



## The politics of luck: Political ideology and the perceived relationship between luck and success



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### HIGHLIGHTS

- We investigated individuals' belief about the importance of luck to success.
- Political conservatives endorsed this belief less than political liberals.
- Luck was polarizing because it emphasizes chance and challenges deservingness.
- Conservatives were more amenable to notions of luck that de-emphasized chance.

### ARTICLE INFO

#### Article history:

Received 8 May 2014

Revised 19 March 2015

Available online 27 March 2015

#### Keywords:

Luck

Success

Political ideology

Attributions

### ABSTRACT

Three studies examined how individuals' beliefs about the relation between luck and success vary with political ideology. Conservative participants endorsed luck as influential to success considerably less than liberal participants (Studies 1 and 2). The ideologically polarizing effect of luck was shown to be related to its emphasis on random chance: Polarization was not found in response to an external attribution for success that was unrelated to chance (Study 2), and was specific to the challenge that random chance poses to deservingness (Study 3). Moreover, conservatives' support for the notion that luck contributes to success was related to their belief that luck is a quality of the person (which does not rely on random chance), whereas liberals' support was not (Study 3). These findings demonstrate that there is ideological disagreement over how success is achieved, which may be at the heart of the ideological divide over wealth redistribution.

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It is common to think about being “lucky in love” or being favored by “lady luck.” Happenstance can lead to finding romance or winning blackjack streaks and either phrase is unlikely to be met with disapproval. However, this is not the case for all matters related to luck. In particular, invoking luck as one of the forces behind whether people experience success can be met with hostility. This was the experience of the economist Robert Frank (2009, April 25) when he wrote in the *New York Times* that in addition to talent and hard work, luck plays a role in success. A host from a Fox News talk show “treated Frank’s argument with total incredulity, offering up ripostes such as ‘That’s outrageous!’ and ‘That’s nonsense!’” (Chait, 2009).

Although the link between luck and success may be contentious, luck can affect success. The experience of randomly-determined early success exerts a causal influence on the ultimate success of an

endeavor: Randomly chosen projects on [kickstarter.org](http://kickstarter.org) that were provided with a small percentage of their funding goal were two times as likely to receive additional funding from other individuals than projects that received no such initial donation (van de Rijt, Kang, Restivo, & Patil, 2014). Professional sports provide another instance in which luck affects success, such as hockey players who benefit from being born in January (rather than December). As player groupings in hockey are based on the calendar year, these January-birthday players were more physically mature and experienced in their early years due to being the oldest in their cohort, resulting in more playing time and opportunities to develop their skills, which facilitated their path to success (Addona & Yates, 2010; Gladwell, 2008; Levitt & Dubner, 2009).

These “happy accidents” illustrate the role luck plays in success, but leave open the question of what factors determine individuals’ beliefs about whether luck contributes to success. Theoretically, investigating beliefs about luck’s influence on success is important because prior work on ideological differences in attributions has focused primarily on attributions for negative outcomes. This research finds that liberals are more likely than conservatives to

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emphasize external attributions for failure (e.g., Skitka & Tetlock, 1992, 1993; Zucker & Weiner, 1993). In this research, we examine whether analogous polarization is observed in explanations for success, and if so, why.

The investigation of the ideological differences in the role of luck in success is both theoretically and politically important. Theoretically, explicitly linking random chance with success could be ideologically divisive because it implies that successful individuals have not fully earned their spoils. It challenges the notion that people get the outcomes that they deserve (Feather, 1992). Concerns about the violation of the deservingness principle have been empirically shown to be a more important consideration to conservatives than to liberals (e.g., Brandt, 2013; Reyna, Henry, Korfmacher, & Tucker, 2005; Skitka & Tetlock, 1992, 1993). Correspondingly, individuals with socially conservative attitudes have been shown to believe more strongly in the Protestant work ethic (Atieh, Brief, & Vollrath, 1987; Feather, 1984) and belief in a just world (Jost & Hunyady, 2005; Rubin & Peplau, 1975) than their liberal counterparts. Therefore, we hypothesize that conservatives (individuals on the political right) will be less likely to endorse the link between luck and success than their liberal counterparts (individuals on the political left). Conservatives should be less supportive of the notion that luck is influential to success because the randomness it invokes challenges their belief that people's outcomes are deserved, whereas the notion of random chance contributing to success is consistent with the liberal worldview.

This investigation of this hypothesis is politically important as emphasizing luck's importance to success has been used to support redistributive social policies. For instance, author Michael Lewis (2012) contended in a commencement address to Princeton University that, "Life's outcomes, while not entirely random, have a huge amount of luck baked into them. Above all, recognize that if you have had success, you have also had luck — and with luck comes obligation... You owe a debt to the unlucky." Invoking luck as one explanation for success can support the conclusion that the successful (the lucky) should help the unsuccessful (the unlucky). Those who have benefited from random chance, this argument goes, should give back to those who have not. However, if the basic premise (luck plays a role in success) is not broadly shared by a segment of the population, then it is unlikely to be an effective rallying cry for redistribution. Therefore, it is crucial to understand whether this premise has the potential to be ideologically uniting, or whether the premise itself is, as we expect, ideologically divisive.

## Overview of studies

The present research examines whether there is a relationship between political ideology and the belief that luck is influential to success. Study 1 provides evidence that people's views about the role of luck in success are related to their political ideology. Study 2 examines whether there is greater polarization for external attributions of success that emphasize randomness (i.e., luck) as opposed to external attributions that place less emphasis on randomness (i.e., help from others). Study 3 illustrates that this ideological polarization is based on how luck's role in success challenges the notion that people deserve their outcomes. Study 3 further demonstrates that conservatives support the idea that luck influences success to the extent that they conceptualize luck as a quality of the person, a notion of luck that does not resonate as well with liberals.

### Study 1: Ideology, luck, and success

Study 1 investigated whether political ideology predicts people's views on the importance of luck in determining success, even when controlling for other demographic variables.

## Method

### Participants

American participants ( $N = 576$ ) were recruited from a Qualtrics panel, and received monetary compensation for their participation. Participants completed an attention check, which asked them whether they were reading carefully. They were instructed to ignore this question and select "Not At All Carefully". As determined a priori, the responses of participants who failed the attention check ( $N = 76$ ) were discarded (the inclusion of participants who failed the attention check did not change the results, which is also true in Studies 2–3). 500 participants remained (49% male;  $M_{\text{Age}} = 48.95$ ). The sample size was determined a priori, we did not analyze the data until data collection was completed, and we did not collect additional responses after analyzing the data (this is also true of Studies 2–3).

### Procedure

Participants first provided their demographic information, including their age, gender (female = 0, male = 1), education level (ranging from less than high school to advanced degrees), income level (ranging from below \$20,000 to above \$100,000 in \$20,000 increments), frequency of attendance at religious services, and extent of belief in a supreme being. For all of the continuous demographics, higher numbers indicate a higher level/greater amount.

Participants completed three measures of political ideology (in general, on economic issues, and social issues) separately indicating their general, economic, and social political ideology on a scale from 1 (*very liberal*) to 7 (*very conservative*), with a midpoint of 4 (*moderate*). These items were averaged to provide an overall measure of political ideology ( $\alpha = .95$ ,  $M = 4.20$ ,  $SD = 1.53$ ). Participants indicated which political group they most identified with (Democrats, Republicans, Independents, Other) and which person they would vote for in the presidential election if it was held today (Obama, Romney, Undecided, Would Not Vote).<sup>1</sup>

Participants next indicated their agreement with the following items (presented in a random order) on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*):

- Successful people are likely to have been lucky in their lives.
- Unsuccessful people are likely to have been unlucky in their lives.
- When good things happen to people, luck usually played some role.
- People do not need luck to do well in their lives. (Reverse-coded)

We averaged these four items to create the Luck and Success Scale (LASS,  $\alpha = .80$ ,  $M = 3.82$ ,  $SD = 1.14$ ). All measured variables are reported, which is true of all studies.

### Results and discussion

Participants' overall political ideology (with higher scores representing a more conservative ideology) was negatively correlated with people's belief about the extent to which luck plays a role in success ( $r(498) = -.15$ ,  $p = .001$ ). Conservatives believed that luck played a role in success less than did liberals. To further examine this ideological divide, we compared participants who identified as conservative (a score of 5 or higher on the composite ideology measure,  $n = 171$ ) to those who identified as liberal (a score of 3 or lower,  $n = 126$ ). Conservatives viewed luck as less important to success less than did liberals ( $M_{\text{Conservative}} = 3.62$ ,  $SD = 1.21$  vs.  $M_{\text{Liberal}} = 4.01$ ,  $SD = 1.11$ ,  $t(295) = 2.85$ ,  $p = .005$ ,  $d = .34$ ).

We examined whether participants' political ideology would predict the belief that luck is important to success, even when controlling for other demographic variables that might affect the perceived relationship between luck and success. We regressed participants' LASS scores onto

<sup>1</sup> Studies 1 and 3 were conducted in 2012 prior to the Presidential election.

**Table 1**

Correlations between the Luck and Success Scale (LASS) and the demographic variables in Study 1.

	Political ideology	Gender	Age	Education level	Income level	Frequency of religious attendance	Belief in supreme being
LASS	-.15**	.03	-.07	-.03	-.00	-.17***	-.17***

\*\*\*  $p < .001$ .\*\*  $p < .01$ .

their overall political ideology (centered), age, gender (0 = female, 1 = male), education level, income level, frequency of religious participation, and the extent to which they believed in a supreme being. Ideology remained a significant predictor when accounting for the other demographic variables,  $B = -.09$ ,  $SE = .04$ ,  $t(487) = -2.44$ ,  $p = .015$ . Frequency of religious participation was the only other significant (negative) predictor ( $B = -.07$ ,  $SE = .03$ ,  $t(487) = -2.05$ ,  $p = .04$ ). All other predictors did not reach significance,  $ps > .1$  (see Table 1 for the bivariate correlations with the LASS).

Study 1 provided evidence that individuals' beliefs about luck's contribution to success are associated with their political ideology. More conservative participants endorsed the relationship between luck and success less than more liberal participants.

## Study 2: external explanations for success

We hypothesize that luck-based explanations for success are ideologically polarizing because of their implication that success is due in part to random chance. To examine whether luck is particularly polarizing, it is necessary to compare a luck-based attribution for success to another external attribution that places less emphasis on randomness. This comparison is especially important in light of findings demonstrating that conservatives often prefer internal explanations for negative individual outcomes, whereas liberals prefer external explanations for the same phenomena (Skitka, Mullen, Griffin, Hutchinson, & Chamberlin, 2002; Zucker & Weiner, 1993).

In Study 2, we examined how much participants agreed with a luck-based account of success as opposed to another external factor that can contribute to people's outcomes without relying on random chance: help from others (Weiner, Russell, & Lerman, 1979; Weiner, 2000). For both luck and help, success is explained as due to factors outside the person: chance or assistance from others. However, whereas individuals can seek help to assist with obstacles they may face in achieving success, people cannot seek luck, but must simply hope chance works in their favor. Therefore, if luck-based explanations are particularly ideologically polarizing because they rely on random chance in explaining success, as we hypothesize, then there should be a greater ideological divergence when luck, as opposed to help from others, is described as the "secret to success."

## Method

### Participants

American adults ( $N = 202$ ) were recruited from Mechanical Turk on Amazon.com, and received monetary compensation for their participation. Seven participants failed the attention check; 195 remained (63% male,  $M_{Age} = 32.52$ ).

### Procedure

Participants read a passage titled either "Luck: The Secret To Success" or "Help From Others: The Secret To Success." The luck version of the passage was taken directly from Michael Lewis's (2012) Princeton Commencement address. The help version replaced the luck-related terms with help-related ones (in parentheses) below:

People really don't like to hear success explained away as luck (help from others) — especially successful people. As they age, and succeed, people feel their success was somehow inevitable (entirely their own creation). They don't want to acknowledge the role played

by accident (others) in their lives. Don't be deceived by life's outcomes. Life's outcomes, while not entirely random (due to support from others), have a huge amount of luck (help) baked into them. Above all, recognize that if you have had success, you have also had luck (help).

**Dependent measures.** Participants indicated their agreement with the passage on three items on a scale from 1 (*Not At All*) to 7 (*Very Much*): how much they agreed with the second to last sentence in the passage, how much they thought this view on success was correct, and how much they agreed that luck (help from others) is needed for people to be successful ( $\alpha = .92$ , presented in a fixed order).

Participants then evaluated how likeable, wise, and admirable the author of the passage is on scales from  $-3$  (*Very Unlikeable/Foolish/Detestable*) to  $3$  (*Very Likeable/Wise/Admirable*), which were presented in a fixed order and combined into a composite evaluation score ( $\alpha = .86$ ). Participants indicated how much the author of the passage thought the following four factors contributed to success: lucky breaks, help from other people, hard work, and talent (presented in a random order). The "lucky breaks" and "help from other people" constituted our manipulation checks.

At the conclusion of the study, participants provided the same demographic information as in Study 1 (save for the voting intention measure), in addition to a measure of subjective social status (Adler, Epel, Castellazzo, & Ickovics, 2000). Participants completed the same three political ideology measures as in Study 1 ( $\alpha = .92$ ,  $M = 3.26$ ,  $SD = 1.50$ ).<sup>2</sup>

## Results and discussion

### Manipulation check

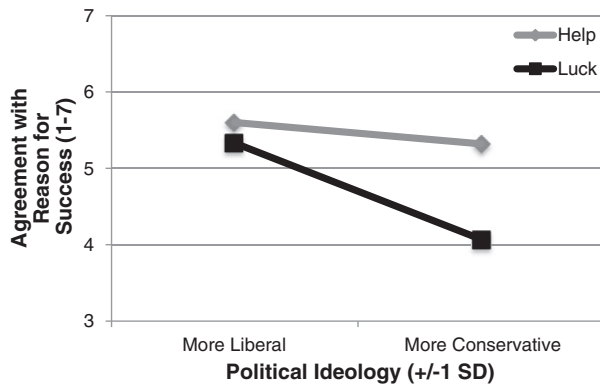
Participants viewed the author as attributing success more to luck in the Luck condition than the Help condition ( $M_{Luck} = 6.18$ ,  $SD = 1.05$  vs.  $M_{Help} = 3.60$ ,  $SD = 1.56$ ,  $t(193) = 13.45$ ,  $p < .001$ ,  $d = 1.94$ ), and vice versa for help from others ( $M_{Luck} = 4.22$ ,  $SD = 1.60$  vs.  $M_{Help} = 6.29$ ,  $SD = 1.09$ ,  $t(193) = 10.62$ ,  $p < .001$ ,  $d = 1.51$ ).

### Agreement with passage

All subsequent measures were submitted to linear regressions with three predictors: political ideology (centered), condition (Help passage =  $-1$ , Luck passage =  $1$ ), and the interaction between ideology and condition.

Overall, participants agreed with the passage less when it attributed success to luck rather than help ( $M_{Luck} = 4.61$ ,  $SD = 1.51$  vs.  $M_{Help} = 5.48$ ,  $SD = 1.14$ ,  $B = -.44$ ,  $SE = .10$ ,  $t(193) = -4.58$ ,  $p < .001$ ,  $d = 0.65$ ), and the more conservative they were ( $B = -.29$ ,  $SE = .06$ ,  $t(193) = -4.51$ ,  $p < .001$ ). Most importantly, the predicted interaction between condition and ideology was significant,  $B = -.16$ ,  $SE = .06$ ,

<sup>2</sup> One issue with measuring political ideology at the end of the study is that the manipulation could affect participants' ratings of their political ideology. We did find that participants report being more conservative in the Luck condition ( $M = 3.48$ ,  $SD = 1.47$ ) than in the Help condition ( $M = 3.05$ ,  $SD = 1.49$ ),  $F(1, 193) = 4.24$ ,  $p = .04$ ,  $d = 0.29$ . However, this appears to be a failure of random assignment, as there were a greater percentage of Democrats in the Help condition (51%) than in the Luck condition (41%). Indeed, when political party is included as an independent variable in the analysis along with the luck versus help manipulation, there is no longer a significant difference in political ideology based on condition,  $F(1, 187) = 0.98$ ,  $p = .32$ . Based on these analyses, we do not believe there is an issue with the suitability of using this measure as a predictor.



**Fig. 1.** Participants' agreement with the view of success (importance of help versus luck) based on their political ideology ( $\pm 1$  SD) in Study 2.

$t(191) = -2.67, p = .008$  (Fig. 1). When the passage was about the role of help from others in success, agreement with the passage did not differ based on political ideology ( $B = -.09, SE = .08, t(98) = -1.22, p = .23$ ). However, when the passage was about the role of luck in success, the more conservative participants were, the less they agreed with the passage ( $B = -.42, SE = .10, t(92) = -4.36, p < .001$ ).<sup>3</sup>

As in Study 1, we compared participants who identified as conservative ( $n = 30$ ) to those who identified as liberal ( $n = 98$ ). Although both conservatives and liberals agreed with the passage when it attributed success to help from others ( $M_{\text{Conservative}} = 5.53, SD = 1.44$  vs.  $M_{\text{Liberal}} = 5.63, SD = 1.13, t < 1, d = 0.23$ ), conservatives agreed with attributing success to luck less than did liberals ( $M_{\text{Conservative}} = 3.56, SD = 1.57$  vs.  $M_{\text{Liberal}} = 5.12, SD = 1.24, t(52) = 3.85, p < .001, d = 1.10$ ).

#### Evaluation of author

Participants rated the author more favorably when the passage argued for the importance of help, rather than luck, for success ( $M_{\text{Luck}} = 0.59, SD = 1.10$  vs.  $M_{\text{Help}} = 1.36, SD = 0.88, B = -.39, SE = .07, t(193) = -5.43, p < .001, d = 0.77$ ). And the more conservative participants were, the less positively they evaluated the author overall ( $B = -.17, SE = .05, t(193) = -3.29, p = .001$ ). The interaction was not significant,  $t < 1$ .

Study 2 demonstrated that the role of luck in success is particularly ideologically polarizing as compared to another external attribution for success that does not emphasize random chance. Conservatives and liberals disagreed when luck was described as a key to success, but they were equally supportive of the passage when it argued for the importance of help from others. Although this pattern does not spill over to assessments of the passage author, the clear divergence in liberal versus conservative support for the notion that luck contributes to success (and the lack of divergence when success was attributed to help from others) indicates that luck's emphasis on random chance divides liberals and conservatives.

#### Study 3: definitions of luck and the deservingness principle

In the present study, we test whether attributing success to random chance challenges the notion that people are deserving of their

outcomes, and whether this explains the ideological divide observed in Studies 1 and 2. We hypothesized that whereas conservatives dislike luck as an explanation for success because it is inconsistent with their worldview that people are deserving of their outcomes, this relationship should be amenable to liberals because it is consistent with their worldview that poverty and other societal ills are at least partially due to factors outside of people's control (e.g., Skitka et al., 2002). Therefore, how much participants endorse luck as influencing success should be negatively related to notions of deservingness, and deservingness should mediate the relationship between ideology and the perceived role that luck plays in success.

To further examine whether random chance is key to luck's polarizing effect, we investigated whether luck could become more appealing to conservatives by removing the notion of random chance. Although luck is typically conceived of as external to a person and dictated by happenstance, people have other ways of viewing luck: as an internal quality that individuals possess (Darke & Freedman, 1997a,b; Weiner, 1986; Wohl & Enzle, 2002, 2003).

There is considerable evidence that luck can be viewed as a personal quality. First, people do not view chance and luck as interchangeable, as people view luck as a personal skill that can be used to exert control over chance outcomes (Wagenaar & Keren, 1998). Furthermore, the inclusion of choice in a game of chance (which heightens perceptions of personal control) increased people's view that luck was a quality of the person (rather than an aspect of the situation), and led to higher expectations of winning (Wohl & Enzle, 2002). And this internal belief in luck affects how people react to experiencing lucky breaks: Positive outcomes from games of chance increase the belief that luck is a personal quality (Wohl & Enzle, 2002, 2003), and people who believe that they are lucky act in a risk-seeking manner after experiencing good fortune (Darke & Freedman, 1997b; Wohl & Enzle, 2003).

This understanding of luck as a personal quality does not imply that outcomes are randomly determined, as they are a feature of the person rather than the situation. Thus, in the context of explaining success this version of luck should be relatively more amenable to a conservative than liberal worldview compared to the random-chance version of luck. We hypothesized that liberals would view random-chance luck as contributing to the link between luck and success, whereas conservatives' support of the link between luck and success would be associated more with an internal quality definition of luck that does not emphasize random chance. To test this, participants evaluated different statements about luck that captured either random chance or internal quality definitions of luck.

#### Method

##### Participants

American participants ( $N = 283$ ) were recruited from Mechanical Turk, and received monetary compensation for their participation. Eight participants failed the attention check, leaving 275 remaining (54% male,  $M_{\text{Age}} = 32.36$ ).

##### Procedure

First, participants indicated their political ideology as they had in Studies 1 and 2 ( $\alpha = .91, M = 3.35, SD = 1.54$ ). Participants next indicated their agreement with the four LASS items ( $\alpha = .86, M = 4.03, SD = 1.22$ ).

Immediately after completing the LASS, participants indicated their agreement with both "random chance" and "internal quality" definitions of luck. The four random chance statements defined luck as due to chance occurrences that were outside of a person's control ( $\alpha = .83, M = 5.14, SD = 1.12$ ).

Luck is completely due to chance occurrences that are outside of people's control.

Luck is completely determined by random chance.

<sup>3</sup> Participants viewed the author as attributing success more to hard work and talent in the Help condition than in the Luck condition (hard work:  $M_{\text{Luck}} = 4.05, SD = 1.40$  vs.  $M_{\text{Help}} = 4.89, SD = 1.36, t(193) = -4.23, p < .001, d = 0.61$ , talent:  $M_{\text{Luck}} = 4.05, SD = 1.42$  vs.  $M_{\text{Help}} = 4.41, SD = 1.26, t(193) = -1.86, p = .06, d = 0.23$ ). One interpretation of these results is that participants viewed the luck explanation as more of an external attribution than the help explanation. To account for this possibility, we added hard work and talent as additional predictors to the regression model predicting agreement with the passage. The interaction between political ideology and help versus luck remains significant ( $B = -.14, SE = .06, t(189) = -2.32, p = .02$ ), as does the simple effect of political ideology for the luck passage ( $B = -.35, SE = .10, t(193) = -3.46, p = .001$ ).



**Table 2**

Linear regression predicting the Luck and Success Scale (LASS) based on political ideology and endorsement of random chance and internal quality conceptions of luck in Study 3.

	LASS
Political ideology	-.19*** (.05)
Agreement with random chance luck	.23*** (.07)
Agreement with internal quality luck	.27*** (.07)
Ideology × random chance	-.05 (.04)
Ideology × internal quality	.10** (.04)
Constant	4.00*** (.07)

Unstandardized coefficient reported. Standard errors in parentheses.

Political ideology: higher numbers indicate greater conservatism.

\*\*\*  $p < .001$ .

\*\*  $p \leq .01$ .

When I think of luck, I think of random chance.

Luck is something external that people can't control.

The four internal quality statements defined luck as determined by the internal features of a person ( $\alpha = .70$ ,  $M = 3.12$ ,  $SD = 1.10$ ).

People create their own luck.

Luck is something you are born with.

Luck is something internal that people have.

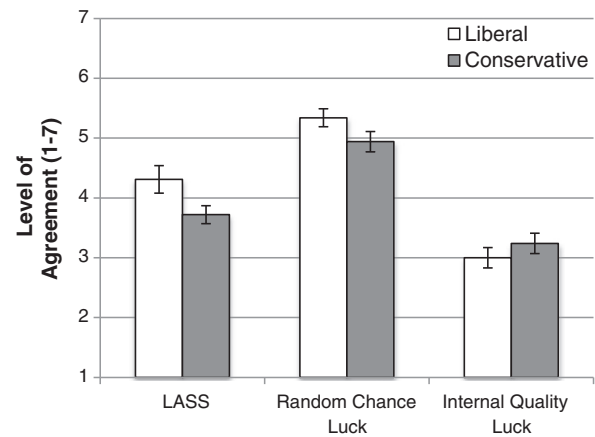
People are only lucky or unlucky if they deserve to be.

The eight statements were presented in a randomly determined order. Although the internal quality statements might appear to be more varied than the random chance statements, a factor analysis on these eight statements (varimax rotation) revealed the hypothesized two-factor structure (only two eigenvalues were greater than 1). Only the four random chance items positively loaded on the first factor (at .80, .88, .76, and .78, respectively), and only the four internal quality items positively loaded on the second factor (at .39, .84, .83, and .75, respectively).

Participants then completed a series of scales related to political ideology and beliefs about the role of effort in outcomes, presented in a random order: Protestant Work Ethic (Mirels & Garrett, 1971, Personal:  $\alpha = .87$ , Achievement:  $\alpha = .81$ , Societal:  $\alpha = .78$ ), Belief in a Just World (Rubin & Peplau, 1975,  $\alpha = .88$ ), Belief in Meritocracy (Major et al., 2002,  $\alpha = .82$ ), System Justification (Kay & Jost, 2003,  $\alpha = .85$ ), and Need for Closure<sup>4</sup> (Webster & Kruglanski, 1994,  $\alpha = .70$ ). Participants also completed the Belief in Good Luck scale (Darke & Freedman, 1997b,  $\alpha = .82$ ), which measures the extent that people believe they are personally lucky. Participants provided the same demographic information as in Study 2 (excluding the question about the political party they most identified with), and indicated their specific religion.

### Results and discussion

The more conservative participants were, the less they believed that luck is influential to success, as measured by the LASS ( $r(272) = -.25$ ,  $p < .001$ ). There was no relationship between political ideology and participants' belief in their own good luck as assessed by the Belief in Good Luck scale,  $r(272) = .01$ ,  $p = .93$ . As in Study 1, ideology remained a significant predictor when accounting for the other demographic variables,  $B = -.20$ ,  $SE = .05$ ,  $t(262) = -3.75$ ,  $p < .001$ . In contrast with Study 1, ideology was the only significant predictor, as all other predictors did not reach significance,  $ps > .1$  (and none of the predictors had significant bivariate correlations with the LASS,  $ps > .05$ ).



**Fig. 2.** Participants' endorsement of the Luck and Success Scale (LASS), and the random chance and internal quality notions of luck based on their political ideology ( $\pm 1$  SD) in Study 3.

### Ideology and definitions of luck

We examined whether both "luck as random chance" and "luck as an internal quality" definitions of luck would be related to participants' endorsement that luck is important to success. Indeed, both of these definitions were positively associated with participants' LASS score (random chance:  $r(273) = .20$ ,  $p = .001$ , internal quality:  $r(273) = .15$ ,  $p = .01$ ). The two definitions were negatively correlated with one another,  $r(273) = -.29$ ,  $p < .001$ . In addition, as shown in Fig. 2, the more conservative participants were, the less they endorsed the random chance definition ( $r(272) = -.17$ ,  $p = .004$ ), and the more they tended to endorse the internal quality one ( $r(272) = .11$ ,  $p = .08$ ). These correlations significantly differed from one another,  $Z_H = -3.00$ ,  $p = .003$ . As in Studies 1 and 2, we compared participants who identified as conservative ( $n = 50$ ) to those who identified as liberal ( $n = 139$ ). Conservatives endorsed random chance luck less than liberals did ( $M_{Conservative} = 4.83$ ,  $SD = 1.18$  vs.  $M_{Liberal} = 5.32$ ,  $SD = 1.07$ ,  $t(187) = 2.69$ ,  $p = .008$ ,  $d = .44$ ), whereas the opposite pattern tended to emerge for luck as an internal quality ( $M_{Conservative} = 3.37$ ,  $SD = 1.19$  vs.  $M_{Liberal} = 3.05$ ,  $SD = 1.12$ ,  $t(187) = 1.69$ ,  $p = .09$ ,  $d = .28$ ).

We specifically were interested in whether a version of luck that de-emphasized random chance (and featured it as an internal quality instead) would be associated with stronger conservative support for the relationship between luck and success than when random chance was emphasized. We examined whether ideology would moderate the association between the definitions of luck and belief that luck matters to success, with liberals showing a greater association with the random chance definition and conservatives with the internal quality definition. We ran a linear regression that predicted participants' endorsement of LASS based on their agreement with each definition of luck, their overall political ideology (both centered), and the interactions between the definitions and ideology (Table 2).

As predicted, the association between the internal quality definition and LASS was moderated by ideology,  $B = .10$ ,  $SE = .04$ ,  $t(268) = 2.56$ ,  $p = .01$ . For participants who identified as more politically conservative ( $+1$  SD from the ideology mean), the more they agreed that luck was an internal quality of the person, the more they endorsed that luck plays a role in success,  $B = .39$ ,  $SE = .09$ ,  $t(270) = 4.52$ ,  $p < .001$ . For participants who identified as more politically liberal ( $-1$  SD from the ideology mean), there was no such relationship,  $t < 1$ .<sup>5</sup> This result indicates that removing random chance from luck (i.e., describing it as

<sup>4</sup> This measure did not yield any results relevant to the hypothesis and will not be discussed further.

<sup>5</sup> We find the same interaction pattern if we separate the internal quality items into two sub-scales, running separate regressions for each subscale (create/deserve luck ( $r = .38$ ):  $B = .10$ ,  $SE = .03$ ,  $t(270) = 2.94$ ,  $p = .004$ , born/internal luck ( $r = .65$ ):  $B = .08$ ,  $SE = .03$ ,  $t(270) = 2.41$ ,  $p = .02$ ). For participants who identified as more politically conservative, the more they endorsed either of these subscales, the more they endorsed the LASS ( $ps < .01$ ). For the more liberal participants, there was no such relationship ( $ps > .26$ ).

an internal quality) is associated with stronger conservative support for the relationship between luck and success, providing additional evidence that it is random chance that conservatives find aversive relative to liberals.

The interaction between ideology and agreement with the random chance definition was not significant, although it was in the predicted direction,  $B = -.05$ ,  $SE = .04$ ,  $t(268) = -1.32$ ,  $p = .19$ .

#### Relation to deservingness

We contend that the notion that luck (and specifically random chance) is influential to success is inconsistent with the idea that people are deserving of their outcomes. We examined the correlations among the LASS, and the random chance and internal quality definitions of luck, with the deservingness scales we measured (Belief in a Just World, Belief in Meritocracy, Protestant Work Ethic, and System Justification). As shown in Table 3, these associations indicate that both the LASS and the random chance conception of luck go against explanations of deservingness for the outcomes people experience (i.e., they are negatively related to the deservingness scales). However, the internal quality definition of luck, which does not mention random chance, is positively related to these deservingness measures (as well as to participants' belief in good luck), indicating that this definition of luck does not upset the notion that people earn the outcomes they receive.

Further evidence for the importance of deservingness comes from a bootstrap meditational analysis (Preacher & Hayes, 2008) that assessed whether deservingness explains the relationship between political ideology and the belief that luck is important to success. We combined all of the scales into one overall measure of deservingness ( $\alpha = .87$  based on the four scales). This analysis showed that there was a significant indirect effect from political ideology to LASS through deservingness ( $B = -.18$ ,  $SE = .03$ , 95% CI =  $-0.26$  to  $-0.13$ ), which reduced the relationship between ideology and LASS to non-significance ( $t < 1$ ). The more conservative participants were, the more they endorsed notions of deservingness ( $B = .21$ ,  $SE = .02$ ,  $t(270) = 8.37$ ,  $p < .001$ ), and the less they endorsed the belief that luck is important to success ( $B = -.89$ ,  $SE = .10$ ,  $t(270) = -8.69$ ,  $p < .001$ ). Conservatives' relative aversion to luck (random chance) as an explanation for success is associated with the challenge it poses to the notion that people get the outcomes they deserve.

#### General discussion

The present studies demonstrated that the perceived relationship between luck and success is a function of people's political ideologies. Conservatives endorsed the association between luck and success to a lesser extent than liberals did (Studies 1–3). Luck's polarizing effect is due to its emphasis on the uncontrollable and unstable factor of random chance in determining success (Study 2), and is associated with the challenge that presents to the notion that people are deserving of

their outcomes (Study 3). External attributions for success that do not emphasize chance, such as help from others, do not produce the same level of polarization (Study 2). And conservatives are more amenable than liberals to luck (and its relation to success) when random chance is de-emphasized, as it does not contradict that people are deserving of their outcomes (Study 3). These findings provide the first empirical evidence that the link between luck and success divides along ideological lines.

One potential limitation of the current findings is that political conservatives are under-represented in the samples obtained from Mechanical Turk (Studies 2 and 3), which skew liberal. The over-representation of political liberals in these samples certainly suggests some caution in interpreting the continuous ideological differences. However, in all of our studies, we also test these differences among only those who identified themselves as liberals or conservatives. These results mirror what we find using continuous analyses, supporting real differences between those on the political left and right, and not simply left and center.

The present research demonstrates that political ideology contributes to views about how people become successful, which complements previous research that has investigated responses to individuals who have “failed” (e.g., Skitka & Tetlock, 1992, 1993; Zucker & Weiner, 1993). These results also suggest why the debate over wealth distribution in society appears intractable. Beyond left–right disputes about the economic consequences of wealth redistribution, there is ideological disagreement about what factors fundamentally contribute to success (specifically, the role of luck and random chance). The disagreement over this basic premise suggests that bridging the ideological divide over wealth redistribution will require finding ways to merge liberal and conservative perspectives on how success is achieved.

#### Acknowledgments

We thank Geoffrey Goodwin, Brenda Major, David Nussbaum, Joseph Simmons, and Leaf Van Boven for their helpful comments and insights on earlier versions of this manuscript. The first author gratefully acknowledges support from the Risk Management and Decision Processes Center at The Wharton School, University of Pennsylvania.

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**Table 3**

Correlations between the Luck and Success Scale (LASS), the definitions of luck, and other individual difference measures in Study 3.

Measure	LASS	Random chance luck	Internal quality luck
Belief in a just world	-.35***	.01	.01
Belief in meritocracy	-.52***	-.19**	.13*
Protestant work ethic (personal)	-.45***	-.05	.18**
Protestant work ethic (achievement)	-.49***	-.13*	.13*
Protestant work ethic (social)	-.35***	-.13*	.15*
System justification	-.29***	.01	.15*
Belief in good luck	.36***	-.12	.57***

\*\*\*  $p < .001$ .

\*\*  $p < .01$ .

\*  $p < .05$ .

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