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The Effect of Economic Inequality on Perceptions of Merit

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Abstract

Previous research has shown that the rewards people receive are often taken as indirect

evidence of their competence. Meanwhile, economic inequality has increased in the US

over the past several generations. I propose that variation in economic inequality – the

distribution of rewards in society – alters perceptions of the merits of people at different

strata in society according to an assumption of equity. I use Amazon's Mechanical Turk

(mTurk) to experimentally manipulate the level of inequality (high vs low) participants

perceive in an anonymized country, and I measure participants' perceptions of merit for

people in that country's 90th and 10th income percentiles. Results show that participants

expected greater differences in merit in the high inequality condition compared to the low

inequality condition, and they expect that a high inequality country should demonstrate

greater variation in merit than a low inequality country.

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Chapter 1 – Introduction

One of the most persistent puzzles in the social sciences is why people tolerate inequality, even when they are disadvantaged by it. An increase in inequality will disadvantage more people than it advantages, and theories of rational choice predict that this should lead to increasing concern about inequality, and increasing support for redistributive policies (Alesina and Giuliano 2011). Because inequality has increased dramatically over the past generation, we would predict a similarly dramatic increase in public worry about inequality and its implications for the justice of social institutions (Alesina and Angeletos 2005; Alvaredo et al. 2013; Piketty and Saez 2014; Wolff 2010). Though this self-interest argument is logically compelling, it does not correspond well with patterns of social opinions. In fact, today there is a relative paucity of concern about inequality – certainly less than one would predict based on the increasing number of people disadvantaged by inequality (Ashok, Kuziemko, and Washington 2015; Norton and Ariely 2011; Osberg and Smeeding 2006; Shepelak and Alwin 1986).

This study proposes that people use deeply held assumptions about meritocracy and equity to draw inferences about the overall competence and worth of people throughout the income distribution. I argue that people are prone to interpret information about inequality as providing evidence that some people are highly capable, while others are not. Increasing inequality will then result in an even wider gap in perceived competence between the rich and the poor.

The most commonly and deeply accepted norm governing the level of rewards a person should justly expect to receive is the norm of *equity* (Kluegel and Smith 1986; Kunovich and Slomczynski 2007; Reynolds and Xian 2014). The equity principle states that a person's rewards should be proportional to his or her abilities and effort (Adams 1965; Homans 1961; Jasso and Rossi 1977). When a society distributes reward equitably, it is said to be a *meritocracy*. In a meritocracy, rewards (like income or wealth) are a direct result of a person's competence and hard work, rather than luck, or social forces like the station of one's parents, or one's social connections. A pure meritocracy would not create a level distribution, where all earn the same reward, but would instead distribute high rewards to those of greater merit, and fewer rewards to those of lesser merit (Alesina and Angeletos 2005; Alesina and Ferrara 2005). A proponent of the ideal of meritocracy would be concerned less with the level of inequality *per se* than the degree to which that inequality stems from factors related to merit vs. non-merited based factors.

A common focus in the social sciences is to investigate the extent of inequality in a given society, its causes, and to what extent inequality is based on merit. In contrast, the purpose of this research is to ask how people use information about inequality to derive assumptions about the distribution of merit in society, *given* the cultural pervasiveness of meritocratic values and assumptions. Following prior claims (Berger et al. 1998; Brezina and Winder 2003; Della Fave 1980; Fiske et al. 2002), I argue that levels of reward in society are taken as indirect signals of merit. After all, merit (traits like competence, work ethic, moral virtue) is more difficult for people to observe than outward signs of success or failure like wealth. Assuming that rewards are distributed proportionally to merit helps maintain beliefs in a just world (Benabou and Tirole 2006).

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It is clear from previous work that perceptions of merit are unequally distributed and are related to the wealth of the people being evaluated – that is, people clearly believe that the wealthy are more meritorious than the poor. What has been neglected in prior work is the causal relationship between inequality and judgments of merit. By extension, we do not know how people draw inferences from the level of inequality to *inequality of merit*. Do people tend to assume that the rich are more meritorious from the poor regardless of the extent of inequality? Or can higher levels of inequality lead to perceptions of greater differences in merit of the rich and poor? The goal of this research is to posit and test just such a relationship, in which perceptions of greater (vs lesser) inequality lead people to believe that there is a larger (smaller) gap in merit between the rich and the poor. In the next sections I review relevant theoretical and empirical research, state a specific hypothesis, and present the design and results of an online survey experiment conducted to test the hypothesis.

Chapter 2 – Background Literature

Several strands of research inform the theoretical proposition that inequality will affect expectations of merit of the different strata of society. These literatures establish that 1) the general population does not generally have accurate perceptions of the extent of inequality, and that those perceptions vary widely; 2) the rich are stereotyped as competent and the poor as incompetent, and their stations in life are often attributed to personal factors rather than external, structural ones; 3) differences of resources and rewards in groups tend to translate into corresponding differences in status and performance expectations; and 4) belief in meritocracy, mobility, and the primacy of personal qualities reduces concern about inequality and preferences for redistribution. I briefly review each in turn.

First, studies in recent years have established that the public generally is not aware of the extent of inequality in America. Studies disagree, however, about whether the public over- or under-estimates inequality. Several studies by Kraus obtained estimates of social mobility and found that Americans tended to over-estimate how many people moved up or down from the income rank they were born into. (Kraus and Tan 2015; Kraus 2015). Other research has noted that people generally believe that income inequality is lower than it actually is (Norton and Ariely 2011), a finding which largely persists after accounting for methodological problems (Eriksson and Simpson 2012), and which is more pronounced for higher-income individuals (Dawtry, Sutton, and Sibley 2015; Osberg and Smeeding 2006). In contrast, some work has found opposite patterns.

Chambers and colleagues conducted several studies using a variety of measures and found that Americans underestimated social mobility, overestimated income inequality, and believed that inequality had increased much more over the last several decades than it actually did (Chambers, Swan, and Heesacker 2014, 2015). Regardless of whether Americans over- or under-estimate these inequality and mobility, lay people rarely possess an accurate understanding of the precise degree of inequality and mobility in society. Moreover, Americans disagree widely about whether there is too much inequality (Osberg and Smeeding 2006) and about the desirability of redistribution (Alesina and Ferrara 2005; Alesina and Giuliano 2011; Fisman et al. 2015; Shepelak and Alwin 1986).

Second, research on stereotypes and poverty attribution shows the rich are stereotyped as more generally competent, while the poor are stereotyped as less generally competent (Cuddy, Fiske, and Glick 2007; Fiske et al. 2002). The prestige accorded to occupations is similarly stratified and seen as just (Kelley and Evans 1993). People commonly attribute poverty to personal traits and factors, like laziness, drug abuse, or criminality, and attribute wealth to similarly personal factors like intelligence and drive (Cozzarelli, Wilkinson, and Tagler 2001; Lepianka, Van Oorschot, and Gelissen 2009).

Third, research on group processes has shown that members of task groups adjust their performance expectations to be in line with the level of rewards group members have received (Berger et al. 1998; Cook 1975; Fişek and Hysom 2008; Harrod 1980; Hysom and Fişek 2011). If a group member is rewarded more highly than others, those other group members come to expect better performance from that person, and tend to interpret their contributions more favorably. When a group member is rewarded less

highly than others, those others come to expect less competent input, and are more likely to resist that person's attempts at influence.

Research and theory on the construction of status beliefs has found that a correlation between resources and an initially, neutrally valued nominal characteristic tends to lead to the creation of status beliefs – implicit or explicit beliefs about the relative competence and abilities of people who possess that nominal characteristic (Ridgeway and Correll 2006; Ridgeway and Erickson 2000; Ridgeway 1991). Resources (like income, skills, or social capital) increase one's ability to accomplish goals in a group, but that ability is often attributed instead to one's personal qualities or group memberships. In 'doubly dissimilar' interactions -- i.e., those in which group members vary on both resource levels and nominal characteristics -- group members associate competence and performance with one state of a characteristic (e.g,. male) more than the other state (e.g. female). When the characteristic correlates with a biasing factor like resources, doubly dissimilar encounters will lead interactants to associate one state of the characteristic with competence more than the other state. For example, knowledge that blacks are relatively disadvantaged in society has been shown to contribute to negative stereotyping (Brezina and Winder 2003).

Lastly, a wealth of research shows that inequality is more palatable the more it is seen as part of an equitable social economic system. The umbrella phrase 'just-world belief' describes a variety of attitudes which attribute economic and social outcomes to socially legitimate, fair, and just processes. When people hold just-world beliefs, they are less likely to advocate for redistributive economic policies (Benabou and Tirole 2006; Bullock, Williams, and Limbert 2003; Kuhn 2015). Likewise, when people expect either

to move up the socioeconomic ladder themselves, or expect that their children will likely do so, they are less likely to support redistribution or express concern about inequality (Benabou and Ok 2001; Shariff, Wiwad, and Aknin 2016). These are reasonable consequences of believing in the reality and efficacy of meritocracy – if people believe that those who deserve more rise (fall) to the top (bottom), then they will also tend to believe that no intervention is required to create a more equitable distribution of economic resources like income and wealth.

These studies contribute to our understanding of the social psychology of inequality. However, there are several reasons why they do not fully explore how inequality itself influences perceptions about society and the people in it. First, inequality is more often used to predict outcomes like health or happiness rather than attitudes (Oishi, Kesebir, and Diener 2011; Wilkinson and Pickett 2009) rather than attitudes. And second, studies of inequality-related attitudes and perceptions often do not use inequality itself as a predictor (Bullock et al. 2003; Cozzarelli et al. 2001; Kuhn 2015; Lepianka et al. 2009). Such studies can say little about the impact of the level of inequality on attitudes. To do so, researchers must either acquire data on levels of inequality in their participants' contexts, or use experiments to directly manipulate participants' perceptions. This study addresses each issue by using an experiment to manipulate inequality and determine its effects, specifically measuring theoretically relevant attitudes. In doing so, it contributes to recent efforts to use experimental methodology to understand how inequality shapes social perceptions and preferences (Cruces, Perez-Truglia, and Tetaz 2013; Kuziemko et al. 2013; Shariff et al. 2016).

Chapter 3 – Hypothesis

We propose that people take information about existing inequality as implicit evidence of the competence, skill, and deservingness of the people who occupy different positions in the economic distribution. When people see society as being characterized by a relatively large income differential, they should adjust their expectations to reflect a society where the wealthy are much more competent than the poor (and the poor much less competent than the rich). When they see society as having relatively low inequality, they should adjust their expectations to reflect a society where rich and poor differ less in their competence. Or more formally:

Hypothesis: The higher the perceived inequality in a given country, the larger the difference in expected merit between top and bottom earners.

This hypothesis will be supported if perceiving higher inequality leads people to evaluate the those with higher incomes as more meritorious, or the poor less meritorious, or both, relative to those same ratings when they perceive lower inequality.

Chapter 4 – Method

In order to test these predictions, I needed to present participants with an informational treatment describing a society with high or low inequality, and elicit from them ratings about people from that society. I did not present information about the US because, while I am interested in American-style meritocratic beliefs, I wanted to test the effects of this belief separately from participants' preconceived, idiosyncratic beliefs about the desirability or justice of the American economic system. I also wanted a sample with greater variation in socioeconomic status than commonly-used college student populations. Many perspectives on attitudes toward inequality and redistribution stress economic self-interest (Alesina and Giuliano 2011; Cruces et al. 2013), so any study of these attitudes limited to college student populations may be validly criticized as not addressing potentially important moderators. The online survey experiment format is suited to these needs. I used Amazon's Mechanical Turk (mTurk) platform, an online labor market that allows requesters to post tasks that users (or 'workers') can complete for monetary rewards. Though there are many international workers on mTurk (see Eriksson and Simpson 2010), I restricted the sample to American respondents to maximize the chance that they adhere to an American-style belief in meritocracy (Kluegel and Smith 1986).

Workers use their accounts to participate in a wide range of tasks, including surveys, market research, and machine learning. Social science researchers have found that mTurk provides high-quality data from a wider range of respondents than other

commonly used convenience samples, such as experiments with university students
(Berinsky, Huber, and Lenz 2012; Buhrmester, Kwang, and Gosling 2011; Eriksson and
Simpson 2010; Mason and Suri 2012; Paolacci and Chandler 2014; Rand 2012). Tasks on
mTurk are brief, usually less than 10 minutes long, and pay an hourly rate of around
$6.00. This study is typical in this respect: sessions paid $1.00 and lasted about eight
minutes on average.

Participants were told a cover story about researchers being interested in
impression formation under low-information conditions and were presented with a page
describing three countries: Countries K, L, and M, which varied in their income
distribution. I described the income distribution as a ratio of the income of the 90th
percentile to the income of the 10th percentile within each country. Participants were
randomly assigned to either a high inequality condition, in which Country M had the
highest income ratio (16.4:1), or the low inequality condition, in which Country M had
the lowest income ratio (3.0:1). The World Bank provides estimates of the income shares
held by the top and bottom 10% in many countries. This ratio was 30.2:1.7 in the US in
2013, and 6.0:1 in Iceland in 2012 (World Bank 2016). I reduced these ratios to reflect
the fact that much of the income share held by the top decile is in fact held by those
above the 95th percentile (Alvaredo et al. 2013), so the ratio of the 90th percentile's
earnings to those of the 10th percentile is lower than the ratio of those decile's earnings.

As comprehension checks, participants had to name which country had the best-
off 90th percentile, and were given three chances to answer correctly before continuing.
Next, they were 'randomly' assigned to answer additional questions about Country M,
and asked two more comprehension checks requiring them to provide the correct income

ratio of Country M and state correctly whether that ratio was the highest, lowest, or a middling level of inequality compared to the other two. In addition to ensuring comprehension, these questions were designed to encourage participants to focus more carefully on the information provided. Participants were excluded from the analysis if they failed to answer a comprehension check item correctly after three tries. Only one participant was dropped from data analysis for failing this criterion.

After the manipulation and comprehension checks, participants were asked to imagine an average member of the 90th or 10th percentile in their target nation. To test expectations of merit, participants rated how much they believed citizens of the target country would attribute various traits to that person. This follows previous research on stereotypes content which asked for estimates of general attitudes and perceptions (Cuddy et al. 2007; Fiske et al. 2002). This 'merit' scale was composed of five items of the form 'How _____ do people in this country think this person is?' (confident, competent, hardworking, deserving), and was administered with several filler questions using the same form. Participants completed each scale twice; once for an average person from the 90th percentile, and again for an average person from the 10th percentile, with the presentation order randomly determined.

I also included several exploratory measures to further investigate whether inequality would affect expectations of competence, and also whether it would affect expectations of mobility. Perceived mobility has been shown to influence concern about inequality and preferences for redistribution, and merit-based mobility would be an outcome of an ideally equitable, meritocratic system (Alesina and Angeletos 2005;

Shariff et al. 2016). So, while not as theoretically motivated as the prediction for merit, I believe there is reason to expect that inequality may influence expectations of mobility.

Participants were asked to estimate the future mobility of a young person from the middle of the income distribution (the 50th percentile), given that the young person was either low or high merit ('this person has a strong (weak) work ethic, is very (not very) intelligent, and has high (few) ambitions for their life'). They were asked to predict where this person would end up once they reached their peak earning potential in late middle age, both in terms of income percentile and education. Participants answered this question once for a high merit target and again for a low merit target, with the presentation order randomly determined.

Last, participants were again presented with the three countries from the beginning: one high inequality, one medium inequality, and one low inequality. They were asked to imagine three people, one person from each country's 90th percentile (or 10th percentile). They then chose which of these three people were likely to be the most generally competent, and which was likely to be the least generally competent. They then completed the same two questions for comparisons of both 90th and 10th percenters. These items supplement the primary measures of merit and test the same prediction that high inequality societies will be seen as resulting from a wider spread of underlying talent and merit. If true, the most competent 90th percenters and least competent 10th percenters should be expected to come from the high inequality country. These items were exploratory, and were always presented last. This means that they are at greater risk of fatigue effects that the first several measures, especially given the brevity of most mTurk studies.

After completing all measures, participants filled out a demographics questionnaire asking their age, gender, race/ethnicity, income range, education, social and economic political orientation, and subjective socioeconomic status (SSES). SSES is measured using a picture of a 10-rung ladder, with the best-off at the top and worst-off at the bottom, and asks participants which rung they feel they are on. Subjective perceptions of SES have been shown to moderate some economic and redistributive attitudes, net of actual SES measures (Brown-Iannuzzi et al. 2014). Finally, participants were probed for suspicion, debriefed, and paid.

Chapter 5 – Results

I recruited a total of 96 participants from mTurk. Of those, one was excluded for failing three comprehension checks, and two were excluded for being outside the US, leaving a total N of 93 (44% female). Of the 93, 64 were White, 5 Black, 12 Hispanic or Latino, 11 Asian, and 1 Pacific Islander. The average age was 33.6 years old, median income range was $45,000-$60,001, median education was a Bachelor's Degree, and average subjective socioeconomic status was 4.8 (on a 10-rung scale). The sample was slightly left of center socially (average 3.98 on a 9-point scale) but economically moderate (4.68 on a 9-point scale).

The merit scale was reliable. Cronbach's Alpha was .86 for the scale used for the 90th percentile, .94 for the scale used for the 10th percentile, and .91 for the scale overall. I constructed a difference score by subtracting each participant's ratings of the 10th percentile from their ratings of the 90th percentile. This difference score was also reliable, Alpha = .90.

Table 1 details merit ratings by condition. The merit difference score differed significantly between conditions ($t = 3.28$, $p < .001$). On average, the difference in merit ratings of the 90th and 10th percentiles was 1.59 points larger, on a nine-point scale in the high inequality condition than the low inequality condition (2.08 vs 0.49). Since this is simply the difference between the 90th and 10th percentiles, I compared the means of 90th and 10th percentile ratings separately to determine their relative importance in driving this effect. Ratings of the 90th percentile did not differ significantly between conditions.

However, there was an effect of condition on ratings of the 10th percentile ($t = -5.31$, p <.001). On average, participants in the high inequality condition rated the 10th percentile about 2 points lower in merit on a 9-point scale (4.36 vs 6.38). This supports the hypothesis that greater inequality leads to greater variation in perceptions of merit, and it furthermore indicates that this effect is driven entirely by differences in perceptions of the poor, rather than the rich.

Table 5.1 – T-tests of Mean Merit Ratings

	Condition	
	Low Inequality	High Inequality
90th Percentile	6.88(.41)	6.43(.50)
10th Percentile	6.38 (.48)	4.36 (.62)***
Difference (90th -10th)	0.49(.47)	2.08 (.85)***

Note: Standard deviations are given in parentheses

*** Conditions differ at $p \leq .001$

Previous research has shown that attitudes such as poverty attribution and concerns about inequality are moderated by political orientation (Lepianka et al. 2009; Shepelak 1989), economic self-interest (Cruces et al. 2013), and subjective socioeconomic status (Brown-Iannuzzi et al. 2014). Consequently, I investigated any moderation of condition by demographic variables by testing each demographic variable individually. Neither ratings of 90th percentile nor 10th percentile were significantly moderated by any of these demographic characteristics. The lack of moderation by any

demographic characteristic is surprising and may seem to contradict patterns found in past research. I discuss this in more detail in the discussion section.

If participants see merit as varying more widely in more unequal countries, they should see merit as being more important to the mobility of a given individual. Thus I predicted an effect of condition on expectations for merit-based mobility. However, I did not find an effect of condition on mobility expectations, either for income rank or educational attainment. That is, participants in both conditions held similar expectations for the mobility of a very (or not very) competent person. I propose possible explanations for this null finding in the discussion section.

In the final section of the study, participants answered several exploratory 'competence choice' items. In these, participants were again presented with three anonymous countries, varying in level of inequality. They were asked to predict which country would produce a) the most competent 90th percenter, b) the least competent 90th percenter, c) the most competent 10th percenter, and d) the least competent 10th percenter. Here I did not expect differences by condition.

Table 2 shows the results of the competence choice items. None of the items differed significantly by condition, so I report results across conditions. These results support the hypothesis that inequality causes greater variation in expectations of competence. Participants predicted that the most competent 90th percenters would come from the high inequality country (54.8%), while the least competent 90th percenters would come from the low inequality country (53.8%) ($X^2 = 61.14$, $p < 0.001$). Likewise, they predicted that the most competent 10th percenters would come from the low inequality country (48.4%), while the least competent 10th percenters would come from

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the high inequality country (54.8%) ($X^2 = 61.88$, $p < 0.001$). In other words, participants

expected that citizens in the low inequality country would be characterized by a relatively

narrower range of competence, with the poor being closer in competence to the rich, and

vice versa, while the high inequality country would produce people from a relatively

wider range of competence, with the rich and poor being even more superlatively

competent or incompetent. This finding closely parallels the results from the merit ratings

discussed above and strongly supports the theoretical argument.

Table 5.2 – Predicted Country of Origin for Specific Individuals

	Low Inequality Country	Medium Inequality Country	High Inequality Country
Most competent 90th percenter	31 (33.3%)	11 (11.8%)	51 (54.8%)
Least competent 90th percenter	50 (53.8%)	10 (10.8%)	33 (35.5%)
Most competent 10th percenter	45 (48.4%)	14 (15.1%)	34 (36.6%)
Least competent 10th percenter	36 (38.7%)	6 (6.5%)	51 (54.8%)

Note: Frequencies reported are for all conditions.

Chapter 6 – Discussion

Overall, this study supports the hypothesis that perceptions of inequality have an independent effect on the merit that people expect from people from different strata of society. When we measured the expected merits of people at the 90th and 10th percentiles of a society, participants considering the high inequality society expected significantly less merit from the poor than those considering the lower inequality society. Much previous work shows that attributing economic outcomes (especially poverty) to individuals' merits tends to reduce concern about inequality, and make redistributive policies less desirable, and can even promote discrimination and stereotyping (Bullock et al. 2003; Cozzarelli et al. 2001; McCoy and Major 2007). Given this, my research suggests that by altering perceptions of merit in society, inequality may sow the seeds of its own stability since increasing levels of (perceived) inequality are met with exaggerated perceptions of differences in merit between those in higher and lower socio-economic strata.

No demographic characteristic moderated this pattern. Previous research often shows a pattern in which concern about inequality or agreement with redistributive policies is moderated by factors such as political ideology (Shepelak 1989) or subjective socioeconomic status (Brown-Iannuzzi et al. 2014). The lack of moderation may have resulted from a design decision. Instead of asking for participants' personal beliefs about the target individuals' traits, we asked them to give an estimate of what they thought *people in that country would generally believe* about this person. Such a question format

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has been used in previous research on competence stereotypes (Fiske et al. 2002), but this research did not examine in depths the possible differences between personal views and such estimates of others' views. In contrast, participants may have generalized their own opinions to others, since they had little information with which to make that judgment. In this case, participants' responses would in fact represent their own opinions.

It may very well be that such expectations are relatively consensual, with people generally agreeing on how others will view other people, even while personal interpretations may vary with one's demographics. Surprisingly, little research on views about inequality or poverty attributions has addressed whether people achieve greater consensus on expectations of others' interpretation than in personal views. Likewise, little has been done outside of group processes to investigate the effects on such expectations of others on inequality-related behaviors (activities like protests), especially when they compete with personal views (Troyer and Younts 1997; Zelditch 2001).

The competence choice section similarly found that participants tended to expect wider variation in competence from a high inequality country, and less variation from a low inequality country. That is, they expected the high inequality country to produce superlatively competent rich people as well as superlatively incompetent poor people, compared to the low inequality country. These items asked participants to report their *own* expectations, and so provide tentative evidence that the effect found in the merit ratings may not be an artifact of asking for general, as opposed to personal, expectations.

Mobility expectations, though moderated by several demographic characteristics, did not differ by condition. The lack of significant findings may warrant several interpretations. First, it may be that the null hypothesis is true and there is no effect of

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perceived inequality on merit-based mobility expectations. Second, it may be that the effects are too small or the variation too large for differences to be detected with a sample of 93. Mechanical Turk studies are often much larger, with hundreds or thousands of participants (e.g. Kuziemko et al. 2013; Norton and Ariely 2011). Third, participants may not have fully understood the question, or the differences between the two versions of the question. Fourth, this may be an example of participants losing patience. The mobility estimates were always presented second, after participants completed both merit measures. Since mTurk studies tend to be short, participants may have simply answered the mobility questions quickly in order to finish the study. Fifth, percent measures are cognitively intensive, especially in studies of economic inequality. Participants may have resorted to shortcuts or heuristics in their answers (Eriksson and Simpson 2012, 2013). A future study could resolve these problems by using a non-percentile measure, improving the explanation of the question, and testing for comprehension.

The study as a whole suffers from several limitations. As an online survey, there is the likelihood of higher random error from individuals' varying contexts. This could reduce the ability to detect existing relationships. The study involved three sets of measures: the merit estimate measures, the mobility estimate measures, and the competence choice measures, which were always presented in that order. While questions were randomized within each set, the lack of randomization of the sets themselves means that any mental exhaustion or impatience on the part of the participant would have reduced the effectiveness of the mobility and competence choice items much more than the merit ratings. I also examined perceptions of just two income ranks, the 90th and 10th percentiles. A fuller study would also obtain measures of perceptions about the middle of

the distribution, the 'middle class,' and would more fully explore where people see merit being distributed in society.

Despite these limitations, this study contributes to the growing social psychological and sociological literature on the roots of attitudes about inequality. It examines previously neglected questions about inequality's effects as an independent variable on perceptions and expectations and suggests several intriguing directions for future research: effects on inequality on expectations of personal characteristics, and the dynamics of perceptions of general, consensual attitudes and beliefs.

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