

## REFRAMING THE DECISION-MAKERS' DILEMMA: TOWARDS A SOCIAL CONTEXT MODEL OF CREATIVE IDEA RECOGNITION

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Can decision-maker roles—roles with responsibility for allocating resources toward ideas—shape which ideas people in those roles view as creative? Prior theory suggests that expertise should influence creativity assessments, yet examples abound of experts in different roles disagreeing about whether the same idea is creative. We build and test a social context model of creative idea recognition to show how decision-maker roles can shift creativity assessments. In an experimental study, we show that relative to non-decision-making roles, decision-making roles inculcate an economic mindset and so lead to downgrading otherwise creative ideas with cues of low social approval. A quasi-experimental study triangulates and extends this finding showing that organizational decision-making roles can habitually evoke an economic mindset that shapes creativity assessments. In both studies, decision-maker role, economic mindset, and social approval levels were unrelated to idea usefulness ratings. By integrating work on organizational roles, economic mindsets, and implicit theories of creative ideas, we provide a broadly applicable theoretical framework to describe how social context shapes creativity assessments. This work has important implications for the creativity and innovation literatures, and suggests a new interpretation of the longstanding puzzle of why organizations desire but often reject creative ideas.

Editor's rejection of Akerlof's "Market for Lemons" paper: This is trivial.

Editor's rejection of Orwell's *Animal Farm*: It is impossible to sell animal stories in the United States.

The editors evaluating Akerlof and Orwell's works did not think that those works were creative. Akerlof and Orwell no doubt disagreed. Indeed, these authors had good reason to disagree, since Akerlof's

paper won him the Nobel Prize in economics and Orwell's book *Animal Farm* is an American classic. This phenomenon of people in decision-making roles disagreeing with others over whether an idea is creative appears common. For example, *Star Wars* was first denied by United Artists, Airbnb was initially rebuffed by investors in Silicon Valley, and the digital camera was initially rejected by Kodak. Even domains such as academia that prize theoretical novelty often reject breakthrough ideas (Boudreau, Guinan, Lakhani, & Riedl, 2016; Siler, Lee, & Bero, 2015). This downgrading of creative ideas is unfortunate, because decision-makers who are able to embrace creative ideas can enhance their organizations' strategic effectiveness (Ford, Sharfman, & Dean, 2008), and competitive advantage (Amabile, 1988). However, the question of

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why decision-makers can sometimes view groundbreaking ideas as “trivial” and not creative or worth pursuing remains an unresolved puzzle and one that carries potentially far-reaching consequences.

While organizations often employ decision-maker roles to ensure quality control and gatekeeping during the process of selecting ideas to pursue (Cooper, 2006; Day, 2007; Krishnan & Ulrich, 2001), research has not considered whether the decision-maker role might alter assessments of ideas. This is surprising given longstanding evidence that social roles color the way information is perceived and processed, and shape the mental representations individuals use to guide their behavior (Callero, 1986; Morgan & Schwalbe, 1990). In the current paper, we build from prior work showing that mindsets can shape creativity assessments (Mueller, Wakslak, & Krishnan, 2014) and link the decision-maker role with an economic mindset, a knowledge structure that evokes concerns around rationality, measurement accuracy, and correctness in decision-making (Molinsky, Grant, & Margolis, 2012; Vohs, Mead, & Goode, 2006). Further, we argue that in the course of assessing creative ideas, a person’s economic mindset will make social approval cues—indications that others endorse or sanction an option (Cialdini, Reno, & Kallgren, 1990; MacCoun, 2012)—particularly salient.

Social approval cues have been identified as key concerns for decision-makers as they assess creative ideas. Indeed, Ford and Gioia (2000: 725) argued that social approval cues generate a dilemma for decision-makers:

If they choose the safe path by adopting a professionally sanctioned solution, they might not resolve the problem, but they reduce their exposure to second guessing should the action fail. Adopting creative choices may increase the odds of resolving the problem(s) at hand, but at the cost of leaving decision-makers open to the stones and arrows of critics should the decision fail.

We will argue that the decision-makers’ dilemma is even more pernicious than Ford and Gioia described by building on a research tradition examining implicit theories of creative ideas (Batey, 2012; Loewenstein & Mueller, 2016; Paletz & Peng, 2008). Implicit theories, sometimes called naïve, folk, or lay theories (Atran, Medin, & Ross, 2005), are “schema-like knowledge structures that individuals use to effortlessly process current stimulus cues and choose responses” (Detert & Edmondson, 2011: 463). Implicit theories often depart from scholarly theories

(Dweck, Chiu, & Hong, 1995). For example, unlike scholars, lay people have implicit theories that social approval cues are indicators of creativity. A recent study found that about 70% of Americans believed low social approval indicated *high* creativity, whereas 30% believed low social approval indicated *low* creativity (Loewenstein & Mueller, 2016). We integrate this work on implicit theories of creative ideas with the earlier work on the decision-makers’ dilemma to propose that decision-makers, due to adopting an economic mindset, take low social approval as an indication of low creativity.

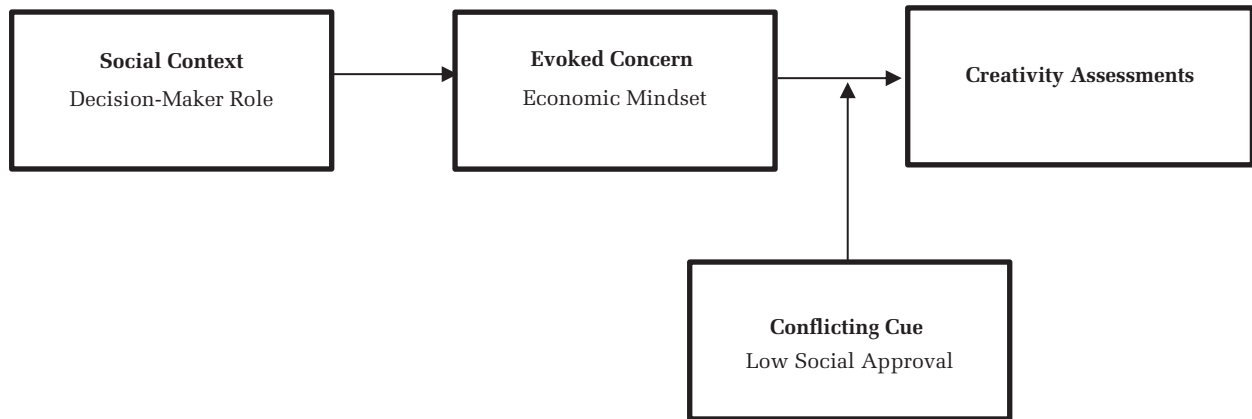
We contribute to the literature by building theory and by providing empirical evidence for a social context model of creative idea recognition (Figure 1). This model can account for instances, such as the ones experienced by Akerlof and Orwell, in which experts in decision-making roles can disagree with experts in non-decision-making roles around whether ideas are creative. Further, we provide theory and evidence that decision-makers may not experience a dilemma of choosing between non-creative ideas with social approval and creative ideas without social approval. Instead, decision-makers may simply not view ideas with low social approval to be creative in the first place. This implies that mandates to select creative ideas are unlikely to help organizations embrace instead of reject creative ideas, because creative ideas are unlikely to have high social approval (Klein & Knight, 2005; Schilling & Hill, 1998). To test this model we employ a laboratory and quasi-experimental study. The laboratory study randomly assigns decision-maker roles and shows that people in these roles adopt an economic mindset and thereby assess ideas with low social approval to be less creative. A quasi-experiment triangulates and extends these findings with employees in a large organization having a range of decision-making responsibilities, showing that routinely serving in decision-maker roles leads to a chronic economic mindset and downgrading the creativity of an idea with cues of low social approval.

## TOWARD A SOCIAL CONTEXT MODEL OF CREATIVE IDEA RECOGNITION

### Decision-Making Roles in the Context of Creativity and Innovation

The sociological literature describes social roles as goals or responsibilities that guide the preferences and behaviors of social actors within a given context (Biddle, 1986). Within the context of creativity and

**FIGURE 1**  
**Proposed Social Context Model of Creative Idea Recognition**



innovation, the decision-maker role, a role defined by the responsibility for allocating or withholding resources for ideas, is especially important. Research describes this role as having responsibility over the selection of ideas (Csikszentmihalyi, 1999), control over budgetary and time allocation (Mollick, 2012), a goal to make money or generate a profit (Ford et al., 2008), and ultimately achieve success with the chosen idea (Stevens & Burley, 1997). As such, these decision-makers have to evaluate, on average, more than 3000 ideas to achieve one commercial success (Stevens & Burley, 1997) and, for this reason, individuals in these roles account for the highest percentage of variance in organizational performance (Mollick, 2012).

Unsurprisingly then, the importance of the decision-maker role is widely recognized in the literature. For example, Ford and Gioia (2000) described the decision-maker role within the context of an evolutionary theory of creativity, noting that decision-makers are responsible for determining which ideas survive and which ideas die, mostly because decision-makers have budgetary and resource constraints that require they select only a small subset of ideas to develop. In his systems view of creativity, Csikszentmihalyi (1999) described decision-making roles as gatekeeper roles responsible for selecting and resourcing the ideas for the community to retain. Elsbach and Kramer (2003) focused on a Hollywood pitch context, where those with the role of “catcher” had responsibility for choosing whether or not to fund the development of “pitchers’” ideas. Drazin, Glynn, and Kazanjian (1999) identified that organizations desiring creativity often imbue managers with the responsibility

to decide how to allocate funds and set deadlines for specific projects. Thus, the decision-maker role is widely viewed as critical to innovation in organizations, in large part because it is the primary locus of responsibility over allocating economic (money and time) resources to potentially creative ideas.

### Decision-Maker Roles and Economic Mindsets

People are influenced by their roles and tend to modify their behavior to meet the goals and responsibilities associated with these roles (Sluss & Ashforth, 2007). Because the decision-maker role is defined as involving responsibility over the distribution of funds and resources (Ford & Gioia, 2000), we argue that the role is likely to activate an economic mindset—a cognitive tendency to prioritize concerns at the heart of economics, including accuracy, rationality, and self-interest (Molinsky et al., 2012; Wang, Malhotra, & Murnighan, 2011).

One reason for the proposed link between the decision-maker role and economic mindset is that the decision-maker role involves goals concerning material and economic matters. Economic criteria tend to be the most evaluable attributes in a decision-making frame (Hsee, 1996), and so can help decision-makers fulfill their goals around accurately assessing the value of a given idea. Also, economic criteria are persuasive when justifying decisions to others (Molinsky et al., 2012), and so can serve a second-order purpose of allaying others’ concerns around assessments being “correct.” Indeed, supporting this, the innovation literature suggests that when vetting ideas for implementation, decision-makers should focus on accurately assessing the potential

market size for an idea (Kornish & Ulrich, 2011) and identifying whether an idea will incur more costs than it generates in revenues (Day, 2007). Likewise, the literature on behavioral decision-making recommends that decision-makers should use measurement tools like confidence intervals to identify whether ideas are viable in the future (Haran, Moore, & Morewedge, 2010). As decision-makers' goals center on accuracy, rationality, and economic outcomes (Drazin et al., 1999; Ford & Sullivan, 2005), we suggest that the decision-maker role will tend to engender an economic mindset.

A second reason for the proposed link between the decision-maker role and economic mindset stems from experiencing a high level of responsibility (Hackman & Oldham, 1976). A feeling of responsibility leads to a challenge if decision-makers are forced to make decisions about uncertain options, and creative ideas are inherently uncertain (Huang & Pearce, 2015). A sense of responsibility, coupled with a high level of uncertainty, is a burdensome experience (Mintzberg, 1971) characterized by feelings of a loss of control. As individuals prefer to feel in control of their environments (Leotti, Iyengar, & Ochsner, 2010), this experience is likely to compel decision-makers to attempt to regain control by seeking to reduce uncertainty. A primary means to do so is to focus on precise economic criteria that are easily evaluable (Hsee, 1996) and verifiable (Molinsky et al., 2012) as well as to focus on support that one's evaluations are correct (Sonenshein, 2006). This focus and reliance on economic decision-making indicators will then create and sustain an economic mindset. Given these two reasons, we propose:

*Hypothesis 1. Relative to adopting a role with no decision-making responsibility, adopting a decision-maker role more strongly evokes an economic mindset.*

### **Economic Mindsets and Implicit Theories of Creative Ideas**

Implicit theories of creativity are widespread because creativity is not just a topic that scholars consider, it is also a word much used and discussed by lay people (Davies, 2008). Accordingly, there are both scholarly perspectives on creativity and lay perspectives on creativity. Perhaps the main scholarly perspective on creativity is the conceptual definition of creativity (Amabile, 1983): an idea is defined by scholars as creative to the extent that it is

judged both novel and useful relative to domain knowledge (Amabile, 1982; Fujita, Trope, Liberman, & Levin-Sagi, 2006; Hennessey, Amabile, & Mueller, 2010). In contrast, lay perspectives on creativity are the product of social context and cultural conventions, so they are more variable. Different groups of people, even different groups of experts, can form different implicit theories (Atran, Medin, & Ross, 2005; Keller & Loewenstein, 2011). In turn, lay people may then look to a large array of cues beyond novelty and usefulness as independent indicators of creativity (Amabile, 1982; Paletz & Peng, 2008; Sternberg, 1985).

We suggest that the decision-maker role, with its associated economic mindset, evokes particular implicit theories about what indicates that an idea is creative. Because decision-makers have to make choices about ideas that have not yet been proven, and their economic mindsets trigger a need for accuracy, rationality, and objective bases for decision-making, we suggest that decision-makers are particularly likely to attend to social approval cues as these cues appear to provide evidence of acceptability (Cialdini, 1993), legitimacy (Rao, Chandy, & Prabhu, 2008), and potential for success (Salganik & Watts, 2009).

We define social approval cues as indicators that others endorse, support, or favorably view an idea, item, or action. Such cues are the input to a wide array of considerations around social influence, talked about sometimes in terms of heuristic responses to social approval cues (social proof heuristic; Cialdini, 1993) sometimes in terms of the aggregate impression generated by social approval cues (social consensus information; MacCoun, 2012), and sometimes in terms of the cultural implications of such cues (descriptive norms; Cialdini et al., 1990; Deutsch & Gerard, 1955). Research confirms that social approval is "most influential when decision-makers are uncertain about the value of a course of action, and when able to observe the actions of similar others" (Rao, Greve, & Davis, 2001: 504). For instance, receiving information about the extent to which others are engaging in a specific behavior has been found to explain individuals' preferences for online products (Amblee & Bui, 2011; Kruglanski, Friedman, & Zeevi, 1971), investors' impressions of public firms (Pollock & Rindova, 2003), and securities analysts' decisions to continue or abandon firm funding (Rao et al., 2001). Thus, it is likely that decision-makers, because of an economic mindset, would attend to social approval cues.

Any idea could, in principle, gain high or low levels of social approval, which means that social approval is a distinct concern from an idea's novelty, usefulness, or domain of origin. Indeed, one of the main discussions around social approval cues is how they are influenced by concerns beyond the informational aspects of the idea (Berger & Milkman, 2012; Sinaceur, Heath, & Cole, 2005), how they can be misleading indicators (Rao et al., 2001), and how they can be manipulated (De Cristofaro, Friedman, Jourjon, Kaafar, & Shafiq, 2014). Hence high social approval may not indicate the inherent quality of an idea, such as its usefulness. Lay people's implicit theories need not accurately reflect reality or conform to scholarly claims; rather the question is whether decision-makers form implicit theories about social approval cues indicating creativity. Prior research indicates that people have strong disagreements around whether and how social approval cues relate to creativity (Loewenstein & Mueller, 2016). On one hand, cues of social approval signal acceptance and endorsement, factors relevant for making acceptable, correct, and accurate decisions that those with an economic mindset might view as key to creativity. Indeed, because the economic mindset evokes concerns around accuracy, people in an economic mindset might view low social approval as indicating an idea is incorrect, and so cannot be accurately assessed as creative. Further, people with an economic mindset might view low social approval as indicating an idea is not creative because the idea is not accepted or proven, and so suggestive of a failed innovation. On the other hand, for those who lack an economic mindset and the corresponding desire to make a correct and acceptable decision, social approval cues may simply not be relevant, or they may even be interpreted as signaling the idea is well-established and, thus, lacking in creativity.

### How Decision-Maker Roles Shape Creativity Assessments

If decision-maker roles evoke an economic mindset, then it should lead people in these roles to attend to cues congruent with that mindset around accuracy, rationality, and correctness in the course of decision-making. Correspondingly, individuals in decision-making roles are likely to discount ideas with cues of low social approval and rate them as less creative than individuals not in decision-making roles. Individuals in decision-making roles can be expected to react this way because their economic mindsets lead them to draw on an implicit theory

relating low social approval cues with an idea's incorrectness, unreliability, and unproven nature, and so to it being lower in creativity.

*Hypothesis 2. For ideas with cues of low (versus high) social approval, decision-makers give lower creativity ratings due to the mediating mechanism of economic mindset.*

## OVERVIEW OF RESEARCH

We employ an experimental and quasi-experimental study to provide an initial examination of the proposed social context model of creative idea recognition. Specifically, we test our hypotheses in an experimental context where we randomly assigned laboratory participants to a decision-maker role or a control condition and told them that they were assisting with an entrepreneurship competition. Decision-makers were told they were responsible for deciding whether an idea would advance to the next level, while those in the control condition were merely asked to assess the idea. In a quasi-experimental study, we triangulate and extend the experimental study by showing that the findings generalized to a different idea and to employees in an organization who had long worked in decision-maker roles.

## STUDY 1: METHODS

### Participants and Experimental Design

A total of 154 undergraduates from a large southeastern university in the United States participated in this study in exchange for course credit in their introductory organizational behavior course. Their mean age was 20.83 years ( $SD = .87$ ) and 46.4% were female. Participants were randomly assigned to one of four conditions of a 2 (role: decision-maker versus control)  $\times$  2 (social approval cue: high versus low) between-subjects design.

### Procedure

Participants were seated in individual cubicles with computers and informed that they would be assisting a well-known, on-campus entrepreneurship research center with a new initiative. Participants put on headphones and watched a video of a professor discussing "a business plan competition for the students by the students," in which undergraduate students would serve as judges of their peers' business plans. Unless otherwise mentioned, we used a 7-point scale for all studies including pilot

studies, with scale anchors (1 = “strongly disagree,” 7 = “strongly agree”). A pretest ( $n = 20$ , 45% male, mean age = 20.95 years,  $SD = 1.23$  years) showed that students rated the video as credible ( $M = 5.6$ ,  $SD = .99$ ), and 100% of participants answered “yes” to the question, “would you be interested in serving as a judge for this competition?”

**Manipulation of decision-maker role.** The video included the manipulation for the role condition (decision-maker versus control). Specifically, all participants were first told that their task was to evaluate *one* randomly selected idea from those that had been submitted to the center. To manipulate the decision-maker role ( $n = 79$ ), participants were told by the professor in the video that their assessments would be the “final word.” Their evaluations of the idea alone would determine whether the student entrepreneurs associated with it would receive an invitation to the student-judged business plan competition. In the control condition ( $n = 75$ ), the professor in the video highlighted that each idea would be rated by a set of students in the laboratory, that the participants’ own ratings would be added to this set of evaluations, and that this collective evaluation would decide if the idea received an invitation to the actual student-judged competition. To make sure that participants in both conditions took this task seriously, they were told: (a) that the center had limited resources for this competition and were only expecting to invite a few proposals back for the final in-person round; and (b) they would have to justify their evaluations; and (c) that competition organizers would review these justifications. At the end of this manipulation video, participants were presented with a set of questions that included manipulation checks as well as a measure of economic mindset.

**Manipulation of social approval cue.** After watching the video and completing the post-video survey, participants were then directed to watch a short, detailed video pitch. The idea involved the recycling of dirty diapers into roofing material and was described as follows:

Dirty disposable diapers collected from childcare centers, nursing homes, and hospitals will be taken to recycling centers where they are washed, dried, and fired into plastic pellets. These plastic pellets will then be absorbent and strong enough to be used as roofing material.

We made two versions of the video, different only in that one included high social approval cues and the other included low social approval cues. In the high social approval cue condition ( $n = 72$ ),

participants saw that the idea had received 178% of its requested funding from 396 contributors on Kickstarter, while in the low social approval cue condition ( $n = 71$ ), participants were told that the idea had amassed 22% of funding from 12 funders on Kickstarter. In both cases, participants were told: “This campaign has been on for over 30 days.” Further, in the high social approval condition, the video indicated that the idea had received 22,000 Facebook likes; while in the low social approval condition, the idea had received 31 Facebook likes. At the end of the study, the participants evaluated the idea and provided demographic information.

To ensure that this manipulation only influenced participants’ perceptions of social approval and did not influence their assessments of creativity, novelty, or usefulness, we employed a pilot study by recruiting 93 participants from Amazon Mechanical Turk to complete an online survey (62.7% male; mean age = 34.51,  $SD = 10.88$ ). In this pilot study, we randomly assigned participants to rate either the high or low social approval version of the “dirty diaper recycling” idea on four different scales: creativity, novelty, usefulness, and social approval. The creativity scale included the two items: “creative” and “innovative” ( $\alpha = .89$ ). The novelty scale included the two items: “novel” and “original” ( $\alpha = .69$ ). The usefulness scale included the two items: “useful” and “practical” ( $\alpha = .77$ ). The social approval scale included the three items: “people endorse it,” “it makes people happy,” and “people approve of it” ( $\alpha = .89$ ). We found no statistical differences in perceptions of creativity, novelty, or usefulness for the high ( $n = 47$ ) and low approval ( $n = 46$ ) idea. Specifically, idea creativity was not seen to differ for the high ( $M = 5.99$ ,  $SD = 1.27$ ) and low approval idea ( $M = 5.76$ ,  $SD = 1.26$ ,  $t(91) = -.87$ ,  $p = .39$ ). Idea novelty was not seen to differ for the high ( $M = 5.70$ ,  $SD = 1.17$ ) and low approval idea ( $M = 5.42$ ,  $SD = 1.31$ ,  $t(91) = -1.12$ ,  $p = .27$ ), nor was usefulness seen to differ for the high ( $M = 5.50$ ,  $SD = 1.18$ ) and low approval idea ( $M = 5.31$ ,  $SD = 1.33$ ,  $t(91) = -.69$ ,  $p = .50$ ). Instead, social approval ratings differed significantly between the high ( $M = 5.31$ ,  $SD = 1.34$ ) and low approval idea ( $M = 4.73$ ,  $SD = 1.34$ ,  $t(91) = -2.22$ ,  $p = .03$ ). This pilot study provides a manipulation check that our social approval manipulation was altering perceptions of social approval, but not creativity, novelty, or usefulness.

## Measures

**Decision-maker role: Manipulation check.** We utilized two separate manipulation checks. First, at

the end of this video, participants were asked whether their evaluations alone would matter for whether the idea was invited back, or whether their evaluations would be averaged with other participants' evaluations to decide the idea's future (assessed on a binary scale). Second, participants were asked about how responsible and accountable they felt for the decision and its potential outcomes. To measure this we used a six-item, perceived responsibility measure (Hackman & Oldham, 1975; Morrison & Phelps, 1999), that included items such as "I feel a personal sense of responsibility for the decision to allocate funds to this idea" and "It's up to me to allocate funds to this idea" ( $\alpha = .73$ ), and a four-item measure of how accountable they felt for their decision (Hochwarter, Perrewé, Hall, & Ferris, 2005) ( $\alpha = .78$ ), including items such as, "I felt accountable for my decision to allocate resources to this idea." Also, to confirm whether participants were engaged in the task, and took their role seriously, we measured the amount of time participants spent justifying their idea ratings.

**Mediator: Economic mindset.** To assess economic mindset, we employed a three-item scale with the stem "While making this decision, to what extent, did you:" followed by "focus on economic concerns," "care about whether this decision made business sense," and "focus on the economic consequences of the decision" ( $\alpha = .86$ ;  $M = 5.35$ ,  $SD = 1.10$ ).

**Dependent variable: Creativity assessment.** Participants were presented with an idea that involved recycling dirty diapers into roofing material and assessed how "creative" and "innovative" they thought the idea was ( $\alpha = .90$ ). Prior work shows that people use the terms "creative" and "innovative" interchangeably (Loewenstein & Mueller, 2016).

**Alternative explanation: Usefulness assessment.** Participants were also asked to assess idea usefulness using a three-item measure, specifically how "practical," "feasible," and "useful" the idea was ( $\alpha = .84$ ).

## STUDY 1: RESULTS AND DISCUSSION

Table 1 presents means, standard deviations, and correlations for variables in this study.

We first confirmed that 100% of participants accurately identified their assigned role condition. Further, decision-makers described feeling more responsible ( $M = 4.35$ ,  $SD = .99$ ) than those in the control condition ( $M = 3.73$ ,  $SD = 1.10$ ,  $t(152) = 3.10$ ,  $p < .01$ ), and more accountable for the decision ( $M = 4.40$ ,  $SD = 1.26$ ) than those in the control condition ( $M = 3.74$ ,  $SD = 1.22$ ,  $t(152) = 3.29$ ,  $p < .001$ ). Both

conditions took their role seriously: decision-makers spent the same amount of time justifying their ideas ( $M = 2.96$  minutes,  $SD = .79$ ) as non-decision-makers ( $M = 2.89$  minutes,  $SD = .87$ ,  $t(152) = -.56$ ,  $p = .58$ ).

Providing support for Hypothesis 1, an independent *t*-test identified that those assigned to a decision-maker role ( $M = 5.55$ ,  $SD = 1.03$ ) had a higher level of economic mindset than those assigned to a non-decision-maker role ( $M = 5.13$ ,  $SD = 1.14$ ,  $t(152) = 2.40$ ,  $p = .02$ ). To assess Hypothesis 2 about the effect of decision-maker roles on creativity assessments, mediated by economic mindset, and moderated by social approval, we used Hayes's (2013) PROCESS procedure (model 15, default settings). As noted, we found that decision-maker role predicted economic mindset ( $b = .42$  ( $SE = .17$ ), 95% confidence interval (CI) [0.0741, 0.7647],  $p < .05$ ,  $R^2 = .04$ ). We found that the decision-maker role by social approval interaction predicted creativity ratings ( $b = .99$  ( $SE = .3049$ ), [0.3844, 1.5893],  $p < .01$ ,  $R^2 = .19$  for entire model; see Figure 2 for interaction pattern). We found that economic mindset interacted with social approval to predict creativity ratings ( $b = .37$  ( $SE = .14$ ), [0.0932, 1.6537],  $p < .01$ , see Figure 3 for interaction pattern). Next, we found that the direct effect of decision-maker role on creativity assessments was significant for low social approval ( $b = -.58$  ( $SE = .21$ ), [-0.99, -0.15],  $p < .01$ ), but not for high social approval ( $b = .41$  ( $SE = .22$ ), [-0.04, 0.84],  $p = .06$ ). As additional support of Hypothesis 2, we found that the indirect effect of decision-maker role on creativity assessments via economic mindset was significant for low social approval ( $b = -.12$  ( $SE = .07$ ), [-0.28, -0.02],  $p < .05$ ), but not for the high social approval idea ( $b = .04$  ( $SE = .05$ ), [-0.39, 0.18],  $p = .15$ ).

In an exploratory analysis we employed the PROCESS procedure (model 15) and tested whether social approval moderated the indirect effect of decision-maker role on usefulness assessments through the mediator of economic mindset. We found no interaction, direct effect, or indirect effect of our model predicting perceived usefulness. Hence, low social approval did not indicate low usefulness for those in decision-making roles, despite it indicating low creativity.

These results provide evidence that participants randomly assigned to a decision-maker role discounted the creativity of an idea with low social approval. In contrast, participants in the control condition saw the idea as highly creative regardless

**TABLE 1**  
Means and Standard Deviations for Creativity Assessments, Study 1

		<i>M</i>	<i>SD</i>	1	2	3	4
1	Decision-maker role (1 = Yes, 0 = No)	0.51	0.50				
2	Social approval (1 = High, 0 = Low)	0.50	0.50	0.01			
3	Economic mindset	5.35	1.10	0.19*	-0.16 <sup>+</sup>		
4	Usefulness	4.74	1.30	0.03	0.18*	-0.16	
5	Creativity	5.63	1.02	-0.05	0.27**	-0.11	0.28**

<sup>+</sup> *p* < .10

\* *p* < .05

\*\* *p* < .01

of the level of social approval. The decision-makers in the current study were told they were solely responsible for their assessments, and this evoked an economic mindset that was then linked to lower creativity assessments of the low social approval idea. Furthermore, there was no evidence that decision-makers devalued creative ideas with low social approval because they saw them as less useful.

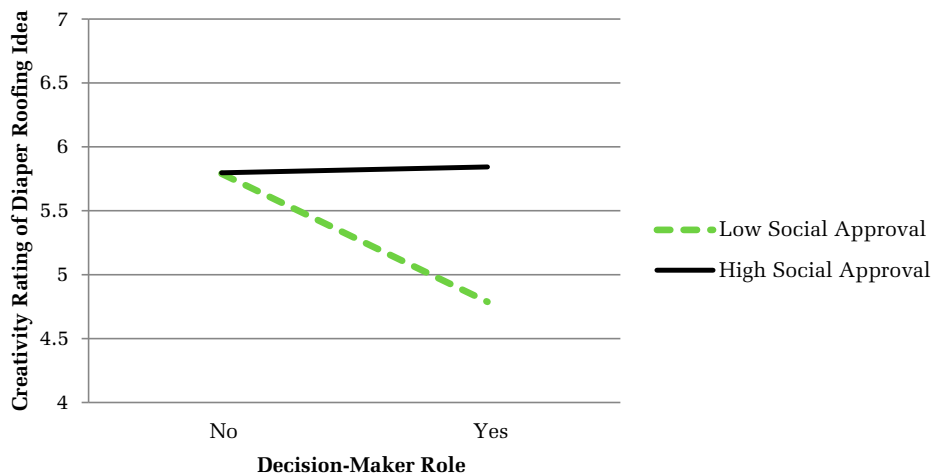
**STUDY 2**

While an experiment allows us to show that manipulating decision-maker role has a causal effect on lowering creativity assessments of ideas with low social approval, it also has limitations. One limitation of conducting an experiment to answer this question is that it does not capture the pervasive nature of decision-maker roles in actual organizations. In real-world organizations, decision-maker roles are rarely short lived and discrete. Employees

often spend many years in a given role and juggle multiple roles. This begs the question of whether the percentage of time spent in the decision-maker role might lead to the habitual adoption of an economic mindset, which may persist even when evaluating ideas outside the realm of their formal decision-making authority. If the amount of time in a decision-maker role evokes higher levels of economic concerns and subsequent downgrading of creative ideas, this suggests that merely switching roles in the moment may be insufficient to diminish the bias against creative ideas with low social approval. Specifically, we hypothesize the following:

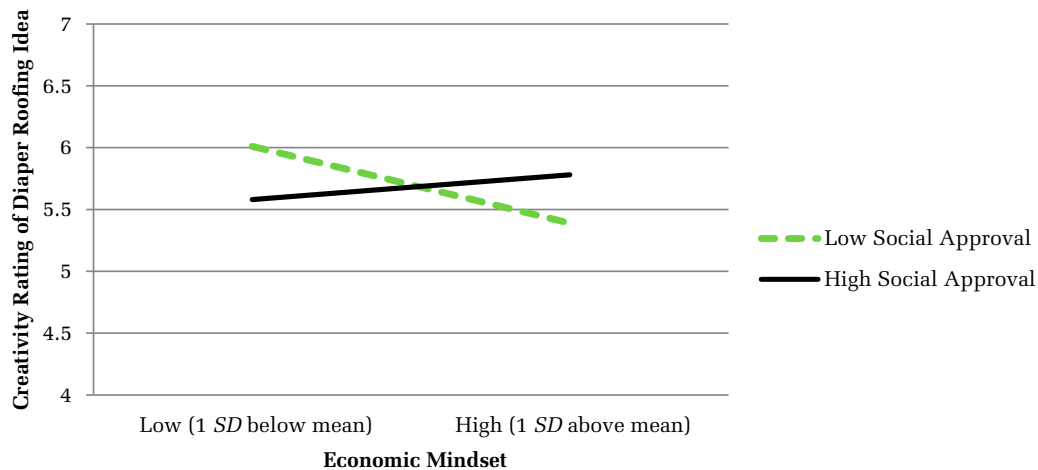
*Hypothesis 3. For ideas with cues of low (versus high) social approval, the more time employees spend in a decision-maker role the more they will view an idea with low social approval as lacking creativity due to the mediating mechanism of economic mindset.*

**FIGURE 2**  
Interaction between Decision-Maker Role and Social Approval Predicting Creativity Assessments, Study 1





**FIGURE 3**  
**Interaction Between Economic Mindset and Social Approval Predicting Creativity Assessments, Study 1**



## STUDY 2: METHODS

### Participants and Procedures

We collected data from 84 employees at multiple levels of a company with over \$10 billion in annual revenues, including the chief executive officer (CEO) and senior executives, area managers, and those in administrative and technical positions in a variety of functional areas. This ensured that we had sufficient variance in time spent in decision-making roles and for those decision-making roles to imply authority over consequential organizational outcomes. Employee participants were 51% male and had a mean level of 16.59 years of overall work experience ( $SD = 4.71$ ), and a mean level of 3.96 years of experience in their current role ( $SD = 4.71$ ). All participants had an undergraduate degree or higher. A total of 95 employee participants were asked by a member of the organization to participate in the study: 88% participated. We asked them to report the percentage of time at work they spend in decision-maker roles. We also asked them to describe the role they spent the largest percentage of time in when working at the company, and we coded this response for indications of economic mindset. Then we asked them to rate an idea different than the one used in Study 1. The idea was a password pill, described as “a tiny chip that uses the acid in one’s stomach to power it on, once activated it emits a specific 18-bit EKG-like signal that can be detected by your phone or computer, essentially turning your body into a password.” We randomly assigned employee participants to rate the password pill idea with either high (94% funded) or low (22% funded) social approval.

### Measures

**Independent variable: Percentage of time in a decision-making role.** Participants were asked to rate the percentage of time they spend in decision-maker roles, defined as “responsible for resourcing or funding ideas” ( $M = 33.06$ ,  $SD = 29.19$ ).

**Mediator: Economic mindset.** Participants were prompted to describe their main role, the role they spend the largest percentage of time in at work, and in particular their main goals and function in this role. We then developed a coding scheme to capture the extent to which participants demonstrated an economic mindset when describing their main role. To develop this coding scheme, we provided three independent coders, who were blind to the study’s hypotheses, with a list of the words used in prior research to prime economic mindset, including: profitable, efficient, and cost-benefit analysis (Molinsky et al., 2012). We asked coders to rate the extent to which participant employees described the main goals of their role using these terms on a 1–4 scale (anchors: “1 = no economic mindset,” 2 = “slight economic mindset,” 3 = “moderate economic mindset,” 4 = “strong economic mindset”). All three coders rated each participant’s role assignment statement (mean pairwise  $\alpha = .75$ ).

**Moderator: Social approval.** After describing their role, participants were directed to what we described as a second task, which was a mock Kickstarter.com page that contained details about the password pill idea and how many days were left to complete the funding cycle. Embedded

on this Kickstarter.com description page were the social approval cues. In the high social approval cue condition, the idea had 268 backers and was 94% funded, while in the low social approval cue condition, 22% of funding had been amassed from 12 funders. In both cases, participants were told: “This campaign has been on for over 30 days.”

**Dependent variable: Creativity.** We employed the same creativity scale ( $M = 6.01, SD = .79$ ) used in Study 1, which had acceptable reliability ( $\alpha = .84$ ).

**Controls.** We employed a two-item usefulness scale ( $M = 4.68, SD = 1.29$ ), including the words, “useful,” and “practical,” which had acceptable reliability ( $\alpha = .70$ ). Participants were also asked to report basic demographic information, including years of work experience.

**STUDY 2: RESULTS AND DISCUSSION**

Table 2 presents means, standard deviations, and correlations among the variables of this study. Providing support for Hypothesis 1, we found that the greater the percentage of time employees spent in decision-maker roles, the more likely their role descriptions indicated an economic mindset ( $r = .30, p = .01$ ). To support this simple first-order association, we used a hierarchical linear regression to assess whether decision-maker role related to economic mindset when controlling for organizational tenure. We identified that the percentage of time spent in a decision-maker role continued to be positively related to the strength of the economic mindset ( $\beta = .34, t(74) = 2.97, p < .01$ ), while organizational tenure ( $\beta = .06, t(74) = .48, p = .63$ ) did not. Hence, we replicate findings from Study 1 in an organizational sample, and provide additional support for Hypothesis 1.

To assess Hypothesis 3 about the effect of chronically enacting decision-maker roles on creativity assessments, mediated by economic mindset, and

moderated by social approval, we used Hayes’s (2013) PROCESS procedure (model 15, default settings). As noted, we found that the percentage of time spent in a decision-maker role predicted economic mindset ( $b = .01 (SE = .003), 95\% CI [0.004, 0.019], p < .01, R^2 = .11$ ). We found that economic mindset interacted with social approval to predict creativity ratings ( $b = .44 (SE = .153), [0.1378, 0.750], p < .01, R^2 = .24$  for full model, see Figure 4 for interaction pattern). We found that the percentage of time spent in a decision-maker role by social approval interaction predicted creativity ratings ( $b = .01 (SE = .005), [0.001, 0.022], p = .04$ , see Figure 5 for interaction pattern). Next we assessed the conditional direct effect of the percentage of time spent in a decision-maker role on creativity assessments for different levels of social approval. We found that the direct effect of the percentage of time spent in a decision-maker role on creativity assessments was significant for low social approval ( $b = -.01 (.004), [-0.017, -0.001], p = .03$ ), and not for high social approval ( $b = .00 (.004), [-0.005, 0.010], p = .56$ ). Figure 4 shows that spending 0–100% of time in a decision-maker role reduces creativity assessments of low social approval ideas by about 1.5 points total on the 7-point scale. In support of Hypothesis 3, we found that the indirect effect of the percentage of time spent in a decision-maker role on creativity assessments via economic mindset was significant for the low social approval idea ( $b = -.004 (.002), [-0.009, -0.001]$ ), but not for the high social approval idea ( $b = .00 (.001), [-0.000, 0.005]$ ).

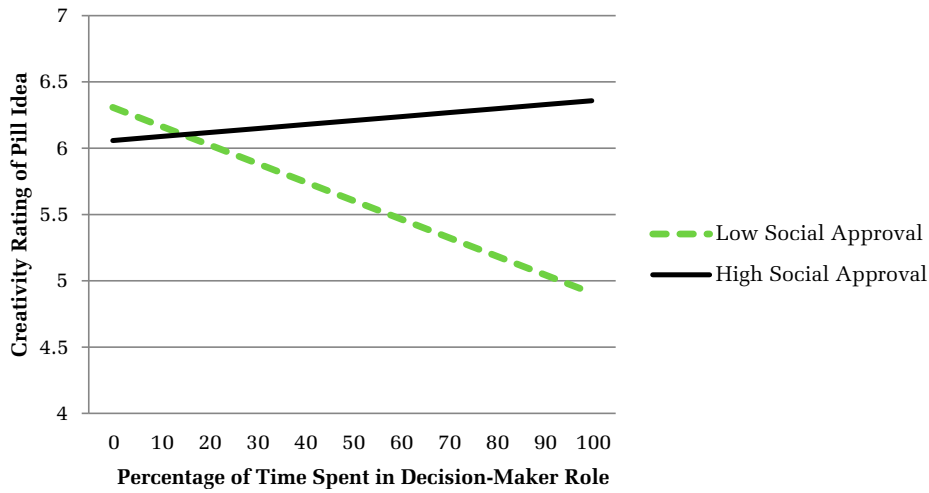
As in Study 1, we employed the PROCESS procedure developed by Hayes (2013) (model 15, default settings) to explore whether social approval moderated the indirect effect of decision-maker role on usefulness assessments through the mediator of economic mindset. We found no significant interaction, indirect effect, or direct effect of our model predicting usefulness.

**TABLE 2**  
**Descriptives and Pearson Correlation Coefficients for All Major Variables, Study 2**

Variables	Mean	SD	1	2	3	4
1. Organizational tenure	10.01	8.64				
2. Decision-maker role	33.06	29.19	0.05			
3. Social approval (1 = High)	0.50	0.50	-0.15	0.01		
4. Economic mindset	2.03	1.07	-0.03	0.30**	0.02	
5. Creativity rating	6.01	0.79	0.04	-0.16	0.17	-0.15

\*\*  $p < .01$

**FIGURE 4**  
**Interaction Between Percentage of Time in Decision-Maker Role and Social Approval Predicting Creativity Assessments, Study 2**



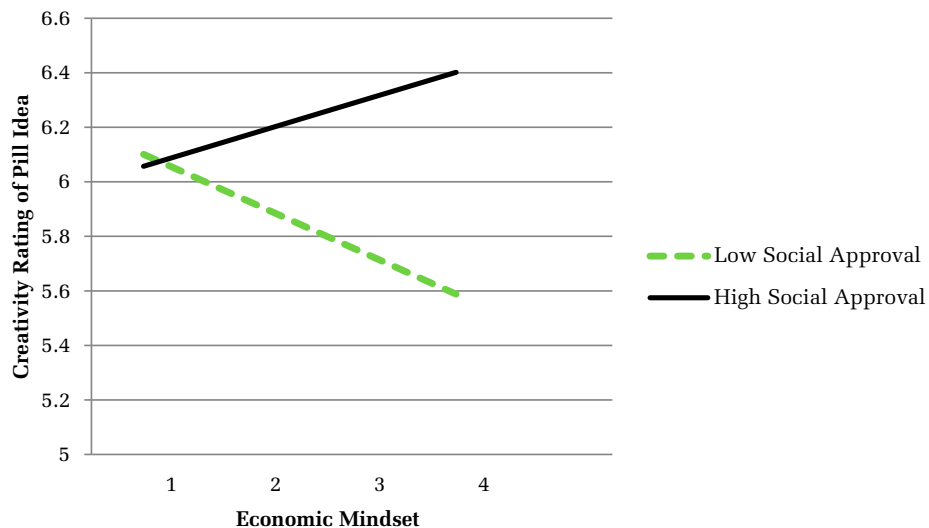
We found evidence, from those in consequential decision-maker roles in a global organization emphasizing creativity, that time spent in decision-maker roles was associated with employees downgrading otherwise creative ideas with low social approval. This effect held even when their decision-making authority did not extend to those specific ideas, suggesting that decision-making roles can induce a habitual mindset that yields chronic effects. Furthermore, the percentage of time spent in decision-maker roles did not appear to alter assessments of idea usefulness for ideas low in social

approval. This suggests that decision-makers are not taking social approval as a proxy for usefulness and so downgrading the creativity of ideas with low social approval, but rather that social approval is conflicting with the economic mindsets habitually induced by chronically enacting decision-maker roles.

**GENERAL DISCUSSION**

Across one experimental and one quasi-experimental study, we showed that decision-maker roles evoked an

**FIGURE 5**  
**Interaction Between Economic Mindset and Social Approval Predicting Creativity Assessments, Study 2**



economic mindset, which diminished creativity (but not usefulness) assessments of low social approval ideas. Prior work has suggested that the negative relationship between social approval and creativity can create a dilemma for decision-makers, who need to choose one over the other (Ford & Gioia, 2000). However, our findings suggest that decision-makers may not often experience this dilemma, because they see *low* social approval as one indicator that an idea is *not* creative. But if decision-makers are viewing ideas with low social approval as less creative, while others inside (e.g., coworkers without decision-making responsibility) and outside (e.g., consumers) of the organization do not factor social approval into their assessments of creativity, then this suggests three important points. First, decision-makers could be more likely than others to reject truly creative ideas even in organizations that support creativity. Second, decision-makers could have a perceptual disconnect with employees who generate ideas and the customers to whom they wish to sell the ideas. Third, because prior work has identified that social approval cues are “fools gold” and noisy indicators of idea quality when ideas are new (Rao et al., 2001), decision-makers using these cues to assess creative potential may be misguided.

### Theoretical Contributions

In the course of examining creativity assessments by members of organizations, we propose that mindsets evoke implicit theories that then guide which cues people believe indicate creativity as well as whether these cues are positive or negative indicators of creativity. Because distinct organizational roles evoke distinct mindsets and corresponding implicit theories, we propose that people in these roles will view ideas as creative if those ideas have cues that fit their implicit theories. As Figure 1 illustrates, the contexts that evoke a bias against creativity may not be just one role or just one cue to creativity, but instances in which the roles and cues, because of the mindsets and implicit theories, conflict. This social context model of creative idea recognition can then be turned to analyze further organizational roles, such as idea generation roles, as well as further characteristics of ideas, such as idea feasibility, that might predictably shape creativity assessments.

The social context model of creative idea recognition can enrich our understanding of prior work examining the bias against creativity. Indeed, Mueller et al. (2012) identified that when primed

with a mindset around uncertainty intolerance, participants experienced negative implicit associations with creativity and subsequently downgraded a creative idea when compared to participants primed with a mindset around uncertainty tolerance. This study identified that implicit attitudes around creativity partially mediated the relationship between mindset and creativity assessments. A social context model of creative idea recognition would suggest that in addition to implicit attitudes evoked by mindsets, implicit theories evoked by mindsets might also shape creativity assessments. In the same vein, our social context model of creative idea recognition casts new light on rising evidence showing that ideas with high novelty are rejected by decision-makers purporting to desire novelty (Boudreau et al., 2016; Criscuolo, Dahlander, Grohsjean, & Salter, 2016; Siler et al., 2015). Siler et al. (2015) identified a puzzling finding: papers later published and hailed as “breakthroughs” were initially rejected by reviewers who perceived them as “lacking novelty.” Hence, the social context of model creative idea recognition may be a useful lens to employ to better understand how editor and reviewer roles, and their corresponding mindsets, might shape perceptions of novelty and corresponding decisions to accept or reject ideas.

The social context model of creative idea recognition has implications for how scholars conduct creativity research. Most field research on creativity employs creativity assessments made by lay people, namely leaders’ ratings of subordinates’ creativity (see Amabile & Mueller, 2007). From the perspective of a social context model of idea recognition, ratings made by employees in a single role may reflect implicit theories of people in that role that may not align with implicit theories employed by other important stakeholders. So if leaders are in decision-making roles, then their creativity assessments may differ systematically from those of their subordinates. Decision-makers may be discounting creative ideas generated by employees if the ideas lack social approval. Independent assessments of creative products diminish self-serving biases (Hennessey et al., 2010). Yet it is not an ideal solution to gather independent assessments if the individuals making those assessments are all in the same role, and we have evidence that this role generates biased assessments. Hence, by taking a social context of creative idea assessment lens we propose that work examining creativity assessments made by participants in a single role (e.g., team leaders) may do well to replicate findings using participants with little

decision-making responsibility (e.g., peer-ratings of creativity).

More broadly, the social context model of creative idea recognition would predict that distinct organizational roles could activate distinct mindsets and corresponding implicit theories. This raises the possibility that actors in different roles will assess the same idea's creativity differently based on which cues match or do not match their particular implicit theories. If so, future research could examine whether there are misunderstandings and conflicts that could drive a wedge between decision-makers and others in organizations trying to innovate. For example, if different assessments give rise to perceived value differences between actors in and not in decision-making roles, this could lead to relationship conflict—a type of conflict shown consistently to harm performance (De Dreu & Weingart, 2003; Jehn, 1995). Making people aware that others have different implicit theories and, more importantly, helping others describe ideas in ways that are congruent with these implicit theories (Loewenstein & Mueller, 2016) could provide ways to potentially reduce conflict caused by distinct perceptions of creativity.

### Practical Implications

The innovation literature describes decision-making roles as a “best practice” in organizations, as stage-gate models of innovation rely on people in decision-making roles to marshal resources toward a select set of products (Cooper, 2006). However, if the decision-making role is altering people's assessments of creative ideas, this suggests that decision-makers' ability to recognize creative opportunities is biased relative to other organizational stakeholders. For example, in most organizations, the selection of which ideas to pursue occurs in a single step: decision-makers are given a set of ideas and a general mandate to select at least some creative ideas. Decision-makers then rank these ideas and decide to resource ideas with the highest rank. The current studies suggest at least one problem that could arise. One class of ideas that others find highly creative—those that happen to have cues of low social approval, which is likely with all new ideas proposed in organizations—are likely to receive a relatively lower rank and so be passed over by decision-makers. As a result, an organizational design that puts the selection of creative ideas into the hands of individuals primarily in decision-making roles could result in systematically rejecting some

worthy ideas. Furthermore, because Study 2 found that time spent in decision-maker roles tended to make adopting an economic mindset chronic and shift creativity assessments even for ideas over which they had no decision-making authority, asking people to step outside their roles may be of little help.

We propose that rather than trying to alter aspects of decision-making roles to temper an economic mindset, organizations might consider restructuring responsibility for selecting creative ideas to pursue. For example, our findings suggest that, relative to decision-makers, those who have little decision-making responsibility may evaluate creative opportunities in ways that are more congruent with how consumers evaluate ideas. Thus, instead of a one-step process mandating decision-makers select at least some creative ideas in a set, organizations might instead have employees with little decision-making responsibility rate the creativity of the ideas first. Then, after the set of ideas is rated by employees, the organization can provide these ratings to decision-makers to inform their selection decisions. This two-step process has the benefit of increasing decision-making accountability around creativity itself (as opposed to the downstream consequences associated with creativity), and so it makes mandates to select creative ideas more measureable and enforceable. It may also provide decision-makers with a justification to explain why they chose a creative idea—ideas that often have poor metrics.

The current findings also suggest a second practical implication relevant to those selling creative ideas. Providing decision-makers with information that ideas have high social approval can increase the extent to which decision-makers find these ideas creative. This is especially important given recent evidence that managers tend to underestimate the degree of social approval creative ideas are likely to garner (Berg, 2016). Hence, providing data that confirm ideas have social approval may help people gain influence for their creative ideas.

### Strengths and Limitations

Our experiment provided a test of the causal influence of roles, and evidence for a mechanism. Our quasi-experiment extended this finding suggesting that the amount of time spent in a decision-maker role can evoke a habitual mindset which alters creativity assessments for ideas outside decision-makers' domain of expertise. One strength of the experimental and quasi-experimental approaches in

these studies was that we ensured that there were no systematic knowledge differences, or differences in the cues of the ideas themselves (beyond those we manipulated) that could explain differences in creativity assessments. A further strength of the experimental and quasi-experimental approaches is that we avoided ownership and responsibility concerns—participants did not evaluate their own ideas, and decision-makers were not evaluating ideas relative to a particular history, comparison set, or specific budget constraints. A third strength of the studies employed is that by keeping the idea itself constant, we were able to vary a single feature of the idea to be in conflict (or not) with the goals of those in an economic mindset. This level of specificity allows us to conclude that this specific context evoked a shift in creativity assessments as opposed to a host of other factors that naturally vary. However, one limitation of the current study is we did not examine creativity assessments where the person in the decision-making role has expertise regarding the idea being evaluated. Prior work notes that expertise can sometimes diminish evaluations of novel ideas (Moreau, Lehmann, & Markman, 2001), and future research should evaluate the independent influence of the decision-maker role and expertise while employing actual decision-makers in the field.

A further limitation of the current approach is that we focused on what the literature has described as the central dilemma for decision-makers: the prospect of selecting creative ideas with low social approval. Decision-makers may face further dilemmas as many additional cues of creative ideas could be in conflict with the economic mindset. Specifically, aims around efficiency are related to an economic mindset (Molinsky et al., 2012); this concern may also alter creativity assessment and selection. Further, research has identified that people disagree strongly around whether feasibility indicates high or low creativity (Loewenstein & Mueller, 2016) and it is possible that decision-makers view ideas that have low feasibility as indicating an idea is not creative. There may be further related cues of creative ideas that present a mismatch to the implicit theories evoked by the economic mindset and our study provides a general model to help guide the efforts of future research on mindset-cue mismatches for decision-makers.

A third limitation of the current approach was that we only focused on a single role. While there is evidence to suggest that decision-making roles are the most influential in the innovation process, there are many other roles supporting organizations' efforts to generate and implement creative ideas. Certainly an

idea generator role is also important to consider (Miron-Spektor, Erez, & Naveh, 2011) as it may evoke implicit theories around creative ideas being viewed positively by other idea generators (Drazin et al., 1999). Hence, employing our social context model of creative idea recognition, we can posit that idea generators designing consumer products may ignore low social approval from *investors* as indicative of creativity, but downgrade ideas with low social approval from *designers*. Additionally, it is possible that idea generators' roles evoke implicit theories that ideas are creative if they are difficult to achieve (as this is how design awards are given; Cronin & Weingart, 2007). This suggests that solutions that were easy to develop and prototype might be seen by those in idea generator roles as less creative. While high feasibility ideas may be seen by decision-makers as matching their implicit theories around creativity, according to our social context model of creative idea recognition, high feasibility ideas could be seen as a mismatch with idea generators' implicit theories around creativity requiring people to demonstrate feats of technical prowess, and so idea generators may downgrade highly feasible ideas as less creative. While the current paper only develops and tests a specific piece of the social context model of creative idea recognition, it provides a framework for guiding future research to identify contextually driven tensions people may experience when assessing creative ideas.

A fourth limitation of the current investigation was that we focused on ideas with relatively high levels of creativity. For these ideas, low social approval appeared to conflict with decision-makers' economic goals and led to lower creativity ratings. Another possibility to explore is whether less creative ideas might, if they had high social approval, strike decision-makers as being highly creative. For our Study 2, we identified a significant interaction between economic mindset and social approval predicting creativity. A simple slopes analysis identified that the relationship between economic mindset and creativity was significant at high ( $\beta = .22$ ,  $t(139) = 2.25$ ,  $p = .02$ ), and low ( $\beta = -.46$ ,  $t(139) = 3.50$ ,  $p = .01$ ) levels of social approval. A similar pattern of results was marginally significant ( $p = .06$ ) in Study 1. In other words, ideas with high levels of social approval were seen as more creative by those with higher levels of economic mindset. This finding suggests a possible expansion of the social context model of creative idea recognition that was outside the scope of the current study, but that future work could consider. Perhaps those in decision-maker roles view ideas that have cues that are highly congruent with

their goals to be highly creative, even if those same ideas are seen by others as lacking creativity. If so, decision-makers might label ideas as highly creative even when others, such as their customers, view them as mere extensions of the status quo and so not creative.

## CONCLUSION

Decision-making roles are intended to help organizations align employee behavior and organizational resources toward maximizing organizational performance, usually evaluated in economic terms. However, a dilemma for decision-makers can arise when organizations decide that creativity is key to economic success and so require decision-makers to endorse creative ideas—even when these kinds of ideas have low social approval. Prior work suggests that merely mandating the selection of creative ideas can resolve the dilemma decision-makers experience. The current studies do not support this prescription, as decision-makers appear unlikely to view ideas lacking social approval as creative. Practically speaking, we generate evidence of an irony of organizational design: the way organizations structure roles in the innovation process may evoke a bias against selecting creative ideas, thereby diminishing the likelihood of organizations adopting the innovations they seek. Theoretically speaking, just as Amabile (1996) proposed that we needed a social context model of creativity and showed that there is more to the generation of creative ideas than just cognition, we provide a social context model of idea recognition to explain why there is more to creativity assessment than just the idea itself.

## REFERENCES

- Amabile, T. M. 1982. Social psychology of creativity: A consensual assessment technique. *Journal of Personality and Social Psychology*, 43: 997–1013.
- Amabile, T. M. 1983. The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45: 357–376.
- Amabile, T. 1988. A model of creativity and innovation in organizations. *Research in Organizational Behavior*, 10: 123–167.
- Amabile, T. M. 1996. *Creativity in context: Update to “The Social Psychology of Creativity.”* Boulder, CO: Westview Press.
- Amabile, T. M., & Mueller, J. S. 2007. Studying creativity, its processes, and its antecedents: An exploration of the componential theory of creativity. In J. Z. C. Shalley (Ed.), *Handbook of organizational creativity*: 33–62. Mahwah, NJ: Lawrence Erlbaum Associates.
- Amblee, N., & Bui, T. 2011. Harnessing the influence of social proof in online shopping: The effect of electronic word of mouth on sales of digital microproducts. *International Journal of Electronic Commerce*, 16: 91–114.
- Atran, S., Medin, D. L., & Ross, N. O. 2005. The cultural mind: Environmental decision making and cultural modeling within and across populations. *Psychological Review*, 112, 744–776.
- Batey, M. 2012. The measurement of creativity: From definitional consensus to the introduction of a new heuristic framework. *Creativity Research Journal*, 24: 55–65.
- Berg, J. 2016. Balancing on the creative high-wire: Forecasting the success of novel ideas in organizations. *Administrative Science Quarterly*, 61: 433–468.
- Berger, J., & Milkman, K. L. 2012. What makes online content viral? *Journal of Marketing Research*, 49: 192–205.
- Biddle, B. J. 1986. Recent development in role theory. *Annual Review of Sociology*, 12: 67–92.
- Boudreau, K. J., Guinan, E. C., Lakhani, K. R., & Riedl, C. 2016. Looking across and looking beyond the knowledge frontier: Intellectual distance, novelty, and resource allocation in science. *Management Science*, 62: 2765–2783.
- Callero, P. L. 1986. Toward a Meadian conceptualization of role. *Sociological Quarterly*, 27: 343–358.
- Cialdini, R. B. 1993. *Influence: Science and practice* (3rd ed.). New York, NY: HarperCollins College Publishers.
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. 1990. A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58: 1015–1026.
- Cooper, R. 2006. Managing technology development projects. *Research Technology Management*, 49: 23–31.
- Criscuolo, P., Dahlander, L., Grohsjean, T., & Salter, A. 2016. Evaluating novelty: The role of panels in the selection of R&D projects. *Academy of Management Journal*, 60: 433–460.
- Cronin, M. A., & Weingart, L. R. 2007. Representational gaps, information processing, and conflict in functionally diverse teams. *Academy of Management Review*, 32: 761–773.
- Csikszentmihalyi, M. 1999. Implications of a systems perspective for the study of creativity. In R. J. Sternberg (Ed.), *Handbook of creativity*: 313–335. New York, NY: Cambridge University Press.
- Davies, M. 2008. *The Corpus of Contemporary American English: 520 million words, 1990–present*. Available at: <https://corpus.byu.edu/coca/>

- Day, G. 2007. Is it real? Can we win? Is it worth doing?: Managing risk and reward in an innovation portfolio. *Harvard Business Review*, 85: 110.
- De Cristofaro, E., Friedman, A., Jourjon, G., Kaafar, M. A., & Shafiq, M. Z. 2014, November. *Paying for likes?: Understanding Facebook like fraud using honeypots*. Paper presented at the 2014 Conference on Internet Measurement.
- De Dreu, C. K. W., & Weingart, L. R. 2003. Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *The Journal of Applied Psychology*, 88: 741–749.
- Detert, J. R., & Edmondson, A. C. 2011. Implicit voice theories: Taken-for-granted rules of self-censorship at work. *Academy of Management Journal*, 54: 461–488.
- Deutsch, M., & Gerard, H. B. 1955. A study of normative and informational social influences upon individual judgment. *Journal of Abnormal and Social Psychology*, 51: 629.
- Drazin, R., Glynn, M. A., & Kazanjian, R. K. 1999. Multi-level theorizing about creativity in organizations: A sensemaking perspective. *Academy of Management Review*, 24: 286–307.
- Dweck, C. S., Chiu, C.-Y., & Hong, Y.-Y. 1995. Implicit theories and their role in judgments and reactions: A word from two perspectives. *Psychological Inquiry*, 6: 267–285.
- Elsbach, K. D., & Kramer, R. M. 2003. Assessing creativity in Hollywood pitch meetings: Evidence for a dual-process model of creativity judgments. *Academy of Management Journal*, 46: 283–301.
- Ford, C. M., & Gioia, D. A. 2000. Factors influencing creativity in the domain of managerial decision making. *Journal of Management*, 26: 705–732.
- Ford, C. M., Sharfman, M. P., & Dean, J. W. 2008. Factors associated with creative strategic decisions. *Creativity and Innovation Management*, 17: 171–185.
- Ford, C. M., & Sullivan, D. M. 2005. Selective retention processes that create tensions between novelty and value in business domains. In J. C. Kaufman & J. Baer (Eds.), *Creativity across domains: Faces of the muse*: 245–259. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Fujita, K., Trope, Y., Liberman, N., & Levin-Sagi, M. 2006. Construal levels and self-control. *Journal of Personality and Social Psychology*, 90: 351–367.
- Hackman, J. R., & Oldham, G. R. 1975. Development of the job diagnostic survey. *The Journal of Applied Psychology*, 60: 159–170.
- Hackman, J. R., & Oldham, G. R. 1976. Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16: 250–279.
- Haran, U., Moore, D. A., & Morewedge, C. K. 2010. A simple remedy for overprecision in judgment. *Judgment and Decision Making*, 5: 467–476.
- Hayes, A. F. 2013. *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Hennessey, B. A., Amabile, T. M., & Mueller, J. S. 2010. Consensual assessment. In M. A. Runco & S. R. Pritzner (Eds.), *Encyclopedia of creativity* (2nd ed.): 253–260. San Diego, CA: Academic Press.
- Hochwarter, W. A., Perrewé, P. L., Hall, A. T., & Ferris, G. R. 2005. Negative affectivity as a moderator of the form and magnitude of the relationship between felt accountability and job tension. *Journal of Organizational Behavior*, 26: 517–534.
- Hsee, C. K. 1996. The evaluability hypothesis: An explanation for preference reversals between joint and separate evaluations of alternatives. *Organizational Behavior and Human Decision Processes*, 67: 247–257.
- Huang, L., & Pearce, J. L. 2015. Managing the unknowable: The effectiveness of early-stage investor gut feel in entrepreneurial investment decisions. *Administrative Science Quarterly*, 60: 634–670.
- Jehn, K. A. 1995. A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 40: 256–282.
- Keller, J., & Loewenstein, J. 2011. The cultural category of cooperation: A cultural consensus model analysis for China and the United States. *Organization Science*, 22: 299–319.
- Klein, K. J., & Knight, A. P. 2005. Innovation implementation: Overcoming the challenge. *Current Directions in Psychological Science*, 14: 243–246.
- Kornish, L. J., & Ulrich, K. T. 2011. Opportunity spaces in innovation: Empirical analysis of large samples of ideas. *Management Science*, 57: 107–128.
- Krishnan, V., & Ulrich, K. T. 2001. Product development decisions: A review of the literature. *Management Science. Special Issue: Design and Development*, 47: 1–21.
- Kruglanski, A. W., Friedman, I., & Zeevi, G. 1971. The effects of extrinsic incentive on some qualitative aspects of task performance. *Journal of Personality*, 39: 606–617.
- Leotti, L. A., Iyengar, S. S., & Ochsner, K. N. 2010. Born to choose: The origins and value of the need for control. *Trends in Cognitive Sciences*, 14: 457–463.
- Loewenstein, J., & Mueller, J. 2016. Implicit theories of creative ideas: How culture guides creativity assessments. *Academy of Management Discoveries*, 2: 320–348.
- MacCoun, R. J. 2012. The burden of social proof: Shared thresholds and social influence. *Psychological Review*, 119: 345.



- Mintzberg, H. 1971. Managerial work: Analysis from observation. *Management Science*, 18: B-97–B-110.
- Miron-Spektor, E., Erez, M., & Naveh, E. 2011. The effect of conformist and attentive-to-detail members on team innovation: Reconciling the innovation paradox. *Academy of Management Journal*, 54: 740–760.
- Molinsky, A. L., Grant, A. M., & Margolis, J. D. 2012. The bedside manner of homo economicus: How and why priming an economic schema reduces compassion. *Organizational Behavior and Human Decision Processes*, 119: 27–37.
- Mollick, E. 2012. People and process, suits and innovators: The role of individuals in firm performance. *Strategic Management Journal*, 33: 1001–1015.
- Moreau, C. P., Lehmann, D. R., & Markman, A. B. 2001. Entrenched knowledge structures and consumer response to new products. *JMR, Journal of Marketing Research*, 38: 14–29.
- Morgan, D. L., & Schwalbe, M. L. 1990. Mind and self in society: Linking social structure and social cognition. *Social Psychology Quarterly*, 53: 148–164.
- Morrison, E. W., & Phelps, C. C. 1999. Taking charge at work: Extra role efforts to initiate workplace change. *Academy of Management Journal*, 42: 403–419.
- Mueller, J. S., Melwani, S., & Goncalo, J. A. 2012. The bias against creativity: Why people desire but reject creative ideas. *Psychological Science*, 23: 13–17.
- Mueller, J. S., Wakslak, C. J., & Krishnan, V. 2014. Construing creativity: The how and why of recognizing creative ideas. *Journal of Experimental Social Psychology*, 51: 81–87.
- Paletz, S. B., & Peng, K. 2008. Implicit theories of creativity across cultures: Novelty and appropriateness in two product domains. *Journal of Cross-Cultural Psychology*, 39: 286–302.
- Pollock, T. G., & Rindova, V. P. 2003. Media legitimation effects in the market for initial public offerings. *Academy of Management Journal*, 46: 631–642.
- Rao, H., Greve, H. R., & Davis, G. F. 2001. Fool's gold: Social proof in the initiation and abandonment of coverage by Wall Street analysts. *Administrative Science Quarterly*, 46: 502–526.
- Rao, R. S., Chandy, R. K., & Prabhu, J. C. 2008. The fruits of legitimacy: Why some new ventures gain more from innovation than others. *Journal of Marketing*, 72: 58–75.
- Salganik, M. J., & Watts, D. J. 2009. Web-based experiments for the study of collective social dynamics in cultural markets. *Topics in Cognitive Science*, 1: 439–468.
- Schilling, M. A., & Hill, C. W. 1998. Managing the new product development process: Strategic imperatives. *The Academy of Management Executive*, 12: 67–81.
- Siler, K., Lee, K., & Bero, L. 2015. Measuring the effectiveness of scientific gatekeeping. *Proceedings of the National Academy of Sciences of the United States of America*, 112: 360–365.
- Sinaceur, M., Heath, C., & Cole, S. 2005. Emotional and deliberative reactions to a public crisis: Mad Cow disease in France. *Psychological Science*, 16: 247–254.
- Sluss, D. M., & Ashforth, B. E. 2007. Relational identity and identification: Defining ourselves through work relationships. *Academy of Management Review*, 32: 9–32.
- Sonenshein, S. 2006. Crafting social issues at work. *Academy of Management Journal*, 49: 1158–1172.
- Sternberg, R. J. 1985. Implicit theories of intelligence, creativity, and wisdom. *Journal of Personality and Social Psychology*, 49: 607–627.
- Stevens, G. A., & Burley, J. 1997. 3,000 raw ideas = 1 commercial success! *Research Technology Management*, 40: 16–27.
- Vohs, K. D., Mead, N. L., & Goode, M. R. 2006. The psychological consequences of money. *Science*, 314: 1154–1156.
- Wang, L., Malhotra, D., & Murnighan, J. K. 2011. Economics education and greed. *Academy of Management Learning & Education*, 10: 643–660.



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