

Perceptions of Socioeconomic Mobility and Risk-Taking Behavior

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Abstract

The purpose of this research was to examine the causal influence that beliefs about potential for socioeconomic mobility have on human risk-taking behavior. We tested the hypothesis that students perceiving socioeconomic mobility as fixed (i.e., static and genetically based) would be more likely to engage in risk-taking behaviors (e.g., gambling, unprotected sex) than students perceiving socioeconomic mobility as malleable (i.e., impermanent and culturally variable). Participants (N = 204) read fabricated scientific journal abstracts about the biological bases of social class, manipulating their beliefs about potential for socioeconomic mobility and then indicated the likelihood that they would engage in various domain-specific risk-taking behaviors. Participants in the malleable-mindset condition displayed significantly greater financial risk-taking behaviors than participants in the fixed-path condition. We discuss the potential implications that one's mindset regarding socioeconomic mobility can have towards their potential for future financial opportunity.

*Keywords:* socioeconomic mobility, risk-taking behavior, socioeconomic status

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Economic inequality remains a formidable societal issue impacting the health and progress of people from lower socioeconomic status (SES) backgrounds. Compared to higher SES individuals, their lower SES counterparts have fewer economic and educational resources and opportunities (Piff, Kraus, Côté, Cheng & Keltner, 2010). Recent psychological research, examining social class and cognition, indicates that people are generally unaware of their actual potential for future socioeconomic mobility. Despite inaccurate judgments, optimism about anticipated economic opportunity may increase the tendency for individuals to work harder, which can benefit their life outcomes (Kraus & Tan, 2015).

Research that explores the extent to which perceptions about socioeconomic mobility effect behavior is important because behavior can determine the possibility of actual change in SES. For example, greater anticipated socioeconomic mobility is significantly associated with reduced health-compromising behaviors (e.g., alcohol consumption, compensated sex), staying in school longer, and increased perceptions of control over one's life (Weintraub, Fernald, Adler, Bertozzi, & Syme, 2015). Conversely, low levels of anticipated socioeconomic mobility may place individuals at a risk for adopting risky and unhealthy behaviors (e.g., gambling, smoking). If one perceives an open path to attaining their desired socioeconomic position, taking current action to ensure this possibility makes sense, but not if the path is fixed (Destin & Oyserman, 2009). A fixed-path mindset is one in which individuals believe certain attributes remain static, while an open-path (i.e., malleable) mindset is one in which individuals believe certain attributes can be changed or developed (Dweck, Chiu, & Hong, 1995). Following this logic, a self-perpetuating dynamic in which perceiving future socioeconomic mobility as unattainable, may lead to actions that impede the possibility for economic growth, serving to exacerbate economic inequality.

Perceived socioeconomic mobility (exerting unique psychological effects) may shape people's surrounding environment and their behavior in various domains (Piff et al., 2010). Yet, research exploring the association between perceived socioeconomic mobility and unfavorable behaviors has been correlational. The current research addresses this gap in the psychological literature and advances our understanding of anticipated economic opportunity by examining the causal influence that perceptions about socioeconomic mobility have on risk-taking behavior. We use a possible-selves theory framework (Markus & Nurius, 1986) focusing on the dynamics of future oriented self-concepts in relation to motivation for present behavior. These self-concepts refer to how one thinks about their potential future and are malleable (Destin & Oyserman, 2009), being influenced by sociocultural and environmental experiences.

The current research examines whether a belief that future socioeconomic mobility is unattainable will influence the behaviors that people engage in. We predict that calling attention to genetic factors that influence socioeconomic mobility (suggesting that social class is determined by stable and internal genetic factors; Kraus & Tan, 2015) is likely to cause individuals to engage in risky-behavior for two reasons. First, genetic explanations highlight that despite one's actions and intentions to move up in social status, some individuals possess inferior (advantaged) genes that reduce (enhance) the capacity to move up in SES (Kraus & Tan, 2015). Second, individuals may lose a sense of hope and disregard their health or the consequences of their actions due to perceptions of unattainable future opportunity. Thus, we hypothesize that exposing participants to genetic explanations of socioeconomic mobility will increase risk-taking behavior in various behavioral domains, in comparison to exposure to non-genetic explanations.

## **Method**

### **Participants and Procedure**

Participants were recruited through the California State University San Marcos Human Participant Pool and received course credit for participation ( $N = 204$ ; 89.2% female; 48.5% self-identified Hispanic/Latinos, 20.6 % White, 30.9% other ethnicities). Participants were randomly assigned to one of two experimental conditions in which they were asked to read a fabricated scientific journal abstract about the biological basis of socioeconomic mobility. Participants answered manipulation check questions, and the likelihood that they would engage in various risk-taking behaviors was assessed using the Domain Specific Risk-Taking (DOSPERT) Scale. After completion, we informed participants that the content in the article was fabricated and that no evidence suggests that socioeconomic mobility is linked to genetics.

### Measures

**Manipulation.** To manipulate socioeconomic mobility mindset, participants read fabricated scientific journal abstracts about the biological bases of social class. In the fixed-path condition, scientists were said to have discovered genetic underpinnings to socioeconomic mobility, describing that socioeconomic mobility is genetically based and static (see Appendix A). In the malleable condition, researchers suggested that there was no genetic basis to social class, describing that socioeconomic mobility is impermanent and culturally variable (see Appendix B). As a manipulation check, we asked participants how much they agreed with two statements on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*): “It is impossible to determine one’s social class by examining their genes” and “There is probably a biological determinant of social class.” The first item was reverse scored, and the items were averaged ( $M = 3.55$ ,  $SD = 1.70$ ).

**DOSPERT Scale.** The likelihood that participants would participate in different risky behaviors was assessed using the DOSPERT scale (Blais & Weber, 2003). Participants rated the

likelihood that they would participate in a behavior (e.g., “Engaging in unprotected sex”) on a 5-point Likert-type scale from 1 (*very unlikely*) to 5 (*very likely*). Scale scores were derived for each of the four behavioral domains by averaging their 8 respective indicators: health/safety ( $\alpha = 0.67$ ), social ( $\alpha = 0.56$ ), financial ( $\alpha = 0.73$ ), and recreational ( $\alpha = 0.78$ ) (see Appendix C)

## Results

**Manipulation check.** To compare the means in each group, we ran an independent samples  $t$  test. As expected, participants in the fixed-path mindset condition reported significantly higher beliefs that socioeconomic mobility is genetically based ( $M = 4.42, SD = 1.39$ ) than did participants in the malleable mindset condition ( $M = 2.68, SD = 1.54$ ),  $t(199.90) = 8.48, p < .001, d = 1.19$ . Thus, our manipulation was successful.

We conducted independent samples  $t$ -tests to determine whether participants in the fixed-path condition would be more likely to engage in risky behaviors than participants in the malleable condition. As shown in Figure 1, results indicate that participants in the malleable condition ( $M = 2.08, SD = 0.55$ ) displayed greater risk-taking behavior in the financial domain than participants in the fixed-path condition ( $M = 1.91, SD = 0.54$ );  $t(202) = -2.28, p = .02, d = 0.31, 95\% \text{ CI } [-0.32, -0.02]$ . Participants in the malleable condition ( $M = 2.50, SD = 0.67$ ) displayed greater risk-taking behavior in the health/safety domain than participants in the fixed-path condition ( $M = 2.34, SD = 0.66$ );  $t(202) = -1.75, p = .08, d = 0.24, 95\% \text{ CI } [-0.35, 0.02]$ . There was no significant difference between the participants in the malleable condition ( $M = 3.51, SD = 0.51$ ) and participants in the fixed-path condition ( $M = 3.54, SD = 0.51$ ) in the social risk-taking domain  $t(202) = 0.35, p = .73, d = 0.06, 95\% \text{ CI } [-0.12, 0.17]$ . Finally, there were no significant differences between the participants in the malleable condition ( $M = 2.96, SD = 0.76$ ) and participants in the fixed-path condition ( $M = 2.86, SD = 0.83$ ) in the recreational risk-taking

domain  $t(202) = -0.95, p = .34, d = 0.13, 95\% \text{ CI } [-0.33, 0.11]$ .

### Discussion

In recent years, psychologists have begun to investigate the consequences of social status for psychological and behavioral tendencies. We hypothesized that participants who received a fixed-path mindset manipulation (exposing them to genetic explanations of socioeconomic mobility) would be more likely to engage in risk-taking behavior in various behavioral domains, in comparison to participants who received a malleable-mindset manipulation (exposing them to information suggesting that there is no genetic basis to socioeconomic mobility). Contrary to our hypothesis, participants in the malleable-mindset condition displayed significantly greater risk-taking behavior in the financial domain than participants in the fixed-path mindset condition. There were no significant differences between the two groups in the health/safety, recreational, or social risk-taking behavior domains.

A limitation of the current study is that participants comprise a sample of undergraduate students in southern California. Focusing on college undergraduates, limits comparisons with adolescents who may benefit more from a malleable mindset towards an optimistic future which includes opportunities for economic and academic growth. Additionally, our measure of risk-taking behavior is a self-report scale. Self-report measures have important limitations; responses may be influenced by impression management considerations or demand characteristics. We did not observe actual risk-taking behavior which would have been more ideal. This study includes several strengths. First, this study uses an experimental manipulation. By doing this we can draw causal inferences about our findings. In the process, we were able to conceptually replicate previous research in the field. These experimental manipulations have been used in previous research, further demonstrating their ability to influence one's mindset towards potential for

future socioeconomic mobility. Additionally, participants were randomly assigned to experimental conditions, allowing us to minimize -pre-existing differences between the two groups.

The current research is the first to examine the causal influence that perceptions about socioeconomic mobility have on risk-taking behavior in different domains, further advancing our understanding of the implications of anticipated socioeconomic mobility. Future research should examine the specific influence that perceptions about socioeconomic mobility have on financial risk-taking behaviors. The particular behaviors may not be so negative. For example, participants indicated that they would invest their money (rather than gamble it). Scale scores in the financial domain reflected both negative (e.g., gambling a week's income at a casino) and positive risk-taking behaviors (e.g., investing 10% of your annual income in a new business venture). Future research should differentiate between the financial behaviors depicting risk and reward in order to determine which of these two drove the significant effect. Exploring the extent to which a malleable mindset influences positive behavior can be informative towards potential interventions that can increase perceptions of a more optimistic financial future, leading younger students to engage in behavior that will benefit their future academic and economic outcomes (e.g., acquiring assets and investing).



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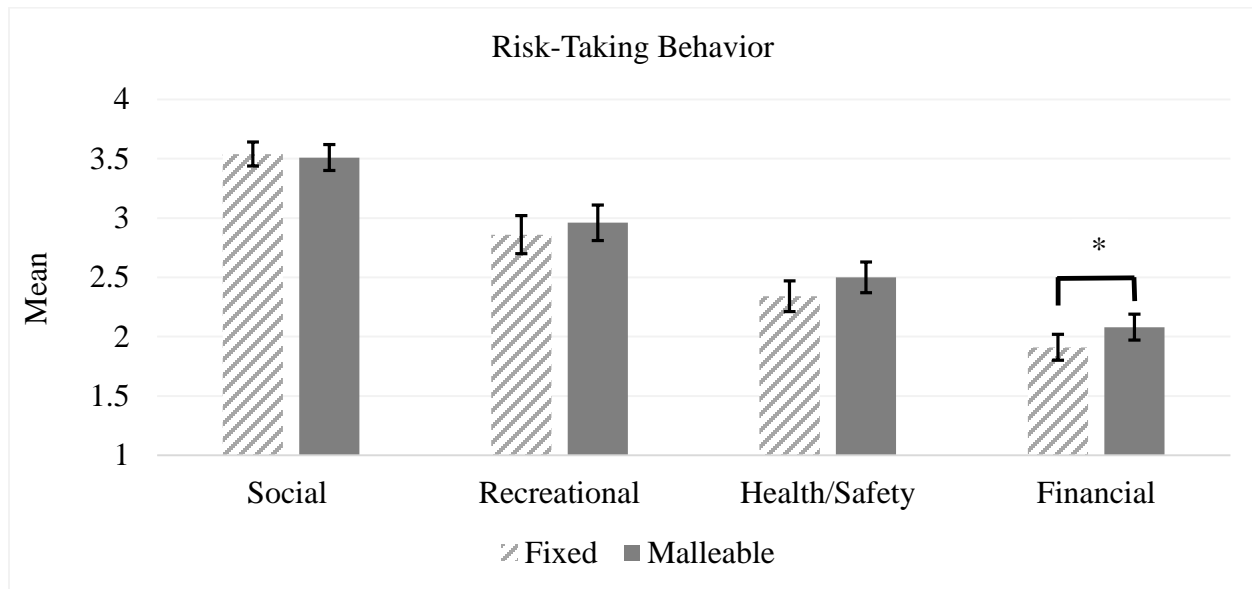


Figure 1. Mean Risk-taking behavior in four domains by condition

Note: Scales from 1 (*very unlikely*) to 5 (*very likely*)

Error bars represent 95% confidence intervals

Appendix A

Fabricated Scientific Journal Article in the Fixed Mindset Condition

## **Scientists Pinpoint Genetic Underpinnings of Socioeconomic Status**

**David J. Johnson\***

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Researchers recently collected data from people from all different levels of socioeconomic status. This included people from very low economic backgrounds and very wealthy people. In their analysis, the researchers looked at family histories of socioeconomic status and genetic similarities between members of the same socioeconomic status (SES) groups. The researchers found that children of lower SES parents are much more likely to become lower SES than children of upper SES parents. In addition, lower SES people tend to have more genetic similarity with other lower SES people than with upper SES people. As a result of their analyses, the researchers are now able to correctly guess a person's socioeconomic status at a rate that was significantly above chance. The lead author was quoted as saying that "we obtain our genetic material from our parents, so we generally inherit their success, work ethic, and intelligence, which ultimately determines our socioeconomic status."

Appendix B

Fabricated Scientific Journal Article in the Malleable Mindset Condition

## **Scientists Reveal That Socioeconomic Status Has No Genetic Basis**

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Researchers recently collected data from people from all different levels of socioeconomic status. This included people from very low economic backgrounds and very wealthy people. In their analysis, the researchers looked at family histories of socioeconomic status and genetic similarities between members of the same socioeconomic status (SES) groups. The researchers found that children of lower SES parents were just as likely to become upper SES as children of upper SES parents. In addition, lower SES people tend to have as much genetic similarity with other lower SES people as with upper SES people. As a result of their analyses, the researchers were not able to correctly guess a person's socioeconomic status at a rate that was significantly above chance. The lead author was quoted as saying that "we obtain our genetic material from our parents, but the practice of classifying people into socioeconomic groups based on genetic information is entirely cultural in origin. There's just no genetic basis to socioeconomic status."

Appendix C

Scale Scores for the Four Domains

Financial Domain

- Betting a day's income at the horse races.
- Investing 10% of your annual income in a moderate growth mutual fund.
- Betting a day's income at a high-stake poker game.
- Investing 5% of your annual income in a very speculative stock.
- Betting a day's income on the outcome of a sporting event (e.g., baseball, soccer, or football).
- Investing 5% of your annual income in a dependable and conservative stock.
- Investing 10% of your annual income in a new business venture.
- Gambling a week's income at a casino.

Social Domain

- Admitting that your tastes are different from those of a friend.
- Disagreeing with an authority figure on a major issue.
- Arguing with a friend who has a different opinion on an issue.
- Approaching your boss for a raise.
- Choosing a career that you truly enjoy over a more prestigious one.
- Speaking your mind about an unpopular issue in a meeting at work.
- Moving to a city far away from your extended family.
- Starting a new career in your mid-thirties.

Recreational Domain

- Going camping in the wilderness.
- Swimming far out from shore on an unguarded lake or ocean.
- Going on vacation to a third-world country.
- Going down a ski run that is beyond your ability.
- Going whitewater rafting at high water in the spring.
- Taking a weekend sky diving class.
- Bungee-jumping off a tall bridge.
- Piloting a small plane.

Health/Safety Domain

- Drinking heavily at a social function.
- Engaging in unprotected sex.
- Driving a car without wearing a seat belt.
- Riding a motorcycle without a helmet.
- Sunbathing without sunscreen.
- Walking home alone at night in an unsafe area of town.
- Eating high cholesterol foods.
- Driving while taking medication that may make you drowsy.