

Racial-Ethnic Self-Schemas*

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Racial-ethnic minorities are at risk of academic disengagement: pulling back effort in school. Our model focuses on implications of content of racial-ethnic self-schemas (RES) for disengagement. We postulate that risk increases when individuals are either "aschematic" (do not have an RES) or "in-group only" RES schematic (when RES incorporates only the in-group without reference to membership in larger society), and that risk decreases when RES contains both in-group and larger society. This latter RES can take the form of a "dual identity," in which one is a member of both in-group and larger society, or a "minority identity," in which one is a member of an in-group that must fight to overcome obstacles to attain larger societal resources. Three studies involving African American, Hispanic, American Indian and Arab-Palestinian Israelis corroborate the positive effect of dual and minority RES versus in-group only RES or RES aschematic status.

Race-ethnicity, like gender, is used by others to define the self and is considered fixed, whether or not one chooses to self-define in these terms. Indeed, racial-ethnic minorities almost universally are targets of negative stereotyping about their academic abilities (Birenbaum and Kraemer 1995) and underperform academically. Over the last decade or two, this problem has received increasing attention from social scientists

who demonstrated that low status (e.g., Lovaglia et al. 1998; Ogbu, 1986, 1992) and the mere presence of stereotypes can have debilitating effects on minorities' academic performance (e.g., Steele 1997).

It is becoming clear, however, that individuals who are the targets of stereotyping do not merely incorporate these stereotypes and the accompanying negative attributes into their identity and behavior. Rather, they

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develop strategies to handle situations in which stereotyping may occur (Oyserman and Swim 2001). Given individual differences in choices of strategies, members of the same group are likely to differ in their vulnerability to stereotypes and in their success in navigating the larger society (Crocker and Major 1989). Here, we outline a model for understanding individual differences in response to these stereotypes, with emphasis on the relationship between engagement with school and the content of racial-ethnic self-schemas (RES).

Much of the racial-ethnic identity research is based on a social identity approach that postulates buffering effects of positive identification with the in-group (e.g., Tajfel and Turner 1986). In contrast, we propose a self-schema framework as a broader, encompassing model that provides novel hypotheses about how racial-ethnic self-schemas can reduce disengagement and promote engagement with school. Our model predicts when minority youths will be able to preserve motivation and focus on academic performance and when they are likely to disengage and stop trying in school.

To foreshadow our argument, we hypothesize that when students' RES take both the in-group and the larger society into account, the students will be more academically engaged and will fare better in school. We provide support for our racial-ethnic schema model using varied samples and methods. First we show that RES significantly predict change in school grades among African American, Hispanic, and American Indian middle school students. Next, using a salience manipulation, we show that content of RES influences persistence on a mathematical task in two separate studies involving American Indian and Arab-Palestinian Israeli junior high school and high school students.

RACIAL-ETHNIC IDENTITY AS A SELF-SCHEMA

Self-schemas are organized generalizations about the self. They are dimensions along which individuals hold clear and distinct perceptions about themselves, and they include personally defining and important

attributes (Montepare and Clements 2001). Individuals are not schematic for all of the characteristics, traits, skills, and abilities that are true or observable about them (Markus 1977). Instead self-schemas reflect domains that are valued in one's social context (Oyserman and Markus 1993). When a domain becomes self-schematic, it becomes important to maintain a particular view of the self within this domain. Individuals are more likely to challenge, disbelieve, or try to refute negative or disconfirming schema-relevant rather than schema-irrelevant feedback (Markus 1977). Negative or disconfirming feedback that is schema-irrelevant is unlikely to result in mobilization of effort and resources to combat it.

As cognitive structures, self-schemas direct attention to self-relevant information, thoughts, feelings, and memories (Markus 1977). Information is assimilated into existing schemas where possible. Individuals process schema-relevant information more quickly and more efficiently (Markus, Smith, and Moreland 1985). They are likely to misremember information in ways that reflect their own schemas (Markus, Crane, et al. 1982; for a review see Markus and Wurf 1987). Information irrelevant to self-schemas is likely to be disregarded (Markus, Hamill, and Sentis 1987); ambiguous information is likely to be framed in ways relevant to self-schemas (Catrambone and Markus 1987).

Although we know of no other research focused on race-ethnicity as a self-schema, researchers have studied other ascribed identity groups including age, gender, and heavy weight. This research shows that not all men and women have gender self-schemas (Markus, Crane, et al. 1982), not all heavy weight people have "fat" self-schemas (Markus et al. 1987), and not everyone is schematic for his or her age (Montepare and Clements 2001). Across each of these domains, however, those who are schematic are more likely to organize information in terms of these schemas and are better able than aschematic individuals to defend the self from negative schema-relevant feedback.

Following this logic, we assume that not all members of racial-ethnic minority groups will be schematic for their race-ethnicity. RES aschematics make sense of who they are

without spontaneously thinking about race; if asked, however, they would know the category membership ascribed to them by others. Indeed, it is likely that race may not be a particularly important self-defining characteristic for many individuals unless pertinent life experiences make it central (Cross and Fhagen-Smith 1996). RES aschematic individuals are aware of minority-group membership and membership in larger society as social "facts," but have not formed an RES—a coherent cognitive structure integrating thoughts, feelings, and beliefs about these memberships as part of the self-concept. Following the self-schema model, our first hypothesis is that those who are RES aschematic will be more vulnerable to negative feedback based on race-ethnicity, including stereotypes or situational factors emphasizing their otherness, because they lack a cognitive structure to automatically process and fend off the negative self-relevant implications of this racially tinged information.

CONTENT OF RES

Hypothesis 1 states that RES aschematics are vulnerable to stereotypes. We next address predictions about the content of RES, drawing on status characteristics, social identity, and self-categorization theories to ask when RES are likely to buffer from stereotypes and therefore to promote academic success.

Using these approaches as a base, we propose Hypothesis 2: being RES "in-group only" schematic also increases vulnerability to stereotypes. Why would this be? First, from the perspective of status characteristics theory (Lovaglia et al. 1998), when members of groups have both a social identity and a specific task to perform (e.g., doing well in school), those in low-status groups perform more poorly on the task than those in high-status groups because members of both low- and high-status groups view success as incongruent with group status. Ogbu (1986, 1992), in his "oppositional culture" theory, makes a parallel argument focusing explicitly on the experiences of minorities in America. He argues that low-status caste-like minorities are expected by others to perform poorly in

school; indeed, they do not put forth sufficient effort to succeed because they do not expect success to pay off for them. They may even police other in-group members to prevent them from academic success behaviors that are regarded as "acting white."

In a review of the situation of migrant youths in America, Zhou (1997) argues that a growing oppositional culture is present among American youths, especially among those who feel socially isolated and identify only with their in-group. Such youths perceive as an out-group middle-class America and its goals of achievement and upward mobility. Once the in-group is defined as opposed to the middle-class, achieving out-group, then in-group high achievers are viewed as sellouts, and efforts to attain academic success are seen as acting white. In this way, the in-group-focused RES, by accepting the notion that academic success is an out-group activity, may reinforce the notion that academics are not an in-group focus, and thus may make youths vulnerable to rejection of academic pursuits.

Second, social identity theories (Tajfel and Turner 1986) also support the notion that being RES in-group schematic can increase the risk of withdrawing effort from school and being vulnerable to negative views about in-group academic success. According to this perspective, social groups vie to claim positive domains as group-defining. Because of majority groups' greater power, minorities are unlikely to claim domains valued by the majority and thus must develop alternative means of maintaining positive in-group identity in the face of a denigrating out-group (e.g., Lemaine 1974; Mummendey et al. 1999; for reviews see Blanton, Christie, and Dye 2002; Branscombe and Ellemers 1998). This simultaneous disengagement from one domain and engagement with another is termed "compensation by substitution" (Allport 1954) or "social creativity strategies" (Tajfel and Turner 1986). Because the majority is likely to claim academic performance as group-defining, minorities' academic disengagement and underperformance are likely to be coupled with engagement and superior performance in alternative domains (e.g., sports, music).

Thus, according to social identity theories, one strategy that racial-ethnic minorities can use to maintain positive identities and to avoid incorporating negative out-group appraisals, stigmas, or prejudices is to devalue the domains that define the out-group while relying on the feedback and reflected appraisals of close and trusted in-group members who use in-group rather than out-group definitions of success. Social identity theorists have identified several such strategies (e.g., Branscombe, Schmitt, and Harvey 1999; Crocker and Major 1989; Crocker, Voelkl et al. 1991; Osborne 1995; Rosenberg 1965, 1979; Tajfel and Turner 1986). In-group members can discount negative feedback from out-group members as evidence of prejudice, and they can devalue and disengage from domains that provide such feedback. On the basis of this analysis, our second hypothesis is that an RES schema focused solely on the in-group will (paradoxically) increase disengagement with school and engagement with alternative domains as a form of compensation by substitution.

We hypothesize that being either RES aschematic or RES in-group schematic increases risk of disengagement from school and vulnerability to negative stereotypes about the in-group's academic ability. What alternatives remain, then, for the content of RES schemas? Our third hypothesis is that being RES schematic for both the in-group and the larger society will reduce risk of disengagement and vulnerability to negative stereotypes. Below we summarize our hypotheses about the effect of each of these RES types on academic disengagement.

Individuals who are *aschematic for RES* do not define themselves automatically in racial-ethnic terms. Following a self-schema framework, RES aschematics are more likely to be influenced by situationally salient race-stereotypic cues because they have not developed a self-schema to buffer them (see Swann and Ely 1984) and are not chronically sensitized to the fact that others hold particular stereotyped beliefs about them (Hilton and Darley 1985). Aschematics are more vulnerable to the subtle negative effects of race-ethnic stereotypes about academic ability, interest in school, and likely success in academic tasks; when these stereotypes are

brought to mind, aschematics do not have an automatic, schematized response. Thus they are more likely to respond simply by disengaging from academic domains.

Individuals with "*in-group*" RES are schematic for race-ethnicity; they define themselves in terms of their positive connection to the in-group, as described by social identity theories. We propose that the perspective shaped by in-group RES tacitly accepts the stereotypical notion that certain positive attributes such as academic success "belong" to majority-group, not minority-group, members. Thus in-group RES inadvertently make individuals vulnerable to disengagement from mainstream institutions viewed as not self-defining. Examples of the relationship between in-group self-schemas and disengagement are found in research with African American adolescents: there a focus on in-group only in racial-ethnic identity promotes disengagement by reducing the perceived relevance of larger societal institutions such as school (Graham, Taylor, and Hudley 1998) and by setting up a contrast between being and acting black or white. "Acting black" involves being cool; "acting white" involves working hard to achieve school success (e.g., Fordham and Ogbu 1986).

In regard to those with *in-group and larger society RES*, we propose that RES can reduce risk of disengagement and buffer from stereotypes when they focus both on positive connection to the in-group and on connection with the larger society. An individual may feel that he or she is either a member of both the in-group and the larger society, or a member of an in-group that must struggle to overcome obstacles and barriers to success in larger society. We term the first way of including the larger society in RES "dual" RES, and the second way "minority" RES.

"Dual" RES focus attention on one's status as both an in-group member and a member of the larger society (Moran et al. 1999), and promote focus on the positive consequences of this dual status (Gaertner et al. 1999). We hypothesize that dual RES provide a more effective buffer from the negative effects of stereotypes about the in-group than do in-group RES because dual RES connect

the individuals to positive larger societal roles and values as well as to in-group roles and values. Because dual RES define the self as a member of the larger society, persons with such RES can dismiss stereotypes about the in-group as not self-relevant because the self is a member of the larger society, for which these stereotypes do not apply (see Hornsey and Hogg 2000).

Minority RES focus attention on one's status as both an in-group member and a member of a group that is discriminated against or obstructed by larger society, and promote focus on ways to prevent or avoid likely negative consequences of minority status in the larger society. We hypothesize that minority RES provide a more effective buffer from negative effects of stereotypes about the in-group than do in-group RES because minority RES provide automatic strategies for noticing and handling stereotypic and prejudicial responses while remaining engaged in the larger society.

STUDY 1

We first explored the hypothesized link between RES and academic success in a middle school sample. Insofar as RES include both in-group and larger society, they help buffer students from negative stereotypes. These students should be more deeply engaged and therefore should do better in school. We investigated this possibility by assessing RES in the fall and examining school success as measured by grade point average (GPA) at the end of the school year (last marking period), assuming that the influence of RES would unfold over the year. To control for differences in academic ability unrelated to RES, we included gender and fall marking period GPA as covariates.

Method

Sample. As part of a larger three-school study of academic experiences of low-income urban minority middle school youths, 94 eighth grade pupils (50 male, 44 female) completed an open-ended question about racial-ethnic identity. Of these pupils, 58 identified themselves as African American, 25 as Hispanic, and 11 as American Indian.

Measures. Race-ethnicity: Students were asked, "People have different ways of describing their race or ethnicity. Which describes you best?"

Racial-ethnic self-schemas: Students were asked: "What does it mean to you to be a member of your race or ethnic group? You can use examples from your everyday life of things you do that make you feel like a member of this group." Responses were entered into a database, and were double coded by two coders who were blind to the respondents' race-ethnicity and the study's research hypothesis. Disagreements between coders were resolved by discussion to obtain consensus. Responses were coded as in-group (59%), aschematic (15%), or taking the larger society into account (15%); 12 percent of the responses could not be coded in one of these categories because the response was focused on individual idiosyncratic traits not linked by the respondent to either the in-group, the larger society, or both (e.g., "Stay smart and use your brain"); was unclear (e.g., "Lots of freedom"); or focused on a more universal outlook (e.g., "I feel like we are all the same no matter if we're white, black, Chinese, etc. We are all still God's people and God loves all of us.").

In-group responses focused only on the in-group (e.g., friendships, language, music, food, customs, and behavior) and did not mention the larger society. Examples include "It means the world to me, I'm glad of my ethnicity, I wouldn't want to be anything else" and "Eating the foods, talking to my friends, and the color of my complexion in the mirror."

Aschematic responses focused on the individual rather than on group membership or explained that groups are not important. Examples include "Really my race does not matter to me." "Nothing." "It means nothing to me. I think it does not matter how you feel about your ethnic group."

Including both the in-group and the larger society, responses showed concern about avoiding problems of racism or focused on connections between the in-group and the larger society. Examples of the former include "Every time that I step out of my house I feel as though someone is waiting for me to screw up. So I feel that as a black male

I have a responsibility to set a good example for me in the world and for the people of my race." Examples of the latter include "Being a member of this race helps me strive on to be a successful person in a world [where] we African Americans are minorities but also members." "I am good at things most white people are good at and proud because of what African Americans did for the world."

Grades: We obtained mean grade point average from records for first and last quarters from each school, with parental permission. Missing data on grades reduced sample size in reported analyses.

Results

Above we hypothesized that only RES schemas which include both in-group and larger society would provide a buffer from negative stereotypes and social representations of the in-group. Therefore we expected better grades at the end of middle school for youths with these RES than for RES aschematic or RES in-group only schematic youths. To assess the relationship between content of RES and academic outcomes, we used an analysis of covariance (ANCOVA), examining end-of-year (last-quarter) GPA as a function of RES (aschematic, in-group only schematic, and larger society schematic), with controls for fall grades. We also partialled out the effects of gender because this variable predicts achievement in middle school (see, e.g., Catsambis 1994). As expected, the effect for RES type was significant, $F(2,78) = 3.28, p < .05$. Youths with RES that included both in-group and larger society received higher last-quarter grades ($M = 2.86, sd = .80$) than did either RES aschematics ($M = 2.27, sd = .99$), or RES in-group only schematics ($M = 2.17, sd = .93$). A planned contrast analysis, comparing the aschematic and the "in-group" categories with the larger society schematics, corroborated this finding, $p < .03$.

Discussion

Study 1 supports the RES model in a field study that uses outcomes with real-world meaning, namely academic records. In this initial study, one goal was to learn whether youths discuss racial-ethnic identity in terms of RES. The findings were encourag-

ing: the RES coding captured most youths' responses. A second goal was to test the model. Indeed, the hypothesized buffering effect of RES that include both in-group and larger society was significant. Though less frequent, these RES were associated with improved grades over the course of the school year, even with controls for fall grades. This finding corroborates our central hypothesis regarding the potential for positive effects of RES on academic performance when RES include both the in-group and the larger society. Although these findings suggest real-world differences in outcomes for youths who differ in RES, further research is needed to clarify how well these findings generalize across various methods and samples.

STUDY 2

Study 2 was designed to provide a conceptual replication of Study 1, using a different population and a different research method—experimental manipulation. Our goal was, first, to assess whether the RES model could apply to a very different social context and racial-ethnic group, namely rural American Indian youths, and, second, to assess whether the predicted positive effect of RES could be demonstrated by using an experimental manipulation to clarify causality. Finally, given the predominance of in-group RES in Study 1, a third goal was to verify whether the distribution of RES types we found in Study 1 could be generalized to a very different sample and setting.

In Study 1 we examined the cumulative effects of RES on academic engagement over the course of the school year. In Study 2, to clarify the causal influence of RES on behavior, we manipulated the salience of RES and predicted that the effects of RES on behavior would be pronounced when RES was made salient. By showing the presence of an effect when RES is brought to mind, we confirm that RES influenced the outcome. The rationale for manipulating RES salience comes from social cognition research which documents that behavior is not a product of *all* possibly relevant knowledge, but only of whatever knowledge is *salient* (on the actor's mind) when the actor is making a behavioral decision. In other words, only *accessible*

information shapes behavior (for reviews see Bargh and Chartrand 1999; Higgins 1996).

We predicted that RES content influences students' academic behavior only when the RES is brought to mind. We hypothesized that youths with RES that included both the in-group and the larger society would remain engaged in a mathematical task even when in-group membership was brought to mind, but that RES aschematics and RES in-group only schematics would disengage when RES was brought to mind.

Method

Sample: As part of a larger study of social representations of American Indians, 65 junior high school and high school American Indian youths (30 female, 35 male) attending rural and reservation schools in Washington State participated in this study.

Experimental manipulation. On the basis of very similar experimental manipulations by Steele (1997), Shih, Pittinsky, and Ambady (1999), and Oyserman, Sakamoto, and Lauffer (1998), we used order of presentation as a manipulation of salience of RES; we assumed that bringing RES to mind should have differential effects on task persistence, depending on the content of the RES. We used the same question as in Study 1, asking participants what being American Indian/Native American meant to them before they worked the mathematical task (high-salience condition) or after (low-salience condition).

Measures. Racial-ethnic self-schemas: We entered into a database the responses to the question "What does it mean to you to be a member of your race or ethnic group? You can use examples from your everyday life of things you do that make you feel like a member of this group." The responses were double coded by two research assistants who were blind to the respondents' race-ethnicity and to the study hypothesis. After coding was completed, disagreements were resolved by discussion to obtain consensus. Responses were coded as in-group (68%), aschematic (15%), or bridging the in-group and the larger society (15%). Only 1.5 percent of responses were not codable in one of these categories. As in Study 1, in-group responses

focused only on the in-group (e.g., friendships, language, music, food, customs, and behavior) and did not mention the larger society. Aschematic responses focused on the individual rather than on group membership or explained that groups are not important. Responses including both in-group and larger society focused either on membership in both in-group and larger society or on avoiding racism/stereotypes.

Task persistence: We used a simple but novel mathematical task previously employed by Oyserman, Gant, and Ager (1995) to assess academic engagement (persistence). Participants were given a sheet of paper with the numbers 2, 3, and 7 written on the top. They were asked to use these numbers to obtain the number 36 by adding, subtracting, multiplying, or dividing and using each number as many times as they liked. This was described as a new task, not taught previously; participants were asked to write down as many ways as they could of combining the numbers to solve the problem, using a new line for each attempt. Thirty blank lines were provided. Analyses were based on the number of attempts made to solve the problem.

Results

Recall our hypothesis: Only individuals with RES including both in-group and larger society will be buffered from negative stereotypes and social representations of their in-group. Therefore we expected that youths with this RES would persist more strongly on the mathematical task and that this greater persistence would be especially pronounced when racial-ethnic group was made salient before completion of the task. To assess the relationship between content of RES and academic persistence outcomes, we used an ANCOVA, controlling for gender and for grade in school. Because we found no significant effects of either variable, we omitted them and used a two-factorial ANOVA to examine the effect of RES on persistence. The two between-groups factors were RES (aschematic, schematic in-group only, or schematic in-group and larger society) and salience of RES (salient vs. not salient).

We found a significant main effect of RES, $F(2, 57) = 4.09, p < .03$. Academic persistence was greater among students with RES that focused on in-group and larger society than among students with in-group only RES or among RES aschematics ($M = 5.90, sd = 1.73$ vs. $M = 3.80, sd = 2.78$ and $M = 2.90, sd = 3.04$ respectively). For a more sensitive test of our hypothesis, we used a planned contrast analysis to examine whether the effects of RES content would be stronger when race-ethnicity was salient than when it was not.

We focused first on the high-salience condition, comparing the in-group and larger-society schematics ($M = 5.57, sd = 1.90$) with both in-group schematics ($M = 3.47, sd = 2.78$) and RES aschematics ($M = 2.17, sd = 2.23$), and excluding the low-salience condition. This contrast was significant, $t(57) = 2.46, p < .02$. Next, we excluded the high salience condition and repeated this comparison within the low-salience group, comparing aschematics ($M = 4.00, sd = 4.08$) and in-group schematics ($M = 3.71, sd = 2.31$) with in-group and larger-society schematics ($M = 6.67, sd = 1.15$). This comparison was not statistically significant, $t(57) = 1.75, p > .08$, although it was in the same direction as the high-salience condition.

Discussion

In real-world settings, RES may be brought to mind rarely, frequently, or constantly. Because it is not clear what an individual is thinking at any given point, cognitive priming provides a direct means of testing the consequences of RES. Therefore we used an experimental manipulation to make RES salient before assigning a mathematical task. In our experiment, we primed (brought to mind) respondents' racial-ethnic self-schemas in the experimental condition but not in the control condition. We predicted that RES should influence behavior (persistence on the mathematical task) when they are brought to mind.

In conceptually replicating Study 1, we found positive effects of being RES in-group and larger society schematic: significant effects occurred when RES were made salient through the priming manipulation.

As in Study 1, however, few students possessed an RES that included both the in-group and the larger society; this point suggests that such RES may be difficult to establish or, once established, difficult to maintain. In view of the consistency of findings across samples within the United States, our goal in Study 3 was to conceptually replicate the findings from Studies 1 and 2, using a racial-ethnic group outside the United States, and to obtain a larger sample so that the two elements—being RES in-group and larger-society schematic (dual and minority RES)—could be studied in greater detail.

STUDY 3

Study 3 involved the same salience manipulation as described in Study 2, but used a different racial-ethnic group, Palestinian Arab Israelis. Palestinian Arabs are Israel's largest minority group, about 19 percent of the population, and are primarily Muslim (CIA 2001). Further, the stereotype of less academic ability is true for this minority group: Arab Israeli students perceive that Jewish Israelis view them as less knowledgeable, more primitive, and less smart than they view themselves (Kurman and Eshel 1999). Palestinian Arab Israelis are targets of affirmative action efforts at Israeli universities, and have experienced chronic diffuse discrimination in domains such as employment (see Rouhana and Fiske 1995).

As in Study 2, we did not expect that the salience manipulation would change the content of racial-ethnic identity; rather, we expected that the salience manipulation would influence whether racial-ethnic identity was brought to mind when subjects worked on the mathematical task. We hypothesized that racial-ethnic identity would influence engagement in the academic task only when it was brought to mind (high-salience) before engagement in the task.

Method

Sample. A sample of Palestinian-Arab Israeli high school students ($N = 524, 225$ boys and 299 girls) completed this study as part of a larger questionnaire administered in class. In collaboration with the Tel Aviv

School of Education, data were collected at seven high schools during a regular class session. Questionnaires were in Arabic, the language of instruction and the respondents' first language.

Experimental procedure. As in Study 2, in the high-salience condition, students first described their RES and then completed a mathematical task. In the low-salience condition, we reversed the order so that students first completed the task and then described their RES.

Measures. Racial-ethnic self-schemas: We used the same open-ended questions in Study 3 as in Studies 1 and 2. We coded for each of the identity schema types. Because of the larger sample size, however, two of the authors content coded 180 randomly chosen responses rather than double coding all questionnaires. We obtained a 92 percent agreement level; one coder coded the remaining responses. In contrast to Studies 1 and 2, sample size in Study 3 was sufficient to allow coding and separate analysis of the RES in-group and larger society responses with a dual versus a minority focus. Twenty-eight percent of the responses were dual RES in-group and larger society responses: that is, they made positive mention of both Israel and being Arab or Palestinian within Israel. Thirty-two percent of the responses were minority RES in-group and larger society responses: they mentioned both being Arab and negative aspects of Israel and being Israeli. In addition, 21 percent of the responses were aschematic: they focused only on facts, highlighting the idea that citizenship is "a fact of life", not an aspect of identity. Twenty percent were RES in-group only responses, focusing only on the in-group. A final 7 percent of responses did not fit any of the RES types described above.

Task engagement or persistence: We used the same mathematical task as in Study 2. Again, the number of attempts was used as the dependent variable; in this case, the distribution of the variable was skewed, so we performed a log transformation using the formula $\log_e(1 + \text{number of attempts})$.

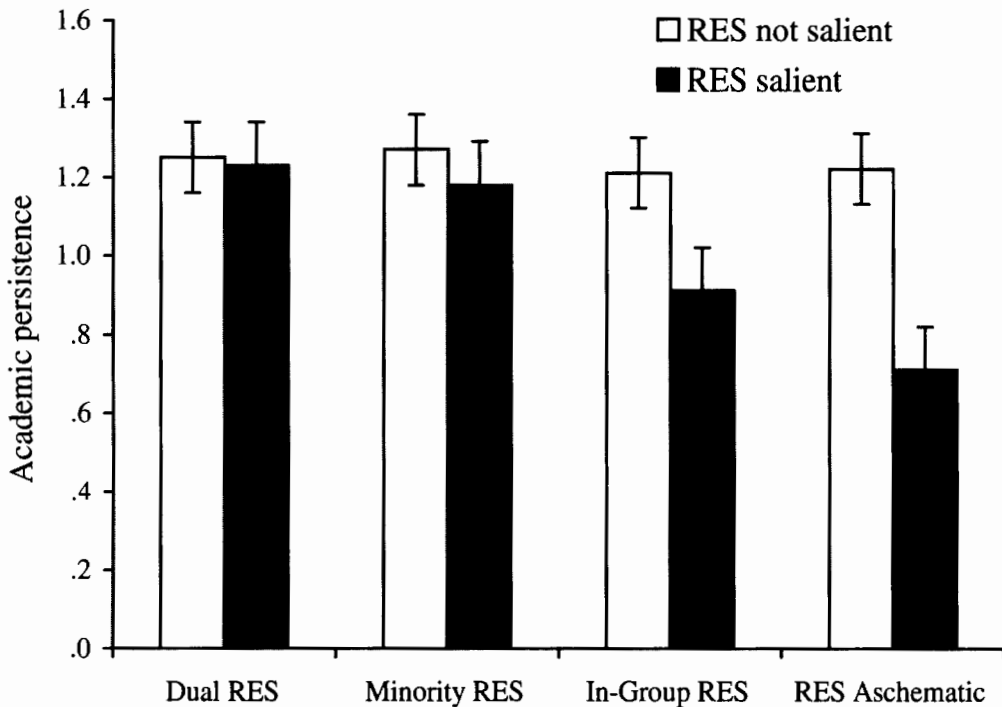
Results

As stated above, we expected that only those with RES containing both the in-group and the larger society would remain engaged in the mathematical task in the RES salient condition, and that aschematics and in-group only RES schematics would disengage. In contrast to Studies 1 and 2, we were able to analyze dual and minority in-group and larger society schemas separately because a larger number of participants reported those types of RES. Therefore we analyzed engagement using a 2 (identity salience: high vs. low) \times 4 (RES: aschematic, in-group, minority, dual) \times 2 (gender) \times 2 (grades 8 and 9 vs. grades 10 and 11) ANOVA.

As hypothesized, academic disengagement was moderated by a two-way RES-by-salience interaction, $F(3, 404) = 3.30, p < .03$. RES influenced behavior when brought to mind (see Figure 1). As predicted, RES aschematic and RES in-group youths reduced their effort, while youths with RES containing both in-group and larger society (whether dual or minority) did not. Pairwise comparisons were significant for RES aschematic, $F(1, 404) = 8.93, p < .01$ youths and (at trend level) RES in-group only schematic youths, $F(1, 404) = 3.43, p < .07$. No disengagement occurred for dual or minority RES schematic youths (both pairwise comparisons $F < 1$).

Discussion

Study 3 results corroborate the influence of RES on academic engagement shown in Study 2. That is, an RES focused on the in-group and the larger society buffers youths from academic disengagement, whereas being RES aschematic or focused only on the in-group does not. Like Study 2, Study 3 used an experimental manipulation of salience of race-ethnicity; thereby it increased confidence in causality such that the result can be taken to mean that salient content of RES influences academic engagement. Moreover, sample size in Study 3 allowed for separate analyses of dual and minority RES in-group and larger-society schematics, corroborating our assumption that either would buffer youths from academic disengagement. Although this study corroborated the effects



Note: Vertical bars reflect one standard error above and below the mean.

Figure 1. Academic Persistence of Arab Israeli High School Students as a Function of RES Salience and RES Schema (Study 3)

of RES that include both the in-group and the larger society, this type of RES was much more common in Study 3 than in Studies 1 or 2. Thus we cannot yet state confidently how often each form of RES occurs among racial-ethnic minority youths cross-nationally.

Although the data used in Study 3 did not allow us to comprehensively examine antecedents of RES type, we were able to explore possible effects of age (grade level) on the content of students' RES. The distribution of racial-ethnic identity self-schemas differed between younger and older students, chi-square (3, $n = 436$) = 23.77, $p < .001$. The specific pattern of differences between older and younger students suggested a systematic developmental shift: we found fewer aschematic older (14%) than younger students (24%), markedly more minority self-schematic older (48%) than younger students (28%), and fewer dual self-schematic older (18%) than younger (30%) students. We saw no differences in frequency of in-group schema by age (older youths 20%,

younger youths 19%). Thus, older teens were more likely to be minority RES schematic, and less likely to be aschematic or dual RES schematic.

It is possible that as youths mature, they find themselves increasingly in contexts that are inexplicable if race-ethnicity is not taken into account; thus the possibility of remaining RES aschematic is reduced. The realization that race influences others' responses to one's self and one's life chances is likely to draw attention to the ways in which the larger society creates obstacles for one's group, thus increasing a minority RES focus.

This preliminary finding on age as an antecedent of RES schema types raises a question: do RES affect the academic motivation of older and younger minority students differentially? As shown in the ANOVA reported previously, the answer to this question is "No" (the three-way interaction of the salience manipulation, age, and content of RES, $F(3, 404) = 1.34$, $p > .26$). The buffering effect of dual and minority RES

applies equally for older and younger youths. Being in-group RES schematic or RES aschematic is equally detrimental to engagement in school for younger and for older youths.

GENERAL DISCUSSION AND CONCLUSIONS

The large comparative self-esteem literature makes quite clear that racial identity can provide a buffer against out-group stereotypes. This research shows either no difference (Frable 1997) in self-esteem between minorities (specifically African Americans) and white Americans, or reveals differences favoring the minority group (Crocker, Luhtanen, et al. 1994; Crocker and Major 1989; van Laar 2000). The only exception occurs in comparisons of Asian Americans with white Americans: Asian Americans on average have more modest self-esteem. Scholars suggest that this difference is likely to reflect a cultural difference in definition of the self (Coon and Kimmelmeier 2001; Oyserman, Coon, and Kimmelmeier 2002) rather than self-denigration. In developing our model of RES, we asked "How can racial identity buffer from a particularly pernicious consequence of out-group stereotypes, namely academic disengagement in light of stereotypes about academic ability?"

Our model frames racial-ethnic identity as a self-schema. We began with the assumption that social context can mark identities by making salient one's membership in particular groups. We then suggested that the content of one's social group identities can provide a buffer from the negative consequences of salient stereotypes about the in-group's academic engagement. We conceptualized racial-ethnic minority identity as potentially a schematic component of self-concept, a racial-ethnic self-schema (RES). We proposed that one's RES makes certain social roles (e.g., good student) self-relevant, along with the normative rules and behavioral routines attached to those roles. By making some social roles but not others self-relevant, RES frames and organizes experience, recruits and maintains motivation, and promotes positive affect (see Oyserman et al. 1995).

In the studies reported here, we first demonstrated the ecological validity of our RES model by showing a relationship with grades during an academic year (Study 1). Then we examined the motivational consequences of situationally cuing RES (Studies 2 and 3), using both American and non-American samples. Our analysis showed that RES influenced disengagement, whether measured over the course of the school year or in an experimental manipulation of salience. Youths with in-group focused RES and youths who were RES aschematic made worse grades in school than youths with RES focused on both the in-group and the larger society. Moreover, when manipulated experimentally, making RES salient resulted in disengagement only for youths who were RES aschematic or RES in-group only schematic. In combination, these findings suggest that the content of individuals' RES moderates the impact of stereotypes about one's racial-ethnic group.

In both our urban multiracial sample and our rural American Indian sample, we found that the most common RES was in-group focused. Because such a focus can have ramifications that increase risk, there is a need for further research on the frequency of RES that includes the in-group and the larger society (whether dual or minority focused) and on the conditions which increase the likelihood that such an RES will emerge.

Although we did not test this possibility in the current studies, we believe that our model of the moderating effect of racial-ethnic identity schemas on academic disengagement can provide a bridge between research on disengagement and on the related phenomenon of stereotype threat (Steele 1997). Research in both areas focuses on how members of stigmatized groups deal with academic situations; both types of research seek to understand why stigmatized status relates to poorer performance and why students "disengage," or stop trying. Stereotype threat researchers focus on highly motivated students; disengagement researchers ask why motivation often lags. Stereotype threat researchers suggest that performance on intellectually challenging tasks suffers when the experimenter makes salient a person's stigmatized status because of the affective

arousal that comes with that person's efforts to disconfirm the stereotypes (e.g., Shih et al. 1999; Spencer, Steele, and Quinn 1999; Steele 1997). Disengagement researchers relate stigmatized status to withdrawal from school: in their view, withdrawal means that neither one's *personal* failure (or success) in school nor one's *group's* negative (or positive) academic reputation is self-defining (Schmader, Major, and Gramzow 2001; Steele 1997).

Stigma can be arousing, motivating either a fight or a flight response. One question has not yet received much attention: What factors determine when participants will *increase* their effort in the face of stigma (fight), and when they will *withdraw* their efforts and leave the field (flight)? In our view, future research with a self-schema model can help to address this important question. We speculate that race aschematics are most vulnerable to stereotype threat effects and that in-group self-schematics are most vulnerable to disengagement. Dual and minority self-schematics are buffered from both stereotype threat and disengagement, and respond by fighting rather than fleeing.

We reason that dual self-schematics define themselves in terms of both the in-group and the larger society; thus, when identity is made salient, positive images of the self as a member of both an in-group and the larger society should come to mind. These positive images should buffer from stereotypes. Minority identity schematics, on the other hand, define themselves in terms of both in-group and action to overcome racism; thus, when identity is made salient, they should think of themselves positively both as in-group members and as overcoming obstacles. These images also should buffer from stereotypes. Therefore we speculate that both dual and minority schemas protect individuals from withdrawal of effort in tasks that simply require persistence, and buffer them from effects of stereotype threat in demanding tasks by reducing affective arousal.

This is not the case for in-group RES schematics and RES aschematics. In-group schemas make disengagement and withdrawal of effort more likely because the domain of school is not regarded as relevant to the in-group. In-group schematics do not fear per-

petuating a stereotype through their failure, nor do they view school as self-defining. Thus, one could argue that the phenomenon which the concept of stereotype threat was developed to clarify is not relevant to in-group schematics. These individuals withdraw before they have a chance to experience desire to succeed academically, and before such a desire can cause affective arousal due to fear that they may not succeed and thus may confirm stereotypes about their group.

RES aschematics are the group at most risk of stereotype threat. These individuals do not chronically self-define in terms of race-ethnicity but have other sources of self-definition. Aschematics will be most disconcerted when confronted with a negative racial-ethnic stereotype: they lack automatic schema-based responses that can defuse the heightened affective response and arousal which accompany the effort to disconfirm the stereotype.

Taken together, these studies affirm the importance of taking RES into account in understanding self-regulation in minority youths. We raise the possibility that RES engage fight or flight responses, documentation of the mediational process is still needed.

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