem. However it is not clear that the same holds for future personal goals not yet attained.

Future Time-Frame. Whereas taking credit for important past goals that have been achieved can amplify the positive feelings that come along with success, it is likely not very self-enhancing to take internal credit for *future* goals that have not yet been (and might never be) achieved. For future (vs. past) goals, there is no comparable source of positive feelings for attributions to amplify; those positive feelings are replaced by uncertainty about whether one will succeed. Thus, it may well be this overriding uncertainty that shapes the central motivational allure of attributions for future goals. Aspirants to success do not have the luxury of orienting self-enhancement efforts toward modifying perceptions of the *way* in which success is achieved; the more pressing question is *whether* success will be achieved at all, and this uncertainty offers a target ripe for self-enhancement efforts. A large literature indicates that individuals are

motivated to be optimistic and confident about the future (e.g., Armor & Sackett, 2006; Taylor & Brown, 1988; Weinstein, 1980). Due to this motivation, the present perspective proposes that it may be more self-enhancing to believe that many factors (internal *as well as* external) will help one succeed in the future. Believing that the proverbial stars will align in one's favor could not only help mitigate uncertainty regarding the prospect of success, but could also be self-protective, providing an excuse for possible future failure. Thus, thinking about a future (vs. past) success may diminish the affective benefits that can be accrued from believing successes are self-made while providing alternate routes to self-enhancement through external attributions.

Two articles have examined temporal differences in attributions (Helzer & Gilovich, 2012; Burns et al., 2012), however they did not examine attributions for important personal successes; thus while they may begin to provide insight into the processes under consideration, their applicability is limited. Specifically, Helzer and Gilovich (2012) identified a temporal asymmetry in which people made stronger attributions to “the will” (conceptualized as an internal sense of willpower and determination) for future events than for past events, and speculated that this reflects a motivation to believe that future goals are attainable. As outlined above, the present perspective fully comports with reasoning regarding the desire to believe future goals are attainable. However, it was expected that in the context of important personal achievements, the *mere achievement* of important future goals is likely to be a more immediate motivational concern than the *means* through which one might achieve the goals. Thus for important personal future goals, attributions should facilitate self-enhancement efforts by increasing positive feelings about the prospect of succeeding (rather than about *how* one will succeed), producing a heightened incentive to acknowledge external causal factors.

While Helzer and Gilovich's (2012) work helped inspire this research, it is unable to directly address the present hypotheses. Many studies exclusively examined attributions for other people's outcomes (targets for which self-enhancement is less relevant). The two studies that *did* examine attributions for personal outcomes averaged across ratings of attributions for successes *as well as failures* (where the present hypotheses would differ), and did not measure attributions for achievements participants identified as being important to them (participants were given a standardized set of hypothetical achievements). Relatedly, research on perceptions of intentionality of behaviors (Burns et al., 2012) has found that people judge other people's future (versus past) behavior to be more intentional, yet that work only considered the intentionality of other people's behavior. The present research builds on this prior work by examining temporal differences in attributions for *important personal successes* in conjunction with ideology.

Context of Poverty Policy Debate

A second contextual factor high in both motivational and ecological relevance is whether people think about their successes against a backdrop of the political discussion about inequality or not. Given that the primary variable of interest in this research was personal attributions, which does not implicate politics or other people in society (in contrast to past investigations of attributions), this afforded an opportunity to *experimentally vary* the extent to which political discourse was on people's minds when generating attribution ratings.

Reminding participants about the political discourse about inequality (operationalized by asking participants to rate their attitudes toward government-sponsored anti-poverty policies) might have several different effects. First, reflecting on the political debate about economic policy could increase external attributions (by emphasizing the systemic causes or consequences of inequality). Second, the prime could remind individuals of their *own ideological positions* and

motivate them to make attributions that are more consistent with those positions (i.e., *less external* for individuals low in social justice orientation, and *more external* for individuals high in social justice orientation). This possibility is related to ideas advanced by Skitka and colleagues (Morgan et al., 2010; Skitka et al., 2002), who demonstrated that the attributions individuals generate for *other people's* outcomes can be driven by a motivation to justify one's ideological beliefs (though, given that it only examined attributions for other people's outcomes, that work operationalized ideological consistency differently). Thus, the present work examined competing hypotheses regarding whether reminders of the discourse about economic policy would encourage external attributions or encourage ideologically-consistent attributions.

Another possibility considered was that the two motivationally-relevant contextual factors – temporal framing and reminders of the political discourse about inequality – would interact to shape attributions for personal successes. Stronger motivational incentives to make external attributions for future (versus past) events might operate synergistically with reminders of poverty to increase external attributions: such reminders might be particularly likely to increase external attributions when individuals are already motivated to generate external attributions because of the personal incentives available for doing so. Thus, orthogonally manipulating time-frame and the reminder of political discourse enabled a test of whether the different contextual influences work together in shaping attributions or whether they operate independently. Examining these two potentially motivationally-relevant variables together was of value given existing theorizing on motivated attributional processing which emphasizes ideological consistency motives, and given the current emphasis on the possible role of a distinct motivational incentive: the motivation to feel good about one's achievements.

The Present Research

Given the numerous novel aspects of this work – the consideration of attributions for personal success in conjunction with ideology, as a function of time-frame, and in response to a reminder of political context – a series of studies were conducted that ensured sufficient methodological parsimony to isolate the processes of interest.

Study 1 sought to understand the overall (time-unbound) relationship between social justice orientation and attributions for personal success, to establish the baseline relationship.

Studies 2-4 subsequently examined the role of the two contextual variables in influencing this relationship. Each study measured social justice on a prescreen before the study, measured attributions for important life achievements placed either in the past or the future, and manipulated whether participants were reminded about anti-poverty policies or not. Given that the studies asked about highly important personal achievements, for which one's own personal investment is likely to be quite high, attributions to internal factors were expected to be high across the board, and social justice orientation was expected to predict the extent to which individuals *also* recognize a role for external factors. It was also expected that the attributions of individuals low in social justice might be especially sensitive to the contextual manipulations, consistent with the notion that *overlooking* the role of external attributions in personal success may reflect a bias (Malle, 2006) that may be more readily subject to influence. The external attributions of those high in social justice were expected to be less likely to shift, as they are already relatively high. Based on the theorized motivational incentives available for making attributions in each time-frame, it was expected that thinking about future (vs. past) events would encourage greater external attributions. Competing hypotheses were tested regarding whether the policy reminder would increase external attributions or increase ideologically-consistent attributions. Of particular interest was the interaction between the two contextual factors, in

which the reminder of the discourse about inequality might increase external attributions particularly when individuals consider *future* achievements (i.e., when individuals are more motivated to make external attributions). In sum, these three studies evaluated the extent to which the attributions of individuals high and low in social justice are sensitive to (independent or interactive) effects of the two contextual variables.³ Social justice was also measured at the end of each study, to assess whether context-induced shifts in attributions were in turn related to shifts in social justice. To the extent that support for social justice and making external personal success attributions are related, context-driven increases in external attributions should in turn be associated with increases in support for social justice. This analysis enables a consideration of whether context not only attenuates ideological differences in attributions, but in social justice ideology itself.

Three subsequent studies experimentally tested the mechanisms underlying the findings of Studies 1-4. Two studies tested the notion that making attributions for future successes confers greater affective benefits (Study 5) and is more prospectively desirable (Study 6) than making external attributions for past successes. Specifically, Study 5 experimentally manipulated whether participants focused on external or internal attributions for past or future achievements, and predicted that reflecting on external attributions for future (but not past) achievements would help mitigate uncertainty. Study 6 manipulated whether participants *expected* that they would reflect on external or internal factors, and predicted that participants would hold stronger prospective preferences for reflecting on future (versus past) achievements when expecting to

³ Though specific hypotheses were generated for each variable, the hypotheses remained agnostic about which competing possibility regarding the policy reminder would emerge and whether effects of the manipulated variables would be independent (additive) or interactive. No prior work tested these ideas, and the experimental design employed could appropriately evaluate each possibility. Four studies were conducted to assess the findings' reliability and robustness (Studies 2-4 and Study 7); to foreshadow, all studies yielded consistent results.

reflect on external (versus internal) factors. After examining the incentives available for making external attributions under different time-frames, Study 7 experimentally tested the mechanism underlying the effect of the poverty policy reminder. Specifically, Study 7 considered that the poverty policy reminder might operate by leading people to consider A) the role of government in shaping economic policy, B) the needs of disadvantaged others, or C) potential personal financial vulnerability. It was expected that the latter two mechanisms would be most likely to operate, given the “hot” motivational nature of reflecting on one’s own and others’ needs.

In pursuing a deeper understanding of the relationship between self-reliance and ideology, the present research offers a novel theoretical perspective on the tension between personal responsibility (prioritizing personal goals) and social responsibility (prioritizing societal goals) – a tension that lies at the heart of moral psychology. The current perspective proposes that the motivation to believe that success is self-made may enhance personal affect while posing an obstacle to efforts to provide for the well-being of other members of society. It further suggests that a shift in temporal framing may shift what is self-enhancing, thereby bringing paths to *self-enhancement* and *group-enhancement* into greater alignment. Though several other frameworks regarding the relationship between attributional processes and ideology have been proposed, the present perspective offers a missing piece in efforts to provide attributional explanations for ideological positions. Notably, although these other accounts also offer affective and/or motivational explanations, each differs substantially from the explanation proposed here, both in the target of attributions (most focus on the motivational appeal of attributions for others’ outcomes) and in the object of motivation. Specifically, an influential model argues that conservatives make internal attributions for others’ need, evoking negative emotional reactions toward those individuals, and reducing helping behavior (Weiner et al., 2011). System

justification theory argues that political conservatives make internal attributions for others' poverty as a result of motivations to justify economic inequality, maintain the political status quo, and manage uncertainty (Kay et al., 2005; Jost et al., 2004; McCoy & Major, 2006). Relatedly, just-world theory holds that people generate internal, victim-blaming attributions to uphold beliefs that society is fair and that people get what they deserve (Hafer, 2000; Hafer & Bègue, 2005; Lerner, 1980), and a more recent account suggests that people are motivated to believe in free will due to a desire to hold others accountable for immoral actions (Clark et al., 2014). As already discussed, another perspective holds that people make internal attributions to justify their ideological beliefs (Skitka et al., 2002). While each of these models differ in the specific object of motivation, they all theorize that people are motivated to develop attributions in response to other people's behaviors/outcomes to justify societally-relevant beliefs (e.g., that social structures are fair, that people get what they deserve, that people can be held accountable, that one's general ideological beliefs have merit) or outcomes (e.g., inequality, punishment of others). The overarching goal of the present research was to introduce *the motivation to feel good about personal achievements* as another motivational basis of ideological disagreement over the causes of success – one that may point toward unique avenues for overcoming entrenched ideological disagreement over how to help more members of society attain economic success.

STUDY 1

The purpose of Study 1 was to probe the relationship between social justice orientation and attributions for personal successes not specifically tied to either a past or future time-frame. Only a few prior studies have considered the relationships between ideological variables and self-relevant attribution measures (e.g., locus of control, Protestant work ethic, free will beliefs), and those studies did not explicitly examine attributions for personal successes or social justice

orientation. Thus, before considering the role of time-frame, it was important to examine the overall relationship between social justice orientation and personal success attributions, to establish the nature of the “default” relationship between these variables.

Method

In all studies in this article, data collection ended when the predetermined sample size was reached or when participants invited from a prescreen stopped signing up for the actual study. No data were analyzed before data collection was complete. Power analyses were conducted with G*Power. All studies aimed for .80 power to detect small-medium effects (correlations in Study 1, 3-way interactions in Studies 2, 3, and 4, and 2-way interactions in Studies 5, 6, and 7). Sample sizes in all studies except Study 1 were constrained to an extent by the use of a prescreen survey, which limited the initial pool and produced attrition between time points (some studies also oversampled individuals low in social justice, further limiting the pool). Nevertheless, each study obtained a sample large enough to detect at least small-medium effects with .80 power. Participants were recruited in the United States only. All measures, manipulations, and exclusions in all studies in this article are disclosed either in the main text or in the *Supplemental Material*.

Participants

For Study 1, 296 participants were recruited from Amazon Mechanical Turk (MTurk). Four participants who had no variability in their responses across the measures were excluded, leaving 292 participants. This provided at least .80 power to detect correlations as small as $r = .163$ (small effects).

Procedure

Participants completed measures of social justice orientation and attributions.

Measures

Social justice orientation. Social justice orientation (Janoff-Bulman & Carnes, 2013) was measured by asking participants to indicate their level of agreement with five items used in previous research (e.g., “*It is important for those who are better off to help provide resources for the most vulnerable members of society*”; 1 = *Strongly Disagree*, 7 = *Strongly Agree*; $\alpha = .89$, $M = 5.08$, $SD = 1.33$).

Attribution ratings. Participants were asked to “*Think for a moment about what it takes to succeed in important life goals and achievements. To what extent do you think that each of the following factors contribute to your successes?*” Participants rated attributions toward four sources: *Effort and hard work*, *Your abilities*, *Help from other people*, and *Luck* (1 = *Not at all*; 7 = *A great deal*). Consistent with the large body of research on attributions for personal achievements (e.g., Malle, 2006; Weiner, 2000), two composite scores were created: one for internal attributions (the average of effort and ability; $\alpha = .73$, $M = 6.08$, $SD = .84$) and one for external attributions (the average of help and luck; $\alpha = .48$, $M = 4.78$, $SD = 1.20$).

Results and Discussion

Participants higher in social justice orientation made greater external attributions, $r = .188$, $p = .001$, and fewer internal attributions, $r = -.116$, $p = .048$, for their successes. Thus when it comes to personal life successes in general – with no time-frame specified – social justice orientation was associated with making greater external and fewer internal attributions, consistent with the limited prior research examining related variables. Small correlations emerged, leaving the door open for contextual factors to influence the relationships. These findings nonetheless represent an important step in examining the relationship between ideology and personal success attributions.

STUDIES 2-4

Time-frame is a particularly important contextual variable not only because of the theorized past-future differences, but also because both frames likely represent common ways in which people think about success. This stands in contrast to research on attributions for *other people's* outcomes, where outcomes usually lie in the past. When thinking about what it takes to achieve personal success, it seems similarly likely that people would reflect on what it took to succeed in the past as they would on what they expect it to take to succeed in the future. To test the intuition that people do not perceive either frame to be more natural, a separate sample of 582 MTurk participants completed past- and future-specific attribution measures and then were asked, “*When you think about the causes of success in your life, do you tend to think about it in terms of the past or the future? In other words, which is a more ‘natural’ frame of reference for you?*” Responses were fairly evenly split: 54.7% selected “*the past*” and 45.3% selected “*the future*.” Thus, it seems important to consider *both* ecologically meaningful time-frames, and to assess whether the different frames encourage distinct patterns of attributional responding.

Studies 2, 3, and 4 tested the focal hypotheses about how time-frame and a reminder of the political discourse about poverty operate together with social justice orientation to shape attributions for personal success. As described earlier, internal attributions for major, specific life achievements were expected to be quite high across the board (i.e., higher than in Study 1). Individuals low in social justice were expected to be more sensitive to the contextual variables, and orthogonally manipulating the contextual variables enabled an assessment of whether time-frame and the poverty policy reminder independently or interactively influence attributions. Social justice was measured both before the study and at the end, to examine whether contextual shifts in attributions are associated with shifts in subsequent support for social justice.

Slight methodological variations were implemented across the studies. Study 2 employed a student sample. Study 3 employed a larger student sample and tweaked the experimental manipulation (removing an open-ended attribution measure). Study 4 employed a more broadly representative, non-student sample; this was important given that undergraduate students have relatively uniform types of life achievements available to draw from (mostly academic and immediate post-graduation jobs), making it important to establish that the effects generalize to a sample with a broader set of past achievements and future goals.

Method

Participants

Participants were recruited from a prescreening survey completed at least one week before the actual study, which included a measure of social justice orientation (among filler items). In Studies 2 and 3, students were invited to the actual study weeks after completing a departmental prescreening at the beginning of the semester. In Study 4, participants were invited after completing an initial prescreening survey conducted one week before the actual study.⁴ The use of the prescreen was important because it ensured that the measure could neither be *affected* by the study (i.e., if placed at the end, given the possibility that support for social justice could shift during the study), nor could it *affect* responses in the study (i.e., if placed at the beginning, given the use of a related measure of support for anti-poverty policies as a prime). Additionally, because there were fewer people on the low end of the social justice measure, individuals low in

⁴ In Study 4, the number of participants who would not return after the first MTurk survey was underestimated (although 388 participants were invited to the actual study, only 48% of these participated). The sample size in Study 4 was thus limited due to a lower than expected part 2 participation rate. This recruitment issue was corrected in the subsequent MTurk studies (including in Study 7, which provided further tests of the key effects in an MTurk sample).

social justice were oversampled (by randomly inviting fewer people high in social justice) to help normalize the distribution.

Applying the same exclusion criteria across all studies, participants were excluded if they reported language difficulties or technical difficulties, had no variability in responses across measures, or failed to follow instructions based on the following criteria: participants either failed to rate their achievement above the midpoint on an item asking how important the achievement they wrote about was to them (it was essential for participants to select an important life achievement for theoretical reasons and failure to do so also reflected a clear lack of attentiveness by participants to the study instructions), they did not write about an academic- or career-related achievement (participants either wrote nonsensical responses or wrote about other types of goals, such as getting married or traveling despite clear instructions [described below]), or they wrote about an achievement in the wrong time-frame.⁵

Initial sample sizes, numbers of exclusions, and final sample sizes are reported in *Table 1*. Sample demographics for all studies are reported in the *Supplemental Material*. In each of the studies, the samples afforded at least .80 power to detect omnibus main effects and interactions that constitute small-medium effects (see *Table 1*). Aggregating across the studies ($N = 685$) provided at least .80 power to detect omnibus main effects and 3-way interactions as small as $\eta_p^2 = .011$ (small effects).

| | Study 2 | Study 3 | Study 4 |
|---|----------------|----------------|----------------|
| Sample | Student | Student | MTurk |
| Study N before exclusions | 232 | 331 | 188 |
| Technical difficulties | 0 | 1 | 1 |
| Language difficulties | 1 | 0 | 0 |
| Did not follow instructions | 16 | 28 | 19 |
| Final N | 215 | 302 | 168 |

⁵ For all MTurk studies, basic data screening measures were also implemented to screen for bots and duplicate study completions (see *Supplemental Material*).

| Smallest effect powered to detect with .80 power | $\eta_p^2 = .036$ | $\eta_p^2 = .026$ | $\eta_p^2 = .045$ |
|--|-------------------|-------------------|-------------------|
|--|-------------------|-------------------|-------------------|

Table 1. Sample information for Studies 2-4.

Procedure

The procedure was nearly identical across all three studies, with minor variations. Participants were randomly assigned to select a personal achievement they had either achieved in the past or hoped to achieve in the future. Participants were told that the achievement should be something they view as important to them and were asked to briefly describe the achievement. Soliciting a single, important achievement ensured that the achievement could implicate the self and allow self-enhancement processes to operate. Several examples of achievements were provided that varied minimally across the time-frame conditions. The examples of achievements provided in Studies 2 and 3 were appropriate for the student sample. These were adapted to accommodate a broader range of achievements relevant to the MTurk sample in Study 4.

Participants in Studies 2 and 3 received one of the following sets of instructions:

We would like you to think about an academic or career-related goal [that you have successfully achieved / that you hope to achieve in the future]. This should be any [successful / future] academic or career-related achievement that you view as important to you [(e.g., graduating from high school, getting into college, getting a desirable internship) / (e.g., graduating from college, getting into graduate school, getting a desirable job)]. Take a moment to think about an achievement of this sort. When you are ready, in a sentence or two, briefly describe the achievement in the space below.

Participants in Study 4 were asked to describe a “career-related goal” (the word “academic” was removed) and examples were provided of achievements spanning a broader range of career stages (using *the same* examples in the past and future conditions): “*This should be any [successful / future] career-related achievement that you view as important to you (e.g., an academic achievement, obtaining an academic degree, getting a desirable job, getting promoted, meeting an important career goal).*” The only other procedural difference across studies was that

in Study 2, after describing their achievement, participants were asked to briefly list open-ended attributions for the achievement. Studies 3 and 4 did not solicit these open-ended attributions.

Next, participants were randomly assigned A) to rate their support for government-sponsored anti-poverty policies before completing the attribution ratings (the poverty policy reminder condition) *or* B) to complete the attribution ratings before rating their support for anti-poverty policies (the no poverty policy reminder condition). The manipulations cleanly solicited attributions for past or future achievements under conditions in which participants considered the political discourse about poverty and inequality or not. Finally, participants rated the importance of their achievement and completed the social justice measure.

Measures

The measures were identical across Studies 2-4 (see *Table 3* for descriptive statistics).

Social justice orientation. Social justice orientation was assessed using the same measure as in Study 1, both on a prescreen before each study and again at the end of each study.

Poverty policy support. As part of the poverty policy reminder, participants were told, “*We would like you to rate your attitudes toward a number of public policies. To what extent do you approve or disapprove of the following?*” Participants rated their support for nine poverty policies (*Government welfare for the poor, Universal health care, Food stamps, Job training programs, Government-sponsored day care assistance, Housing assistance for the poor, Unemployment insurance, Laws prohibiting employment discrimination, Free school lunches for needy children*; 1 = *Strongly opposed*, 7 = *Strongly in favor*).

Attribution ratings. Participants were asked to think about their achievement and rate the extent to which each of the following either “contributed” or “will contribute” to their success (1 = *Not at all*, 7 = *A great deal*): *Effort and hard work; Your abilities; Luck; Help or*

support from family members; Help or support from friends; Help or support from teachers or mentors; Help or support from other people (i.e., not mentioned above).

Internal and external attribution composite scores were created. Averaging items to yield internal and external attribution composites is common in research on attributions in the achievement domain (Malle, 2006), with effort and ability as the common internal causes and luck and help from others as the common external causes (Weiner, 2000).⁶ Effort and ability were averaged. Numerous items were included to assess help attributions, to cover the wide range of different possible sources of help. Importantly, though, it was not relevant for this research to distinguish *who* helped, or *how many* different sources helped, but merely that participants recognized the role of help from *someone* else in their success. Perhaps teachers were perceived as playing a very large role but friends were not in a position to play any role. Thus, rather than simply average the help items, each participant's *highest rating* among the four help items was identified. This ensured that the strongest recognition of help was represented, and that this rating was not weighed down by the inevitability that not all sources are likely to have provided substantial help for any single achievement, capturing breadth without sacrificing

⁶ The external attribution reliability estimates in *Table 3* include all 5 items contributing to the external attribution composite. The correlation between luck and the highest help score across studies was $r = .148$. Attributions are often somewhat hydraulic in nature, in that, for example, greater attributions to luck can result in fewer attributions to help, as there is less causal force left to explain after attributing some of it to luck, even though luck and help attributions both reflect external attributions (Kelley, 1972). Thus, typical measures of reliability are often not useful for such measures, as positive associations are inherently constrained even when there is high conceptual overlap in the items. It was important to use independent ratings of internal and external attributions (and not a bipolar internal-external scale) because internal attributions were expected to be high and potentially less malleable than external attributions in the context of important personal achievements. Using separate measures left up to participants to determine the extent to which attributions to each source constrain attributions to others and avoided imposing any artificial constraint (see Helzer & Gilovich, 2012, for a related discussion).

precision. This highest help value was averaged with luck to create the external attribution composite. These composite scores most closely reflected the theoretical constructs of interest.⁷

| | Study 2 | | | Study 3 | | | Study 4 | | |
|------------------------------------|----------|-----------|------------------|----------|-----------|------------------|----------|-----------|------------------|
| | <i>M</i> | <i>SD</i> | <i>α</i> | <i>M</i> | <i>SD</i> | <i>α</i> | <i>M</i> | <i>SD</i> | <i>α</i> |
| Prescreen Social Justice | 4.56 | 1.18 | .86 | 4.57 | 1.26 | .88 | 5.04 | 1.38 | .91 |
| End-of-Study Social Justice | 4.71 | 1.19 | .86 | 4.64 | 1.29 | .89 | 4.97 | 1.50 | .92 |
| Welfare Policy Support | 5.47 | 1.00 | .90 | 5.48 | 0.97 | .89 | 5.45 | 1.22 | .92 |
| Internal Attributions | 6.46 | 0.60 | .50 | 6.40 | 0.64 | .33 | 6.44 | 0.71 | .70 |
| External Attributions | 4.87 | 1.13 | .79 ⁶ | 4.70 | 1.08 | .75 ⁶ | 4.74 | 1.27 | .73 ⁶ |

Table 3. Descriptive statistics for Studies 2-4.

Results

Analytic plan

The results of Studies 2-4 were highly consistent across studies, with the same key effects emerging in every study and only very limited points of divergence emerging. Thus, aggregate analyses combining the studies (and treating study as a factor in the analysis) are reported below. The results for the individual studies are reported in the *Supplemental Material*.

Moderated regression analyses were conducted to test the effects of prescreened social justice orientation, the temporal framing manipulation (past vs. future), and the poverty policy reminder manipulation (reminder vs. no reminder), on internal and external attributions. Analyses were conducted in two stages, using different regression coding schemes at each stage. First, the two manipulated independent variables were effect-coded and social justice orientation was mean-centered. This enabled a consideration of overall “main effects” of the variables and

⁷ In addition to these composites, effects on help and luck attributions were examined separately, as were effects on a *mean* help score. As described in the *Supplemental Material*, the same results emerge regardless of how external attributions is operationalized, signaling the robustness of the findings across indicators of external attributions. Thus, despite low values on traditional measures of reliability, the fact that the same results emerge regardless of the specific type of external attribution examined supports the idea that luck and help tap into the same psychological construct – external attributions – and serve similar psychological functions, yet are not highly correlated because they are to some extent substitutable.

their 2-way interactions – *collapsed across* levels of the other variables (akin to a factorial ANOVA). These analyses tested *whether* the effect of social justice depended on one of the contextual variables (a 2-way interaction) or both of them (a 3-way interaction). Of course, the more critical theoretical question was *how* these variables interacted. Thus, the manipulated variables were dummy coded and social justice orientation was rescaled at 1 *SD* above and below the mean, enabling an examination of the conditional effects within particular levels of the other variables. This set of analyses comprehensively addressed the research questions. “Study” was effect-coded and included as a factor to obtain the aggregated results reported below.

Effects on internal attributions

There were essentially no effects on internal attributions. The *single effect* that emerged in any study was driven by a single cell within a single study and its interpretability is extremely limited (see *Supplemental Material* for details). Internal attribution means were very high (above 6.40 in each study). In fact, 85% of internal attribution scores fell between “6” and “7” on the 7-point scale. The vast majority of participants – irrespective of temporal framing, the policy reminder, or, most notably, social justice orientation – made very strong internal attributions toward their important, specific personal life achievements. The key differences emerged in whether participants *also* acknowledged external attributions.

Main effects and 2-way interactions on external attributions

The main effect of social justice orientation on external attributions (“collapsed” across levels of the other variables) was significant, $F(1, 660) = 13.07, p < .001, \eta_p^2 = .019$, indicating an overall relationship between social justice and external attributions, similar to the Study 1 effect. The main effect of time-frame on external attributions was also significant, $F(1, 660) = 13.59, p < .001, \eta_p^2 = .020$, indicating that, overall, external attributions were higher for the

future than for the past. No single contextual variable alone moderated the relationship between social justice and external attributions: the 2-way interactions between social justice and each contextual variable individually were not significant, p 's > .162, $\eta_p^2 < .003$.

3-way interaction on external attributions

Critically, the 3-way interaction between time-frame, poverty policy reminder condition, and social justice orientation was significant, $F(1, 660) = 19.68$, $b = .62$, $SE = .14$, $p < .001$, $\eta_p^2 = .029$ (see *Figure 1*). Thus, the relationship between social justice and external attributions depended on *both* contextual variables.

Conditional effects within the poverty policy reminder condition

Conditional effects were examined next. Among individuals who received the poverty policy reminder, a significant 2-way interaction emerged between social justice and time-frame, $b = .41$, $SE = .10$, $p < .001$, $\eta_p^2 = .027$, indicating that the relationship between social justice and external attributions differed as a function of time-frame. Tests of simple slopes revealed starkly different relationships between social justice and external attributions in each time-frame: social justice orientation was significantly associated with making greater external attributions for *past* successes, $b = .33$, $SE = .07$, $p < .001$, $\eta_p^2 = .032$, a relationship consistent with the one that emerged when no time-frame was specified in Study 1. However, when making attributions for *future* successes, this relationship did not emerge, $b = -.08$, $SE = .06$, $p = .205$, $\eta_p^2 = .002$; that is, when considering future successes, individuals high and low in social justice orientation no longer differed in their attributions to external factors. The reason for these very different relationships was clearly apparent when testing the difference between the time-frame conditions among individuals low and high on social justice. The difference was driven by individuals *low* in social justice, who made significantly greater external attributions for future compared to past

successes, $b = .94$, $SE = .18$, $p < .001$, $\eta_p^2 = .042$. Individuals high in social justice, in contrast, did not differ as a function of time-frame, $b = -.09$, $SE = .17$, $p = .581$, $\eta_p^2 < .001$. Thus, when reminded about anti-poverty policies, individuals low in social justice who considered future achievements no longer showed a reluctance to make external attributions – a reluctance that emerged in both the past and neutral temporal contexts.

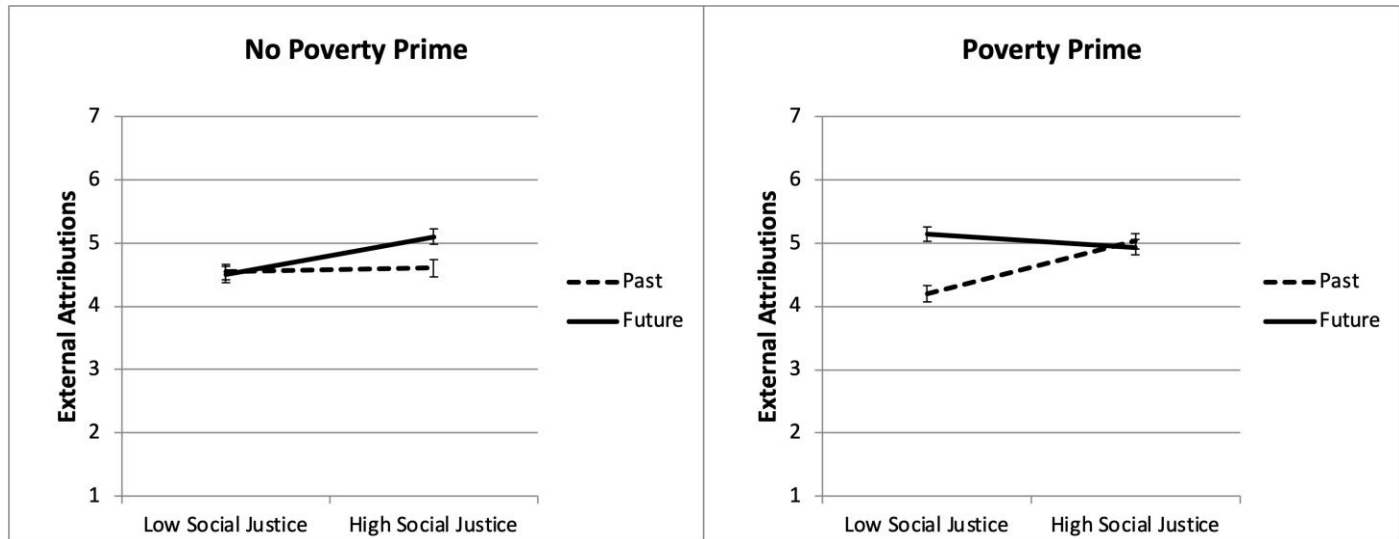


Figure 1. Social justice \times time-frame \times poverty policy reminder interaction on external attributions aggregated across the three studies. Error bars represent standard errors.

Conditional effects within the no reminder condition

Conditional effects within the no poverty policy reminder condition were examined next. When individuals low in social justice were not reminded of poverty policies, they consistently made low external attributions, with no past-future difference emerging, $b = .06$, $SE = .18$, $p = .758$, $\eta_p^2 < .001$. Some evidence emerged suggesting that individuals *high* in social justice made lower external attributions when both not reminded of poverty policies and reflecting on *past* successes (a departure from their consistently high levels of external attributions elsewhere): a significant (though weak) 2-way time-frame \times social justice interaction in the no reminder condition emerged suggestive of this tendency, $b = -.21$, $SE = .10$, $p = .039$, $\eta_p^2 = .006$. However, due to interpretive issues, only a single marginal effect from a single study can be said to

constitute evidence for this effect (see *Supplemental Material* for details). The effect among individuals high in social justice should thus be considered with caution at present and as a possible area of additional exploration in the future.

Effects of the poverty policy reminder within each time-frame

The conditional effects could be decomposed in one additional theoretically relevant manner – by assessing the *effect of the policy reminder* within each time-frame among individuals low and high in social justice. This assesses whether the poverty policy reminder triggered *external attributions* or *ideologically-consistent* attributions. Individuals low in social justice made greater external attributions for future successes when they were reminded about poverty compared to when not reminded about poverty, $b = -.65$, $SE = .18$, $p < .001$, $\eta_p^2 = .020$. This illustrates that when individuals low in social justice were reminded about poverty policies (policies they ideologically *disagree* with), they responded by making *less ideologically-consistent* (i.e., more external) attributions for future successes. Thus in the context of future successes, the policy reminder very clearly *increased* external attributions among individuals low in social justice. If anything, a mild opposite tendency emerged among individuals low in social justice in the past context, $b = -.36$, $SE = .18$, $p = .048$, $\eta_p^2 = .006$ (the poverty reminder slightly decreased external attributions, constituting limited evidence of ideological consistency in the *past* frame), and no effect emerged among individuals *high* in social justice in the future time-frame, $b = -.17$, $SE = .17$, $p = .323$, $\eta_p^2 < .001$.⁸

Implications for downstream support for social justice

⁸ Although predictions were based on treating the poverty policy scale as a prime, the scale scores themselves were also examined for additional insights. There were no significant effects on policy attitudes in any of the studies that could account for the attributional differences. The scale acted as a prime, changing the impact of temporal framing and social justice orientation on external attributions, but without itself being directly impacted by the manipulated variables.

A conditional process analysis examined whether the conditions that increased external attributions (i.e., the future-framing among individuals low in social justice orientation reminded of poverty policies) had implications for downstream support for social justice (using PROCESS; Hayes, 2018; model 11, 10,000 resamples, percentile confidence intervals; see *Figure 2*).

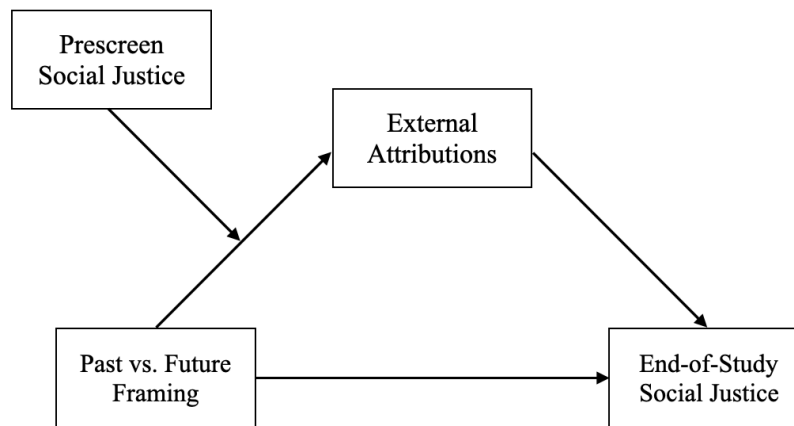


Figure 2. Conceptual diagram for mediation model (PROCESS model 11) for Studies 2, 3, 4, and 7.

Among individuals low in initial social justice who were reminded about poverty policies, focusing on the future (vs. the past) was associated with higher end-of-study social justice through external attributions, $b = .18$, $SE = .06$, 99% CI[.05, .36]. This illustrates that shifts in external attributions have implications for subsequent support for social justice.

The total effect – the effect of time-frame on end-of-study social justice among individuals low in social justice who were reminded of poverty policies *irrespective* of the mediator – was also significant, $b = .29$, $SE = .13$, $p = .029$, $\eta_p^2 = .007$ (though this total effect did not emerge as significant within the individual studies). Although identifying effects of the independent variables on end-of-study social justice *outside of effects operating through attributions* was not the primary focus of this research, this suggests that merely thinking about a future goal and poverty policies can (to a small degree) increase support for social justice among

those initially low in social justice. The size of total effects can be suppressed by other factors working against the mediator (Hayes, 2018). It is possible that just as the independent variables *increase* support for social justice through external attributions, they also *decrease* support for social justice for other reasons (one distinct possibility is that although it may not do so on the attribution measure, the policy reminder may trigger motivations for ideological consistency *on the ideological social justice measure*). Together, these analyses document an effect on downstream support for social justice through external attributions.

Robustness of the findings

The main effects, interactions, and simple effects were nearly entirely consistent across the three studies (see *Supplemental Materials*). Although considering internal and external attributions separately enabled critical insights, it was also important to verify that the effects emerge on a difference score of the two measures, which could succinctly capture within-subject profiles of attributional responding. Given that almost no effects emerged on internal attributions, it was anticipated that similar effects would emerge on the difference score as on the external attribution measure. All primary findings (e.g., the 3-way interaction, all conditional effects in the poverty policy reminder condition, the indirect effect) remained unchanged when using the difference score (see *Supplemental Material* for details). To further assess the robustness of the effects, effects on each attributional source were tested separately. This could illustrate whether the effects were driven more by attributions to luck or help. All primary findings remained unchanged using the luck item, the highest help item, or the average of the help items as the dependent variable (see *Supplemental Material* for details).⁹

⁹ Help and luck reflect distinct types of attribution falling under the theoretical umbrella of external attributions. Despite being substitutable and thus not highly correlated in this research, the same effects emerged on each measure. Thus, whether one focuses on the similarities between the luck and help constructs (they are both external factors) and emphasizes the composite analyses, or focuses on the

Given that social justice orientation was not experimentally manipulated, the analyses were rerun controlling for demographic variables that could covary with social justice orientation and attributions: gender (Eagly, 1987), socioeconomic status (Kraus, Piff, & Keltner, 2009), and race/ethnicity (Hunt, 1996). The results remained unchanged when controlling for gender, income, education level, and race/ethnicity, and these variables did not moderate the key effects (see *Supplemental Material*). Analyses were also rerun replacing the social justice orientation measure with a generic 2 item measure of political orientation (liberal-conservative; Democrat-Republican). The effects did not emerge with this measure, indicating that the effect is sensitive to the group-based ideology regarding the distribution of resources across society per se (the more relevant ideological construct).

Studies 2-4 Discussion

Studies 2-4 found that the combination of two simple conditions – a focus on future goals coupled with a brief reminder about anti-poverty policies – increased the extent to which individuals low in social justice orientation attribute success to external factors. In fact, the combination of these two factors eliminated the tendency of individuals low in social justice relative to those high in social justice to overlook the role of situational factors in shaping their success – a tendency observed both in the context of past successes as well as in the context of successes more generally. This heightened willingness to acknowledge situational factors was in turn associated with greater support for social justice. Thus, the Studies 1-4 A) document ideological differences in attributional tendencies B) identify a set of ecological conditions that eliminate these differences, and C) illustrate the implications of overcoming these tendencies for the very ideology under investigation. Overlooking external contributions to personal success

differences between the constructs (they are not very highly correlated) and emphasizes the analyses treating luck and help separately, the conclusions drawn about external attributions are identical.

appears to pose a barrier to being willing to support efforts to reduce economic inequality, and a shift in psychological context appears to encourage recognition of these external contributions, removing the attributional barrier to supporting social justice. Rather than lead people to make ideologically-consistent attributions, the poverty policy reminder increased ideologically-*inconsistent* external attributions for future goals among individuals low in social justice. Thinking about future goals may enable routes to self-enhancement that involve perceiving future goals to be attainable. The studies highlight the context-sensitive nature of the relationship between ideology and external attributions, on the one hand, as well as the rigid context-*insensitivity* of internal attributions, on the other. Although rhetoric about causal attribution is often framed in the language of internal attributions (“self-reliance,” “pulling oneself up by one’s bootstraps”), such attributions are understandably uniformly high in this context, and the critical differences emerge in whether individuals *also* acknowledge a role for factors extending beyond the self.

Several important questions remain about why these effects emerged, including the as-yet-unexamined question of whether there are in fact stronger incentives to acknowledge the external factors that shape *future* success versus *past* success. In addition, it is not precisely clear *why* a reminder of anti-poverty policies was needed to increase external attributions for the future. Studies 5-7 addressed these questions. Studies 5 and 6 tested the proposed motivational mechanism for the impact of time-frame. Study 7 tested the mechanism underlying the role of the poverty policy reminder while offering a conceptual replication of Studies 2-4.

STUDY 5

Time-frame had a critical impact on external attributions in Studies 2-4. Although *whether or not* time-frame had an impact reliably depended on other factors, its impact never

reversed direction: when a temporal difference emerged, external attributions were weighted more heavily for the future versus the past. The current perspective proposes that thinking about future versus past successes shifts the types of attributions that are *emotionally rewarding* and *desirable*. For past achievements, taking personal credit for the achievement can amplify the positive feelings stemming from having succeeded. For future achievements, there is little to gain from taking credit for achievements not yet attained, and believing that situational factors will help shape success might help mitigate the uncertainty about succeeding.

Prior research established that making internal (vs. external) attributions for personal past successes increases positive affect and self-esteem (McFarland & Ross, 1982; Riemer, 1975) but has not considered the affective consequences of attributions for personal future goals. Extrapolating from research which, critically, did not examine personal attributions might lead to the prediction that *internal* attributions may confer the affective benefit of mitigating uncertainty regarding future successes (Helzer & Gilovich, 2012), whereas the present perspective predicts that *external* attributions should mitigate uncertainty regarding future successes.

To test these competing hypotheses regarding the affective consequences of different attributional foci, a 2×2 experiment was conducted in which participants were asked to contemplate the internal or external causes of past or future successes before rating their feelings of uncertainty. It is important to note that an experimental design manipulating attributions was necessary for testing this question given the hydraulic nature of the prediction (just as those who reflect on external attributions for success should experience greater certainty, those who are most *uncertain* might have the most incentive to make external attributions to reduce their uncertainty, thus muddling any conclusions from correlational designs). Internal attributions served as a useful comparison condition here because internal attributions are highly regarded in

this context, enabling an assessment of whether focusing on external attributions confers benefits over and above the most likely alternative to doing so (focusing on internal attributions).

Studies 5 and 6 zeroed in on testing the affective impact of making external attributions for future goals. It is possible that these predicted affective benefits would be further heightened by reminders of poverty policies or among individuals low in social justice orientation. However, it was predicted that these benefits might emerge regardless of these conditions that influenced the generation of external attributions in Studies 2-4. That is, it was expected that these benefits reflect psychological features inherent to reflecting on attributions in a future time-frame, with social justice orientation and the poverty policy reminder influencing when individuals choose to *pursue* these benefits by making particular attributions, rather than influencing the extent to which individuals can *perceive* the benefits.

Method

Participants

As in Studies 2 and 3, undergraduate psychology students were recruited from a departmental prescreen (again used to measure and oversample participants low in social justice orientation). Of the 213 participants who completed the actual study, 25 were excluded for not following instructions (using the same criteria as the prior studies), leaving 188 participants in the final sample ($M_{age} = 19.98$, $SD = 2.24$; 50 males, 138 females). This provided at least .80 power to detect main effects and interactions as small as $\eta_p^2 = .041$ (small-medium effects).

Procedure

Participants were randomly assigned to list either a *past* or *future* academic/career-related achievement that is “very important” to them, and were provided the same examples of achievements as those provided in Studies 2-3.

Participants were then randomly assigned to either reflect on the *internal* or *external* factors that *helped* or *would help* shape their success. Specifically, participants received one of the following sets of instructions (based on the manipulation used by Bryan et al., 2009):

Research demonstrates that people often underestimate the role that factors such as [ability, talent, and hard work / chance, opportunity, and help from others] play in shaping success. These factors tend to play a bigger role than people think. Please tell us the story of how you [achieved / plan to achieve] your goal. In particular, we would like to know about the role [that / that you expect] [your abilities, talents, and hard work / chance, opportunity, and help from others] [played / to play] in helping you get there. Please describe this in as much detail as possible in the space below.

Participants spent at least one minute completing the writing task and then rated their affect.

Measures

Prescreen social justice. Social justice orientation ($\alpha = .92$, $M = 4.53$, $SD = 1.47$) was assessed on the prescreen using the same measure as the previous studies.

Uncertainty. To capture feelings of uncertainty in response to the attribution reflection task, immediately after participants finished writing, they were told, “*Listed below are a number of words that describe different feelings and emotions. We are interested in the extent to which you feel each of these emotions right now, at this very moment.*” Participants then rated how “*uncertain*” they felt (1 = *Not at all*; 9 = *A great deal*; $M = 4.75$, $SD = 2.53$).

Results

A 2 attribution condition (internal vs. external) \times 2 time-frame (past vs. future) ANOVA on feelings of uncertainty was conducted. The main effect of attribution condition was not significant, $F(1, 184) = .09$, $p = .765$, $\eta_p^2 < .001$. Neither was the main effect of time-frame, $F(1, 184) = .96$, $p = .328$, $\eta_p^2 = .005$, though uncertainty was directionally higher after reflecting on a future achievement ($M = 4.94$, $SE = .25$) compared to a past achievement ($M = 4.58$, $SE = .27$). Most importantly, this was qualified by a significant interaction between attribution condition

and time-frame, $F(1, 184) = 4.33, p = .039, \eta_p^2 = .023$, indicating that thinking about internal versus external contributions to success had different affective consequences under different time-frames (see *Figure 3*). For future goals, participants reported marginally less uncertainty after reflecting on external ($M = 4.50, SE = .36$) compared to internal attributions ($M = 5.38, SE = .36$), $p = .087, d = .343$. In the context of past successes, however, this pattern reversed, and no significant difference emerged as a function of reflecting on internal ($M = 4.25, SE = .36$) versus external attributions ($M = 4.91, SE = .39$), $p = .219, d = .263$. Put differently, participants felt more uncertain about the future than about the past after reflecting on internal determinants of success – an effect which may reflect a natural tendency to be more uncertain about the future compared to the past when adopting the natural focus on internal attributions, $p = .030, d = .452$. In contrast, reflecting on external attributions mitigated uncertainty to the point that uncertainty about the future was no different from uncertainty about the past, $p = .443, d = .163$.

The interaction effect was not further moderated by social justice orientation, $b = .24, SE = .51, p = .640, \eta_p^2 < .001$; thus, the affective benefits conferred by making external attributions for the future were experienced by individuals both high and low on social justice orientation.¹⁰

¹⁰ Several other emotions were measured (happy, joyful, delighted, satisfied, pleased, optimistic, hopeful, proud, sad, upset, disappointed, dissatisfied, frustrated, hopeless, pessimistic, angry). While the uncertainty item was most relevant to our theorizing about the affective benefit likely to be conferred by making external attributions for the future, other emotions could also be seen as being relevant in light of their valence. Although no interactions (or main effects of attributions) on any of these emotions reached significance, an inspection of the directions of the effects were consistent with what would be expected based on the valence of the emotion. For example, people were directionally more happy, more delighted, more optimistic, more hopeful, less sad, less upset, and less frustrated, after making external (vs. internal) attributions for the future, but internal (vs. external) attributions for the past (although these interactions did not reach significance, p 's $> .218, \eta_p^2 < .008$). It is not surprising that differences in the magnitude (but not direction) of effects emerged between emotion items given that it was left to participants to consider what the emotion specifically might be “about” and given that each emotion likely differs in how applicable it is in the context of the reflection task. Uncertainty is highly relevant to reflecting on the future, and was most sensitive to participants’ top-of-mind concerns about their future goals.

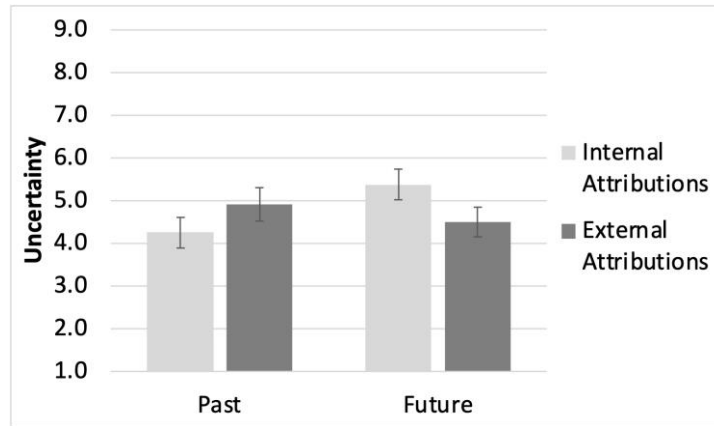


Figure 3. Study 5 attribution condition \times time-frame interaction on uncertainty. Error bars represent standard errors.

Discussion

Study 5 found that different affective incentives are available for generating attributions for past versus future successes. Relative to reflecting on internal attributions, reflecting on external attributions helped mitigate uncertainty regarding future achievements. This finding illuminates a potentially important pathway through external attributions to self-enhancement when considering one's future prospects. Thus, Study 5 identified a novel affective benefit conferred by external attributions consistent with the proposed explanation for why individuals are more likely to generate external attributions for future successes. Study 6 tested these ideas in a different way.

STUDY 6

Study 5 identified an affective benefit arising from making external attributions for future goals, yet it did not consider whether the benefit is sufficiently appealing so as to orient people's decision-making toward actively seeking it out. A motivational explanation for why some participants were more willing to make external attributions for future than for past successes in Studies 2-4 would require that people be able to *anticipate* these benefits and develop prospective *preferences* based on them. Study 6 assessed whether individuals *prefer* certain

attributional frames to a greater extent than others. Such preferences would presumably be based upon the sum total of the benefits and costs anticipated for each frame. Thus, directly measuring active attributional preferences enabled a succinct test of the proposed motivational mechanism.

Participants were either led to expect that they would vividly reflect on the *internal* or *external* causes of personal life achievements in an upcoming task, and as the dependent variable, participants were given the opportunity to indicate whether they preferred to reflect on a *past* or *future* achievement. Participants were expected to prefer to reflect on past over future achievements when instructed that they would be thinking about internal attributions, but were expected to show a stronger preference for reflecting on future achievements when instructed that they would be thinking about external attributions.

Method

Participants

A prescreen measure of social justice was collected as in Study 4, via a brief initial MTurk survey conducted one week before the actual study. Given the difficulties experienced in retaining participants in Study 4, larger numbers of participants were recruited by prescreening 700 participants and inviting all of them to the actual study (people low on social justice were thus not oversampled in this study). Of the 363 who completed the actual study, 95 did not follow instructions and were excluded (using the same criteria as the prior studies; 62 of the 95 participants did not rate one or both of the achievements they listed above the midpoint on importance), leaving 268 participants in the final sample. This provided at least .80 power to detect effects as small as *Cramer's V* = .171 (small-medium effects).

Procedure

Participants were asked to list an “*important academic or career-related goal*” they achieved in the past as well as one they hoped to achieve in the future. These instructions paralleled the earlier studies, but solicited achievements in *both* time-frames, ensuring that participants would consider important, specific achievements in the preference task.

Next, participants were randomly assigned to an expected attribution condition. They were informed that in a moment they would engage in a reflective writing task in which they would reflect in vivid detail about either the internal causes of success in their lives or the external causes of success in their lives. They were informed that they could choose to write about either the past achievement or the future achievement they had listed earlier (the achievements they listed were displayed back to them). Specifically, participants received one of the following sets of instructions:

We are interested in the role that factors such as [ability, talent, and hard work / chance, opportunity, and help from others] play in shaping success in people's lives. On the next page, you will be asked to write, in as much vivid detail as possible, about the role that [your abilities, talents, and/or hard work / chance, opportunities, and/or help from others] play in helping you achieve success in your life.

For the writing task, you can choose to write about the past achievement or the future goal that you entered on the previous page (listed below for your reference):

Important goal you have successfully achieved in the past:
“*[The past achievement they listed appeared here]*”

Important goal you hope to achieve in the future:
“*[The future achievement they listed appeared here]*”

Participants then indicated their preferences as described below.

Measures

Prescreen social justice. Social justice orientation ($\alpha = .90$, $M = 5.24$, $SD = 1.28$) was assessed on the prescreen using the same measure as the previous studies.

Attributional preference. Participants were asked, “Which would you prefer to write about?” and were given a choice between two options tailored to their assigned expected attribution condition: “The role of [ability, talent, and hard work / chance, opportunity, and help from others] in shaping my past achievement” or “The role of [ability, talent, and hard work / chance, opportunity, and help from others] in shaping my future achievement.”

Results

A 2×2 chi-square analysis, testing the effect of expected attribution condition on preferences for writing about past or future achievements, was significant, $\chi^2(1) = 8.07, p = .005$, Cramer’s $V = .174$. (see Figure 4). When participants expected to vividly reflect on *internal* causes of success, a clear preference for writing about past achievements emerged: far more participants preferred to write about a past achievement (64.08%) than a future achievement (35.92%), $\chi^2(1) = 11.27, p < .001$. However, when participants expected to vividly reflect on *external* causes of success, preferences shifted significantly toward favoring future achievements (53.17%) over past achievements (46.83%). Though the difference within the external attribution expectation condition was not significant, $\chi^2(1) = .51, p = .476$, the strong preference for past achievements was eliminated and directionally reversed, and the omnibus chi-square analysis indicates that the shift in preferences as a function of attribution expectation condition was significant. Put another way, whereas a majority of participants chose to reflect on *past achievements* (64.08%) when expecting to consider internal causes, a majority chose to reflect on *future achievements* (53.17%) when expecting to consider external causes. The effect of time-frame on preferences for attributional frames was not moderated by social justice orientation, $b = .23, SE = .20, p = .235$.

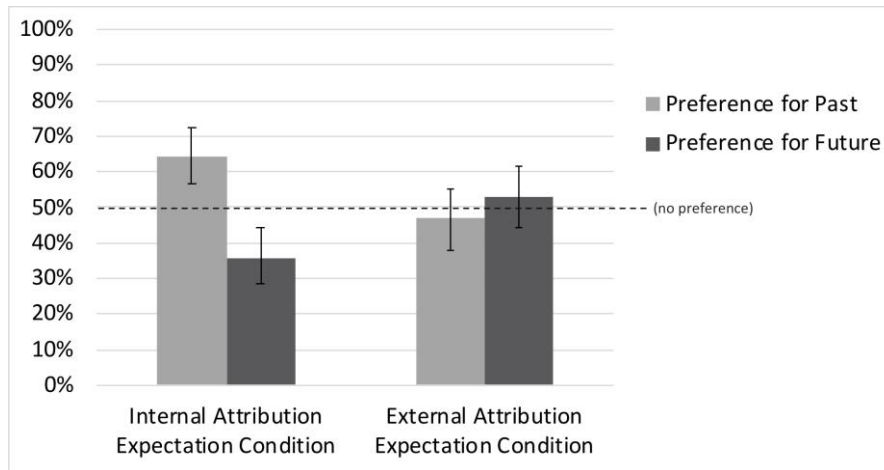


Figure 4. Percentage of participants in each attribution condition who preferred each time-frame in Study 6. Error bars represent 95% CIs for independent proportions (Newcombe, 1998).

Discussion

Study 6 directly examined participants' preferences toward different attributional frames. When they anticipated that they would reflect on *internal* causes of success, participants found it highly desirable to reflect on past achievements, confirming prior ideas (e.g., Riemer, 1975) via a novel paradigm. Critically, when participants anticipated that they would reflect on *external* causes of success, this preference was eliminated and shifted significantly toward a preference for reflecting on future achievements.

Studies 5 and 6 provide converging support for a motivation-based explanation for why individuals low in social justice were more reluctant to make external attributions for past versus future successes in the previous studies. Although Studies 5 and 6 suggest that individuals high and low in social justice orientation detect similar *incentives* for generating attributions, the key ideological differences emerge in attribution *generation* itself: individuals low in social justice consistently tend to downplay the role of external factors in past successes, generating desirable, self-enhancing attributions for past successes, whereas individuals high in social justice forgo this opportunity. Critically, individuals low in social justice join those high in social justice when reflecting on political discourse about poverty and thinking about their future goals – where

external attributions are more desirable – creating an area of common ground in which *both groups* endorse external attributions. Studies 5 and 6 illustrate the viability of an explanation of temporal differences in the attributions of individuals low in social justice orientation based in the stronger affective incentives available for generating external attributions for future (versus past) achievements.

STUDY 7

Study 7 examined the mechanism underlying the second influential contextual variable in Studies 2-4 – being reminded about anti-poverty policies or not. Only when reminded about such policies did individuals low in social justice make greater external attributions for future success, even though individuals low in social justice *oppose* these policies (Weiner et al., 2011). It was therefore critical to understand why reminding individuals about the political discourse about poverty increased external attributions for the future. The poverty policy reminder was in some ways subtle – it merely *posed the question* of whether participants approve or disapprove of a set of specific government-sponsored anti-poverty policies. At the same time, the poverty policy reminder could have evoked a number of different concepts, any of which might have driven the effects. Study 7 returned to the paradigm used in Studies 2-4, but substituted the poverty policy reminder with three narrowly-defined, non-overlapping conditions designed to invoke distinct ingredients and determine which one(s) are capable of producing the effects.

The poverty policy reminder could have operated by invoking any of three distinct concepts, each implicating a different underlying process. First, the reminder invoked the *role of government* in implementing policies to address poverty and inequality. This could have increased the salience of external attributions, as government-sponsored solutions are themselves external correctives for inequality, though it likely did so while reminding participants about

their ideological beliefs. A more constrained prime was designed that invoked this awareness of external, government-based correctives, as well as the accompanying ideological beliefs – without invoking the next two constructs of interest.

Beyond the mere invocation of government policies, the original poverty policy reminder also invoked the *hardships and needs of other people*, particularly by asking about specific policies such as “free school lunches for needy children” and “housing assistance for the poor.” Thus, it is possible that the reminder encouraged participants to take the perspective of people who are struggling in society and who require external support, leading participants to acknowledge a role for external factors. The second prime was designed to focus on a single individual in need, while avoiding a focus on government policy (and on the final construct described next). The effect’s emergence here would suggest it arises in response to thinking about other people in need, indicating a pro-social basis.

Finally, by describing various economic needs, the original prime may have also reminded participants about the their *own personal vulnerability* in a difficult economic climate. Perhaps it was this recognition that *they too* could personally benefit from external help in pursuing their goals that encouraged participants to acknowledge the role of situational factors in shaping success. Thus, the third prime was designed to focus on *personal* financial anxiety, avoiding a focus on government policies or others’ need. An emergence of the effect here would suggest a mechanism that is more heavily based in self-interest and self-enhancement in the face of perceived financial vulnerabilities.

Method

Participants

As in Studies 4 and 6, a prescreen measure of social justice was collected through a brief initial MTurk survey conducted one week before the actual study. Anticipating dropouts, 1000 participants were prescreened and all of them were invited to the actual study on MTurk (people low on social justice were not oversampled). Of the 700 participants who completed the actual study, 92 who did not follow instructions were excluded (using the same criteria as the prior studies; 42 of the 92 did not rate their achievement above the midpoint on importance), and 3 were excluded who had no variability in their responses across the measures, leaving 605 participants in the final sample. With approximately 200 participants in each poverty policy concept condition, this provided at least .80 power to detect conditional 2-way interactions within each poverty policy concept condition as small as $\eta_p^2 = .038$ (small-medium effects).

Procedure

Participants were randomly assigned to list either a past or future life achievement using the same instructions as Study 4 (tailored to the MTurk sample). Participants were then randomly assigned to one of three poverty concept conditions, in which they received brief instructions and answered two questions (which differed across conditions). Participants then completed the same measures as in Studies 2-4.

Poverty Concept Conditions

Government's role in addressing inequality. This condition made salient the role of government policies in addressing inequality by asking participants two questions specifically about the role of government, without explicitly mentioning particular policies or economic hardship (see *Supplemental Material* for details).

Others' need. This condition made salient the economic needs of *others* (without mentioning government policies or personal financial vulnerability) by providing a brief

description of a single homeless individual (drawn from Cameron et al., 2016) and asking participants how they feel about the individual, encouraging perspective-taking (see *Supplemental Material* for details).

Personal vulnerability. This condition made salient the construct of personal financial vulnerability (without drawing attention to government policies or others' need) by asking how anxious and worried participants are about their future financial well-being (see *Supplemental Material* for details).

Measures

Social justice orientation. Social justice orientation was assessed using the same measure as all previous studies, both on the prescreen ($\alpha = .91$, $M = 5.18$, $SD = 1.38$) and again at the end of the study ($\alpha = .92$, $M = 5.13$, $SD = 1.42$).

Attribution ratings. Internal ($\alpha = .72$, $M = 6.25$, $SD = 0.83$) and external ($\alpha = .75$, $M = 4.51$, $SD = 1.27$, with a correlation between luck attributions and max help scores of $r = .181$) attribution composite scores were created just as in Studies 2-4.

Results

Multicategorical moderated regression analyses (Hayes, 2018) tested the social justice (estimated at 1 SD above and below the mean) \times time-frame (dummy-coded) interactions within the three poverty concept conditions (dummy-coded) to assess the critical conditional 2-way interactions within each poverty concept condition. The 2-way interaction within the *personal vulnerability* condition was significant, $b = .28$, $SE = .14$, $p = .038$, $\eta_p^2 = .022$ ¹³ (see *Figure 5*).

¹³ Effect sizes for conditional effects reported in this article thus far reflect the proportion of variance explained by the conditional effect relative to variance across all conditions present in the study. For the conditional effects in the remainder of this section, effect sizes are reported that reflect the proportion of variance explained solely within the relevant poverty concept condition (rather than across all conditions) to enhance interpretability of the magnitude of the effects, as the effect sizes would otherwise appear arbitrarily smaller due to Study 7's larger experimental design.

The 2-way interaction took the same form in the *others' need condition*, but was not significant, $b = .15$, $SE = .13$, $p = .219$, $\eta_p^2 = .008$. The effect in the *role of government condition* was neither significant nor did it take the expected form, $b = -.16$, $SE = .13$, $p = .202$, $\eta_p^2 = .008$. No effects emerged on internal attributions, p 's $> .269$, $\eta_p^2 < .002$.

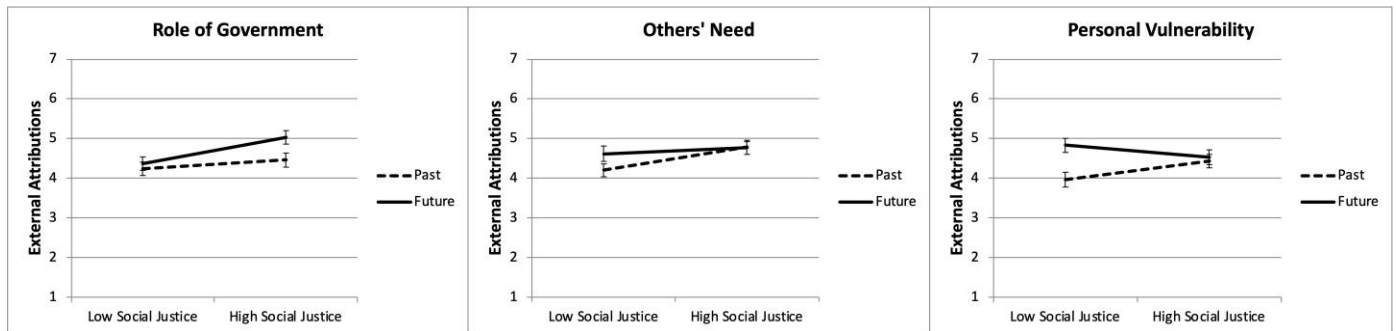


Figure 5. Study 7 social justice \times time-frame interaction on external attributions within each poverty policy concept condition. Error bars represent standard errors.

Decomposing the simple effects within the *personal vulnerability* condition confirmed that the effect followed the same pattern that emerged in the policy reminder conditions in Studies 2-4. Individuals low in social justice orientation made significantly greater external attributions for future relative to past successes, $b = .87$, $SE = .26$, $p < .001$, $\eta_p^2 = .056$, while no difference emerged among those high in social justice orientation, $b = -.09$, $SE = .25$, $p = .724$, $\eta_p^2 < .001$. The relationship between social justice orientation and attributions for past success was marginally significant, $b = .17$, $SE = .09$, $p = .062$, $\eta_p^2 = .018$, and for future success was not significant, $b = -.11$, $SE = .10$, $p = .268$, $\eta_p^2 = .006$.¹⁴

Although the 2-way interaction in the *others' need condition* was not significant, the simple effects were probed given that the pattern of a priori interest emerged and given that the 2-way interaction did not differ significantly from the one in the *personal vulnerability condition*, $b = .13$, $SE = .18$, $p = .486$, $\eta_p^2 < .001$. In the *others' need condition*, the effect of

¹⁴ Additional analyses examined whether it varied as a function of participants' ratings of personal financial vulnerability (see *Supplemental Material*).

time-frame among individuals low in social justice trended in the same direction, $b = .41$, $SE = .25$, $p = .108$, $\eta_p^2 = .013$, while the effect among those high in social justice was not significant, $b = -.01$, $SE = .24$, $p = .955$, $\eta_p^2 < .001$. The relationship between social justice and attributions for past success was significant, $b = .21$, $SE = .08$, $p = .012$, $\eta_p^2 = .032$, and for future success was not significant, $b = .06$, $SE = .09$, $p = .544$, $\eta_p^2 = .002$. The results remained essentially the same when using the external-internal difference score as the dependent variable.

Conditional process modeling (model 11; 10,000 resamples, percentile confidence intervals) examined whether making greater external attributions in the *personal vulnerability* condition had the same downstream implications for social justice as in the earlier studies. Among individuals low in initial social justice orientation in the personal vulnerability condition, the temporal framing manipulation was associated with higher end-of-study social justice through its effect on external attributions for personal success, $b = .17$, $SE = .07$, 95% CI [.05, .32].

Discussion

Study 7 considered three candidate mechanisms for the impact of thinking about government-sponsored anti-poverty programs on external attributions. Thinking about the generic notion of government solutions to poverty did not produce the the social justice \times time-frame interaction that emerged in the previous studies. Instead, the effect emerged clearly when one's *own* financial vulnerability was primed, lending support to a motivational explanation for the effect. The greater willingness of individuals low in social justice to make desirable, uncertainty-mitigating external attributions for the future emerged primarily under conditions of heightened uncertainty about one's economic future; thus, individuals low in social justice seem willing to recognize the situational factors that shape success when they have a heightened

motivation to do so. Reflecting on *someone else's* economic need produced a similar, albeit weaker, pattern.

Together, Studies 5-7 provide a basis for explaining the effect identified in Studies 2-4. Individuals low in social justice tend to be reluctant to acknowledge the situational factors that shape success, unless they reflect on their potentially precarious financial situation and are poised to benefit affectively from anticipating help from situational factors in the future. Acknowledging of the power of situations in shaping their own success in turn increases their support for social justice.

General Discussion

Seven studies provide new insights into the relationship between ideology and attribution. Attributions for personal successes are widely acknowledged to be sensitive to personal motivational processes, yet have seldom been studied in relation to societal variables. Study 1 found that individuals low in social justice orientation tend to make fewer external attributions for personal successes in general. Studies 2-4 identified that this tendency is highly sensitive to differences in naturally-arising contexts in which attributional thinking is regularly embedded. Although people low in social justice orientation consistently downplayed the role of external attributions in shaping their *past* successes, thinking about anti-poverty policies and a future goal increased their external attributions to the levels observed among individuals high in social justice orientation. This increase in external attributions was in turn associated with greater support for social justice. Thus, Studies 1-4 identified ideological differences in personal success attributions as well as two basic factors – thinking about future goals and poverty policies – that together help reduce the attributional and ideological divide.

Studies 5-7 provided support for a motivational explanation for these effects. Participants found it desirable to take credit for past successes but found it relatively more desirable to consider the external factors that could contribute to future successes, and focusing on these external factors provided the specific affective benefit of helping to mitigate uncertainty about the future. Thus, while it may feel good to believe that we achieved past successes on our own, thinking about the future may transform what is self-enhancing such that it feels good to recognize that other factors will help us succeed in the future. These preferences and benefits did not differ across individuals high and low in social justice orientation. Yet individuals high in social justice consistently *generated* high levels of external attributions (despite the motivational appeal of taking credit for past successes), whereas individuals low in social justice generated attributions that were more sensitive to these motivational factors – they reliably made fewer external attributions for past successes, but made greater external attributions for future goals when reminded of anti-poverty policies. A final piece of evidence consistent with a motivational interpretation was that this increase in external attributions for future goals emerged specifically in response to a reminder of personal financial vulnerability (Study 7). Thus, individuals low in social justice acknowledged the role of external factors in shaping successes when such attributions had the potential to be self-enhancing and when there was a need to self-enhance.

The manner in which the contextual variables influenced attributions across Studies 2, 3, 4, and 7 was highly consistent: temporal framing and being reminded of poverty policies (or personal financial vulnerability) shaped external attributions interactively but not independently. In contrast, internal attributions for these specific and important life achievements were high across the board. Individuals across contexts and ideologies made strong internal attributions for their successes, with differences emerging only in willingness to recognize external factors. This

is consistent with the rhetoric of politicians such as former President Obama and Senator Elizabeth Warren maintaining that internal causes are helpful but not sufficient for success.

The findings were highly robust across numerous direct and conceptual replications and across different samples and methods. The effects on attribution ratings replicated across four studies, two of which involved student samples and two of which involved MTurk samples of older individuals with very different life experiences. The effects illustrating the motivational implications of attributions emerged across two different paradigms and samples.

In contrast to existing theoretical perspectives offering accounts of the link between attribution and ideology based in motivations to justify societal beliefs or outcomes (i.e., wanting to believe the world is fair, wanting to justify political structures and maintain the status quo, wanting others to be held accountable for their actions, or wanting to justify one's own values; Clark et al., 2014; Jost et al., 2004; Lerner, 1980; Morgan et al., 2010), the current perspective highlights the role of motivations to feel good about personal successes in the link between attribution and ideology. Rather than a rigid moral principle, people low in social justice appear to believe in self-reliance more readily for the past than for the future, suggesting that self-reliance is not solely a moral value-system meant to motivate future action, but is also linked to motivations to optimize feelings about personal success.

Future Directions

In bringing together three variables not examined together before (personal attributions, ideology, temporal framing) this work offers a novel conceptual and methodological framework ripe for additional inquiry.

Study 7 homed in on the mechanism driving the effect of the poverty policy reminder, and future work might further probe the boundaries of this effect (i.e., whether other related

constructs can also produce the effect). In particular, it was notable that thinking briefly about moderate levels of suffering and financial need experienced by a single other individual produced a directionally similar effect. Future research might consider whether the pattern might emerge more robustly in response to a stronger invocation of others' need, and if so, whether it is the taking of another's perspective per se or the personal costs incurred by doing so (e.g., a need to regulate affect in response to others' suffering, or being indirectly reminded of one's own financial vulnerability) that drives the effect. It would be intriguing if empathy for others might also play a role in encouraging recognition of the power of situations in shaping one's own successes. Such recognition is related to support for helping others, but thus far seem to arise primarily from self-interested motives. This work identified contextual factors (a future-orientation and personal vulnerability) that can help reduce the tension between what is self-enhancing and what is "group-enhancing," yet whether other contexts might also help to alleviate this tension deserves further attention.

Future work might also aim to identify whether there are any conditions under which individuals *high* in social justice orientation might generate lower external attributions for past successes, consistent with the potential of such attributions to be self-enhancing (and consistent with hints of this in Study 4). In line with Skitka et al. (2002), it is possible that individuals high in social justice might also sometimes be tempted to take credit for past successes and that ideological-consistency motives help override this temptation.

Future work might examine whether persuasive messages appealing to past vs. future goals might have similar effects on attributions, as well as additional downstream consequences (e.g., donations). The samples employed in the present work had limited variability in socioeconomic status and race/ethnicity, and the extent to which the conclusions drawn from this

research extend to individuals of different socioeconomic backgrounds and other racial/ethnic groups remains unknown. Future work might test whether the effects emerge more strongly among individuals from high (vs. low) socioeconomic backgrounds and among individuals from racial majority (vs. minority) groups, in light of work showing that higher SES individuals and individuals from racial majority groups are less likely to acknowledge the role of situational factors in shaping other people's outcomes (Bullock, 1999; Hunt, 1996; Kraus et al., 2009). Future work might also consider whether focusing on future (versus past) achievements might encourage members of racial majority groups to more readily acknowledge situational advantages that tend to be conferred to members of their group, which may in turn encourage empathy toward members of groups upon which those advantages have not been historically conferred.

Concluding Remarks

As economic inequality grows and systemic efforts to reduce it are continually thwarted, politicians have turned to attributional arguments to attempt to draw attention to the situational factors that help people succeed and to the need for government initiatives that encourage economic opportunity. The notion that situational factors play a critical role in shaping success has gained some traction in the cultural consciousness over the past decade, with several popular books highlighting the theme (Brooks, 2020; Frank, 2016; Gladwell, 2008; Kristof, 2020). Still, these arguments have not yet resulted in policy-based solutions to inequality, and continue to be met with strong resistance by many who see them as antithetical to the American dream.

This research suggests that some of the resistance to acknowledging the importance of help and luck in shaping success may stem from a desire to feel good about one's past achievements. Perhaps if former President Obama had said, "you *won't* get there on your own"

instead of “you didn’t get there on your own,” his point would not have provoked as much outrage in defense of self-reliant values and instead may have elicited an acknowledgement that it is okay for others to help us – and for us to help others – achieve success. Engaging with beliefs about self-reliance in a way that avoids threatening the self and embraces the notion that everyone needs help to succeed in the future may be one way to promote recognition of the situational factors that shape success and bridge the ideological gulf over how to address economic inequality.

The debate over the role of self-reliance is likely to persist for years to come. President Joe Biden formally listed humility as one of his campaign’s core values, below which he noted “nobody does it alone.” In May 2020, the Biden campaign purchased ads on social media entitled “Let’s Build it Together” – the opposite of the 2012 RNC’s “We Built It” in both attributional locus and temporal frame, and a message that may resonate with individuals on both sides of the aisle. Linguistically subtle yet motivationally powerful shifts in how self-reliance is framed may help society find common ground on the factors that contribute to the successful achievement of major life goals and on how to make these successes more attainable for more people.

Appendix A. Supplemental Material

Supplemental Material can be found online at <https://doi.org/10.1016/j.jesp.2021.104250>.

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