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# Socioeconomic Status, Reactions to Choice Deprivation in Group Contexts, and the Role of Perceived Restrictions on Personal Freedom

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## **Abstract**

This research examined whether socioeconomic status (SES) predicts reactions to situations in which a group member decides for the entire group, thereby depriving other group members of personal choice. We found, as predicted, that Americans with higher subjective SES accepted choice deprivation less and demanded personal choice more than subjectively lower SES Americans. Subjective SES was a better predictor for reactions to choice deprivation than objective indicators of SES. The degree to which participants interpreted the deprivation of choice as a violation of their personal freedom partially mediated the relationship between subjective SES and reactions to choice deprivation. The results highlight the role subjective SES measurements can play and the need to consider social status and associated models of agency when interpreting behavior and motivation related to choice in American contexts.

*Keywords:* agency, choice, freedom, social class, socioeconomic status

## **Socioeconomic Status, Reactions to Choice Deprivation in Group Contexts, and the Role of Perceived Restrictions on Personal Freedom**

Imagine that you are working on a team project and need to collaborate with your colleagues on multiple tasks. How would you react if your colleague deprived you of your personal choice of which task to accomplish by taking over and distributing work among the entire team? Would you feel that your freedom to choose had been restricted? The present research addresses these questions and proposes that the answer most likely depends on one's sociocultural environment because these environments shape our ways of thinking and behaving. These environments include socioeconomic status (SES), that is, the social standing or class of an individual or group (American Psychological Association, 2016). Previous research in the US found that individuals' SES relates to their varying degrees of striving for control and choice (Lachman & Weaver, 1998; Kraus, Piff, & Keltner, 2009). To obtain a better understanding of this association, the current investigation examined how SES relates to reactions to choice deprivation by an in-group member.

### **Socioeconomic Status and Models of Agency**

Examinations of SES often reveal inequities in access to resources, evoking varying degrees of power and control, self-esteem, self-focus, and coping strategies (Lachman & Weaver, 1998; Adler & Ostrove, 1999; Kraus et al., 2009; Na et al., 2010; Kraus & Park, 2014). Importantly, SES contexts reflect understandings of culturally normative and appropriate action (Snibbe & Markus, 2005; Markus & Schwartz, 2010). Congruently, recent studies suggest that higher SES individuals are likely to possess a *disjoint* model of agency that construes agency in reference to privately held attitudes and defines good actions as those that promote independence from others. Conversely, lower SES individuals are likely to possess a *conjoint* model of agency that construes personal agency in reference to attitudes held by relevant others and defines good actions as those that promote interdependence with and adjustment to others (Markus & Kitayama, 2003; Kitayama & Uchida, 2005; Stephens, Markus, & Townsend, 2007). These models of agency are relevant to preferences and choices. For example, Snibbe and Markus (2005) revealed that college-educated upper SES adults had a greater preference for self-chosen objects, whereas lower SES individuals did not. They argued that, in higher SES contexts, choice is considered an action through which a person expresses and actualizes her/himself through unique attributes, whereas in lower SES contexts, where agency is emphasized in more conjoint terms (e.g., maintenance of integrity), personal choice is relatively less crucial. This initial evidence for divergent models of agency is a milestone because it reveals that the widespread notion in mainstream American contexts that choice is strongly desirable and leads to positive outcomes for everyone represents only the perspective of the American middle-class.

Previous research also suggests that, when facing a situation that restricts personal choice, individuals with higher SES—unlike those with lower SES—reject and transform the situation so they can choose. In Stephens, Fryberg, and Markus's (2011) study, participants were initially offered a "thank you" gift from the experimenter in return for their participation and were then asked whether they would like to see and choose themselves from the other options. Higher SES Americans were more likely than lower SES Americans to ask to see the other options and choose one themselves. In this context, accepting the gift from the experimenter revealed a behavior fitting the conjoint model of agency, as it reflected a focus on the experimenter and emphasized interdependence with her. On the other hand, the offer by the experimenter discouraged individuals with higher SES who endorsed a more disjoint model of agency because they could not express their uniqueness through choice in this context. Thus, in Stephens et al. (2011), those with higher SES preferred to reject the experimenter-chosen gift and instead to choose from the other options, reflecting their impulse towards enacting their dominant model of agency, which emphasizes personal choice.

### **Personal Freedoms and Socioeconomic Status**

Although there is no clear and acknowledged definition of freedom, the idea of having freedom of choice is part of human identity and a fundamental principle guiding action (Feldman, Baumeister, & Wong, 2014). However, as higher and lower SES contexts offer varying opportunities for choice among good options and varying consequences of choices made, previous research found that middle-class participants associate choice with freedom more than working-class participants (Stephens et al., 2011). Given this association, higher SES individuals might feel more restricted in their freedom than lower SES individuals in a situation characterized by personal choice deprivation.

### **Objective and Subjective Socioeconomic Status**

Socioeconomic status comprises multiple intertwined components including an individual's material resources, family background, and perceived rank within the social hierarchy. As such, it is difficult to capture the construct with a single measure. It is common to distinguish between objective and subjective SES. Objective SES typically refers to an individual's financial resources and educational attainment, and it indicates material resources through which individuals are able to access valued goods and services (Oakes & Rossi, 2003). In contrast, subjective SES typically refers to an individual's perceived social class rank relative to other members of the same society. This can be assessed by asking participants to rank themselves within their local communities, with the wealthier people placed at the top and the poorer people at the bottom (Kraus et al., 2009). These two measures of SES correlate only moderately with each other (Adler, Epel, Castellazo, & Ickovics, 2000), suggesting that they are relatively independent aspects of socioeconomic status. Importantly, recent studies indicate that low subjective SES is associated with a reduced sense of control and is a better predictor than objective measures of various educational, physical, and psychological outcomes (Ostrove & Long, 2007; Kraus et al., 2009). Particularly, in Western cultures that

reflect an emphasis on the disjoint model of agency, one's subjective appraisal of one's own social status would matter more than the socially consensual understanding about one's position implied by objective measurements such as educational attainment and income. Indeed, when individuals compare themselves with other members of society, perceptions of reduced access to resources and subordinate rank relative to others have been shown to give them the impression that they have relatively little personal control over their environment (Lachman & Weaver, 1998). Further, among Americans, subjective SES, and not objective SES, predicts anger expression (Park et al., 2013). Concerning the relationship between SES and choice, previous research has used objective SES measures (e.g., Snibbe & Markus, 2005; Stephens et al., 2011), and to our knowledge no study has investigated the relationship between subjective SES and choice. There is no direct evidence that subjectively higher SES individuals are more likely than subjectively lower SES individuals to pursue personal choice and freedom. Nevertheless, given that subjective SES influences one's sense of control, and that subjective SES is more important and a better predictor of various outcomes than objective SES in Western cultures, we expected that subjective SES might predict reactions to choice deprivation better than objective SES among Americans.

### **The Present Research**

Reflecting the middle-class American perspective that expressions of uniqueness and exertions of control through choice are common practices, thus far only a few studies (e.g., Stephens et al., 2011, as mentioned above) have examined how people with varying socioeconomic statuses react to situations characterized by the absence of personal choice. The topic requires further investigation to test the generalizability of previous findings and to add more evidence. The current research addresses two unexamined issues.

First, previous research used a paradigm in which an experimenter (an outgroup member) deprived participants of their choice. However, in addition to choice deprivation by outgroup members, situations in which ingroup members decide vicariously and thereby deprive others of their choices are frequent daily life occurrences, as illustrated by the example in the beginning of this manuscript. Therefore, whether the findings generalize to situations in which people are deprived of their personal choice by an ingroup member adds to the understanding of the effects of SES on choice behavior in daily life situations. Another advantage of focusing on choice deprivation by an in-group member and not by the experimenter is that the experimenter could be considered as respectable and having a lot of power, and this perception might confound examination of how social status and models of agency influence choice behaviors. Moreover, such an in-group context provided a strict test for whether higher SES individuals would try to exert control through personal choice against the backdrop of the dominance of disjoint agency even in a context urging them to focus on interdependence and maintenance of group harmony. The present research accordingly created two scenarios (see the materials section) in which an in-group member (i.e., a colleague) chose something on behalf of the group. The in-group member who chose did not consider the group members' individual preferences, thereby depriving them of the

possibility to express themselves through choice. We examined how participants would react to choice deprivation in these situations.

Second, the present research included a measurement of subjective SES and explored its effect on choice. This enabled us to test whether subjective SES is a better predictor of one's reaction to choice deprivation than objective SES among Americans, which to date no research has examined. Given previous findings that subjective SES influenced people's sense of control and health outcomes even after controlling for objective SES (Ostrove & Long, 2007; Kraus et al., 2009), reflecting its significance in Western cultures, it appeared likely that individuals' reactions to situations involving choice deprivation by an in-group member would be associated with their subjective estimation of their social rank, and that subjective SES is a better predictor of reactions to choice deprivation than objective measurements of SES.

This research focused on two possible reactions: accepting an in-group member's choice or demanding personal choice. We predicted that reflecting their dominant model of agency, higher SES individuals would be more likely than lower SES individuals to demand personal choice and less likely to accept an in-group member's choice for the entire team. We also examined whether objective or subjective SES predicts these reactions better. Moreover, we tested whether the extent to which individuals feel restricted in their personal freedom would influence their reaction to choice deprivation. The dominant models of agency were presumed to relate to differences in desired amounts of personal freedom, and thus, we predicted that a perceived restriction on personal freedom would partially mediate the relationship between subjective SES and reactions to the in-group member's choice for the team.

## Method

### Participants and Procedure

Two hundred fifty-seven adults living in the US (54.9% female; mean age 40.4 years, ranging from 18 to 75 years) were recruited online through Amazon Mechanical Turk. The majority was European American (84.1%), but the sample also included Asian Americans (5.8%), African Americans (5.4%), Latinos and Hispanics (2.3%), Native Americans (0.8%), and others (1.6%). They answered demographic questions, read the two vignettes, reported their likely reactions, and indicated their subjective SES. Participants spent on average 13 minutes and were reimbursed \$0.30.

### Materials

We constructed the following vignettes describing concrete scenarios in which a colleague chooses on behalf of a group of coworkers:

1. The Work Distribution Scenario: *You plan an event together with your coworkers, and there are many tasks to share. Someone needs to take care of the finances, someone needs to do advertising, someone needs to invite and take care of the guests, and*

*someone needs to do the paperwork. One of your coworkers takes the lead and tells you and the others what to do without asking about individual preferences.*

2. *The Feedback Scenario: You are in a meeting and your boss asks for feedback about a new policy that he had introduced the previous week. One of your colleagues answers in detail, representing the whole team without asking individual opinions.*

To avoid possible confounding effects of power issues, we constructed the scenarios such that the person choosing for the entire group is a colleague and neither higher nor lower in the social hierarchy.

## Measurements

### ***Reaction to the situation: Acceptance versus choice demand***

After reading the scenario, participants indicated on a 7-point Likert scale (1-very unlikely, 7-very likely). how likely they would be to

- a. accept the decision and accomplish the tasks their coworker assigned to them/accept that the colleague speaks on behalf of the whole team,
- b. choose the task they like best and declare that they want to do this and not what the coworker has assigned to them/pipe up and declare their personal evaluation of the new policy,
- c. tell their coworker that they have a right to make their own choice/tell their coworker that they have a right to answer for themselves,
- d. accomplish the tasks their coworker assigned to them because someone needs to do it/go along with their coworker's report because someone needs to give feedback, and
- e. accomplish the tasks their coworker assigned to them because it would be impolite not to do so/go along with the coworker's report because it would be impolite not to do so.

We developed these items to include two reactions, acceptance (i.e., items 1, 4, and 5) and choice demand (i.e., items 2 and 3) and found reasonable reliabilities for those,  $\alpha_{\text{Acceptance}} = .80$ ,  $\alpha_{\text{ChoiceDemand}} = .68$ .

### ***Perceived restriction on personal freedom***

Participants were also asked to indicate to what extent this situation would restrict their personal freedom (1: strongly disagree, 7: strongly agree).

### ***Objective SES***

We used two objective measurements of socioeconomic status: income and educational attainment. Table 1 indicates the demographic information. Participants indicated their monthly net income as coded into 10 categories ranging from 1 (less than \$250) to 10 (more than \$4000). Sixteen participants who did not report their income were excluded from the following data analysis concerning income. Participants also indicated their educational attainment by reporting the highest degree or level of schooling they had completed. Educational attainment was coded into four categories (1: less than high school, 2: high school or some college, 3: college, 4: postgraduate). Four participants categorizing themselves as students and one participant who did not report educational attainment were

excluded in the following data analysis concerning educational attainment.

### **Subjective SES**

Participants indicated their perceived social rank on the MacArthur Scale of subjective SES (Adler et al., 2000). The measure consists of a picture of a ladder with 10 rungs representing people with varying levels of income, educational, and occupational status within the participant's own community. Higher numbers indicate higher placement on the ladder.

Table 1  
*Information about Monthly Income and Educational Attainment of the Sample*

Monthly Income	%	Educational Attainment	%
< \$250	4.7	Less than high school	1.9
\$250 – \$500	4.3	High school	37.0
\$501 – \$1000	9.3	College	44.0
\$1,001 – \$1,500	10.5	Postgraduate	15.6
\$1,501 – \$2,000	14.4	Still in school/not reported	1.6
\$2,001 – \$2,500	12.5		
\$2,501 – \$3,000	10.1		
\$3,001 – \$3,500	7.8		
\$3,501 – \$4,000	7.0		
> \$4,000	13.2		
Not reported	6.2		

## **Results**

We averaged participants' reactions to the two choice deprivation scenarios and analyzed how these reactions related to SES. As can be seen in Table 2, subjective SES correlated with acceptance and choice demand,  $r_{\text{acceptance}}(255) = -.22, p < .001$ ;  $r_{\text{choicedemand}}(255) = .23, p < .001$ . As predicted, as subjective SES increased, participants were less likely to accept the choice made on their behalf and more likely to demand personal choice. Further, the higher the subjective SES, the stronger the participants felt the situations would restrict their personal freedom,  $r(255) = .23, p < .001$ . The correlational patterns between income as an indicator of objective SES and the dependent variables were also significant in the same direction, but weaker,  $r_{\text{acceptance}}(239) = -.18, p = .004$ ;  $r_{\text{choicedemand}}(239) = .17, p = .006$ ;  $r_{\text{restrictionoffreedom}}(239) = .14, p = .032$ . Educational attainment did not correlate significantly with any of the outcome variables.



### Objective vs Subjective SES and Choice Deprivation

To simplify the procedure and to avoid iteration on these results, we created a composite reaction index by subtracting the mean rating for acceptance from the mean rating for choice demand for each participant and used this index as our dependent variable. Higher values on this index represent a preference for choice demand over acceptance. A strongly significant negative correlation between acceptance and choice demand validated this procedure,  $r(255) = -.54, p < .001$ .

Table 2

*Means, Standard Deviations, and Correlations among Acceptance, Choice Demand, Restriction of Freedom, Objective and Subjective Socio-Economic Status Measurements.*

Measurement	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Subjective SES	4.79	1.84	---					
2. Income	5.95	2.62	.50***	---				
3. Education	2.74	0.74	.34***	.32***	---			
4. Acceptance	3.79	1.30	-.22***	-.18**	-.03	---		
5. Choice Demand	4.31	1.29	.23***	.17**	-.03	-.54***	---	
6. Restriction of Freedom	4.38	1.57	.23***	.14*	.05	-.14*	.32***	---

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

To test whether objective or subjective measures of SES are better predictors of reactions to choice deprivation, we conducted a series of regression analyses. Table 3 shows the univariate statistics, correlation of each predictor variable with reactions to choice deprivation, and the regression weights for the various models. The full model including age, gender, educational attainment, income and subjective SES explained 11.9% of the variance in reactions to choice deprivation,  $F(5, 231) = 6.23, p < .001$ . The second model including objective measurements of SES but no subjective SES explained only 5.9% of the variance and had a significantly lower  $R^2$  as the full model,  $R^2$ -change =  $-.06, F(1, 231) = 15.72, p < .001$ . The third model including subjective SES but no objective SES measurements explained 9.9% of the variance, which was not significantly different from the full model,  $R^2$ -change =  $-.02, F(2, 231) = 2.59, p = .077$ . Finally, we compared the predictive utility of the two reduced models, using Steiger's  $Z$  for dependent correlations. The correlation between the two reduced models (one including objective, but no subjective measures of SES and one including subjective, but no objective indicators of SES) was  $r(235) = .60, p < .001$ . The model including subjective SES but no objective measurements of SES accounted for significantly more variance in reactions to choice deprivation than did the model including objective, but no subjective indicators of SES,  $Z = 4.43, p < .001$ .

### Perceived Restriction on Personal Freedoms

To determine whether perceived restriction on personal freedom would mediate the association between subjective SES and reactions to choice deprivation independently of objective SES, we conducted a mediation analysis controlling for age, gender, income and educational attainment. As summarized in Figure 1, subjective SES significantly predicted the reaction index,  $b = .38$ ,  $SE = .10$ ,  $t(236) = 3.97$ ,  $p < .001$ . Subjective SES also significantly predicted perceived restriction on personal freedom,  $b = .20$ ,  $SE = .07$ ,  $t(236) = 2.99$ ,  $p = .003$ , and perceived restriction on personal freedom significantly predicted the reaction index,  $b = .35$ ,  $SE = .09$ ,  $t(236) = 3.80$ ,  $p < .001$ . Although the link between subjective SES and the reaction index was still significant after we controlled for perceived restriction on personal freedom,  $b = .31$ ,  $SE = .09$ ,  $t(236) = 3.27$ ,  $p = .001$ , a bootstrap analysis with a 95% CI (bootstrap sample = 10,000), which was conducted following the procedure suggested by Preacher and Hayes (2008), revealed a significant, indirect effect (confidence intervals = [0.02, 0.15]).

Table 3  
*Summary Statistics, Correlations, and Results from the Various Regression Models*

Variable	<i>M</i>	<i>SD</i>	Correlations with the Reaction Index	Beta weights from various models		
				Full Model	Objective SES (Income, Education)	Subjective SES
Reaction Index	0.52	2.27	.---			
Gender	1.45	0.50	.04	.06	.03	.04
Age	40.35	13.35	.14*	.12	.11	.12
Income	5.95	2.62	.20**	.06	.21**	.---
Education	2.74	0.74	.00	-.15*	-.09	.---
Subjective SES	4.79	1.84	.26***	.30***	.---	.29***

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

## Discussion

Our prediction that socioeconomic status differences would be associated with reactions to choice deprivation in in-group contexts found support with a measure of subjective socioeconomic status and income. In response to two hypothetical situations in which a colleague chose for a group of coworkers, socioeconomic status correlated with acceptance, personal choice demand, and perceived restriction on personal freedom. Notably, subjective SES predicted reactions to choice deprivation better than objective measures (educational

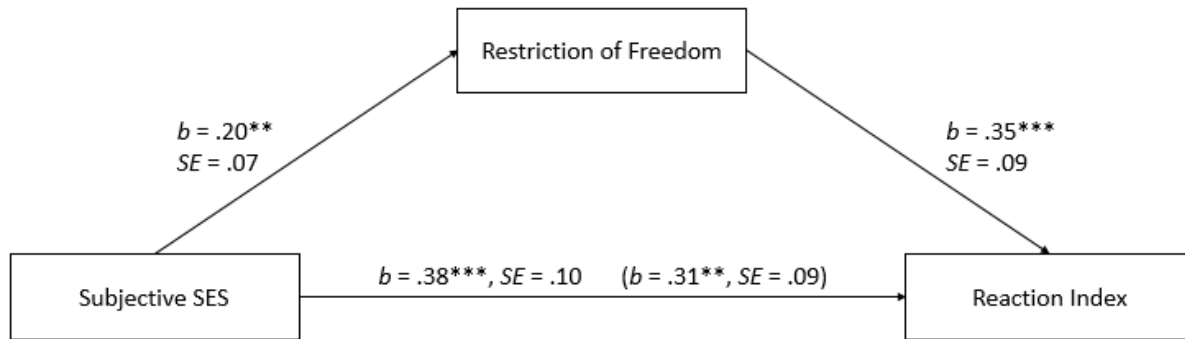


Figure 1. Regression coefficients for the relationship between subjective SES and the composite index of choice demand and acceptance as mediated by perceived restriction of personal freedoms. Coefficients indicating the relationship between subjective SES and the composite index after controlling for perceived restrictions of freedoms are given in parentheses. \*\*  $p < .01$ , \*\*\*  $p < .001$ .

attainment and income). Furthermore, subjectively higher SES individuals felt more restricted in their personal freedom, and this partially explained the association between SES and greater emphasis on personal choice demand over acceptance. By eliminating possible confounding by hierarchy, these results further support the theory that lower SES contexts lead to a conjoint concept of agency with an emphasis on others rather than merely on the individual self, while opportunity-rich higher SES contexts promote a disjoint model of agency emphasizing independence, autonomy, and choice.

### Objective and Subjective SES

Our findings are consistent with the argument that subjective perception of social status, as opposed to socially consensual understanding of status, influences the perception of personal control over the environment (Kraus et al., 2009). Indeed, compared to objective SES measurements (i.e., educational attainment and income), subjective SES was a significantly better predictor of how likely participants would be to accept a choice made on their behalf or to demand personal choice. This provides further evidence for the recent claim in the social class literature that highlights problems with objective indicators of class (e.g., Liu et al., 2004; Oakes & Rossi, 2003).

In line with previous research, income as an objective measure of SES explained variation in reactions to choice deprivation. However, income and subjective SES were highly intercorrelated ( $r(239) = .50$ ,  $p < .001$ ), and our results suggest that subjective SES can explain additional variance in reactions to choice deprivation on top of the variance explained commonly by income and subjective SES. Therefore, subjective SES would seem to be a more useful predictor of responses to choice deprivation.

Contrasting previous research, education was not a good predictor of reactions to choice deprivation. This is surprising, as educational attainment has been shown to be associated with economic outcomes, social and psychological resources, and fewer health risk behaviors (Ross & Wu, 1995; Day & Newburger, 2002). However, despite finding other

SES effects, previous research using M Turk samples could also not find educational attainment effects (Varnum, 2015). Interestingly, while (according to the 2015 Census Report [Ryan & Bauman, 2016]) on average 33% of the US population holds a BA degree or higher, in our sample 59.6% of the participants reported holding a BA degree or higher. Although this sampling bias might mask an existing link between educational attainment and reactions to choice deprivation, other reasons for the nonsignificance of this association might exist and be revealed in future investigations on this issue.

### **Future Directions and Limitations**

There are some limitations worth noting. First, because this research is correlational in nature, it cannot shed light on questions about causation. It is likely that socioeconomic status and concepts of agency both affect each other: parents teach their children their social classes' culture and the "right" way to behave, thereby fostering a specific model of agency in them (Lareau, 2003; Miller, Cho, & Bracey, 2005). By endorsing this model and behaving accordingly, people sustain their social class culture. To understand the link between SES and agency, it would be interesting to investigate whether concepts of agency change when an individual's SES rises or sinks. In addition, to extend these findings, we look forward to experimental manipulations of perceptions of socioeconomic status, which could be utilized to establish causal links with acceptance of a group member's choice, personal choice demand, and restriction on freedom. Second, this research reveals one factor that plays a role in explaining why SES differences exist in reactions to choice deprivation, namely perceived restriction on personal freedom. Although a demonstration of how feelings of restricted freedom relate to choice behavior would be worthwhile, future research should specify and examine empirically other underlying sources of and purposes for accepting someone else's decision or demanding choice. Finally, it would be interesting to investigate how people evaluate a target person who accepts a choice by another in-group member. Because this behavior is normative among individuals supporting a conjoint model of agency, lower SES individuals might evaluate the target person positively, whereas higher SES individuals might give a negative evaluation. On the other hand, reflecting the predominance of the disjoint model of agency in mainstream American contexts, the target person might be evaluated negatively independent of the evaluator's social status. A study by Stephens, Hamedani, Markus, Bergsieker, and Eloul (2009), which investigated North Americans' reactions to survivors of Hurricane Katrina, supports the latter possibility.

### **Conclusions**

To our knowledge, this research is the first to investigate the impact of socioeconomic status differences in reactions to a social situation in which a group member decides for the entire group, thereby depriving other group members of personal choice. Using situations that occur frequently in daily life, we provide further evidence for the assumption that socioeconomic status affects models of agency and reactions to choice.

Despite increasing inequalities within the United States, the belief that anyone, regardless of his or her social status, can become successful, rich, and famous if he or she

works hard is still proudly cherished. However, to make this dream realistic, the system needs to change insofar that it should allow individuals from low SES contexts to succeed in American society. Therefore, addressing the psychological consequences of SES contexts, such as models of agency, is of extreme importance (see also Stephens, Fryberg, & Markus, 2012). Research helps to recognize the existing bias against low SES contexts and shows ways to avoid such biases. We believe that, despite their limitations, the current findings contribute to this line of research and promote a broader understanding of the influence of social status on individuals' psychological processes, particularly how individuals' perceptions of themselves in relation to others lead to behavior in social situations.

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