

Who Am I and What Am I Going to Do With My Life? Personal and Collective Identities as Motivators of Action

Jacquelynne Eccles

*Research Center for Group Dynamics
Institute for Social Research
Ann Arbor, Michigan*

Who am I? What am I about? What is my place in my social group? What is important to me? What do I value? What do I want to do with my life? These are all questions related to what psychologists call identity. Many theorists have argued that we are driven to answer these questions, particularly during adolescence. In this article, I summarize an expectancy value perspective on identity and identity formation. Within this framework, identity can be conceptualized in terms of two basic sets of self perceptions: (a) perceptions related to skills, characteristics, and competencies, and (b) perceptions related to personal values and goals. Together these two sets of self perceptions inform both individuals' expectations for success and the importance they attach to becoming involved in a wide range of tasks. Within this perspective, then, I focus on the role personal and collective identities can play on motivated action through their influence on expectations for success and subjective task values. I also discuss briefly how personality and collective identities develop over time.

Who am I? What am I about? What is my place in my social group? What is important to me? What do I value? What do I want to do with my life? These are all questions related to what psychologists call identity. Many theorists have argued that we are driven to answer these questions, particularly during adolescence (e.g., Adams, Ryan, Hoffman, Dobson, & Nielsen, 1984; Ashmore, Deaux, & McLaughlin-Volpe, 2004; Eccles, 1994, 2007; Erikson, 1980; Harter, 1998; Higgins, 1987; Kroger, 2004; Marcia, 2002; Markus & Nurius, 1986; Phinney, 1990; Sellers, Smith, Shelton, Rowley, & Chavous, 1998, to name just a few). In this chapter, I summarize an expectancy value perspective on identity and identity formation. Within this framework, identity can be conceptualized in terms of two basic sets of self perceptions: (a) perceptions related to skills, characteristics, and competencies (the "Me" self in James's perspective; see James, 1892/1963), and (b) perceptions related to personal values and goals. Together these two sets of self perceptions inform both individuals' expectations for success and the importance they attach to becoming involved in a wide range of tasks. Within this perspective, then, I am focusing on identity in

terms of its influence on behavioral choices, that is, in terms of its influence on motivated action.

I also want to make a distinction between two types of closely related identities: personal identities versus collective/social identities. Although this distinction is inherently quite fuzzy, I find it useful because I am interested in the relation of social roles to personal choices. I believe that social roles influence behavior through quite similar mechanisms as personal identity but I also do not believe that all aspects of personal identities are grounded in social roles. Thus, in this article, I discuss both personal and collective/social identities, focusing specifically on gender as my exemplar of a collective/social identity. For me, personal identities are those aspects of one's identity that serve the psychological function of making one feel unique. Thus, I am defining these aspects of one's identity in terms of the most personally valued aspects of what James called the ME self—the self that one knows through observation of one's own behaviors and characteristics (James, 1892/1963).

In contrast, I am defining collective identities as those personally valued parts of the self that serve to strengthen one's ties to highly valued social groups and relationships—such as one's gender, race, religion, social class, culture, and family (see also Ashmore et al., 2004; Cross, 1991; Phinney, 1990; Sellers et al., 1998). Thus, I am defining these aspects in

terms of the most personally valued aspects of what we might call the WE self. Together, personal and collective/social identities contain those parts of the self that are highly valued by the individual (like self-schemata a la Markus & Nurius, 1986, and future possible selves a la Oyserman & Markus, 1990, or foreclosed or achievement identities a la Marcia, 2002, and Phinney, 1990, or central and salient identities a la Cross, 1991; Sellers et al., 1998; and Phinney, 1990, 1996) because they help individuals define who they are both for themselves and for the people with whom they interact.

I believe that behavioral choices are a primary mechanism through which individuals enact their personal and collective/social identities and thus validate their identities. Like some of these other authors (e.g., Ashmore et al., 2004; Oyserman & Markus, 1990; Sellers et al., 1998), I am assuming that personal and collective identities include ideas and schema related to which types of specific behaviors, tasks and activities are, and are not, associated with the successful enactment of personal and collective identities. To the extent specific identities are very important or very central and salient to the individual, these activities, behaviors and tasks will take on high subjective value and the individual will be highly motivated to enact these activities, behaviors, and tasks. It is this aspect of personal and collective identities that I want to explore in this article.

Finally, I discuss briefly how these aspects of the self develop over the course of a lifetime. Within my theoretical frame, individuals have multiple personal and collective/identities that change in content, salience, and centrality over situations and over time. For example, the salience of these identities is quite malleable over situations at the same point in time (i.e., as one moves from context to context—each of which has its own characteristics and norms that influence the immediate salience of different identities and thus influence the behavioral choices likely to be made and enacted in each context). Furthermore, the contents, salience, and valence of various personal and collective identities develop over a lifetime based on (a) the social and psychological experiences individuals have as they are growing up and moving through adulthood; (b) their own agency in both interpreting and creating social roles and experiences that serve to reinforcement, redefine, or undermine particular personal and social identities; and (c) the co-construction of the content, meaning, and salience of various personal and social identities by the individuals themselves in conjunction with the people with whom they interact each day and over time.

IDENTITY AS A MOTIVATIONAL CONSTRUCT: AT THE CONJUNCTION OF ABILITY SELF CONCEPTS AND SUBJECTIVE TASK VALUES

Over the past 35 years, my colleagues and I have studied the motivational and social factors influencing such long- and short-range achievement goals and behaviors as career

aspirations, vocational and avocational choices, course selections, persistence on difficult tasks, and the allocation of effort across various achievement-related activities. More recently, we have also looked at choices regarding such things as with whom to hang out, what clothes to wear and what music to listen to, what to do with one's friends and relations, and more generally how to spend one's time and energy. Much of our attention has focused on gender and ethnic/race differences in these types of behavioral choices. To guide this research effort, we elaborated a social cognitive model, grounded in both expectancy-value theory of task choice and socioculture theories of socialization, self-socialization, and social influence. In this model, depicted in simplified form in Figure 1, we linked salient life-defining behavioral choices, such as those related to education, recreation, occupations, friendship networks, and so on, most proximally to two sets of beliefs: the individual's expectations for success and the importance or value the individual attaches to the various options perceived by the individual as available.

We also specified a set of the relations of these beliefs to cultural norms, social roles, and social experiences; personal experiences and one's interpretations and memories of these experiences; individual's aptitudes, talents, personalities, and temperamental characteristics; and to those personal beliefs and attitudes that are commonly assumed to be associated with achievement-related activities by researchers in this field (see Eccles et al., 1983). In particular, we linked achievement-related beliefs, outcomes, and goals to interpretative systems like causal attributions, to the input of socializers (e.g., parents, teachers, siblings, peers, and media), to various social-role related beliefs, to self perceptions and self concept, and to one's perceptions of various tasks, behaviors, and activities themselves. We predicted that each of these factors influence both the expectations one holds for future success at the various achievement-related options and the subjective value one attaches to these various options. In turn, we predicted that these expectations and the value attached to the various options were the most proximal psychological influences on the choices people among these options—the decisions they make about how to spend their time and energy.

Finally, we predicted how these behavioral choices themselves provide information that informs the subsequent development of individuals' views of themselves, as well as of various social roles and various tasks and behaviors. We assumed that social experiences, as well as each individual's own interpretation and agentic selection of social and individual experiences, provide the initial information on which individuals begin to form their own notions of their "Me" and "We" selves, as well as their view of the values the people most central to them attach to, and the more distal cultural norms regarding, the differential values of various possible personal characteristics and actions for the individual. Over time, of course, behaviors selected based on these self and task/activity/behaviors-related beliefs yield new information that informs the further development of both sets of beliefs.

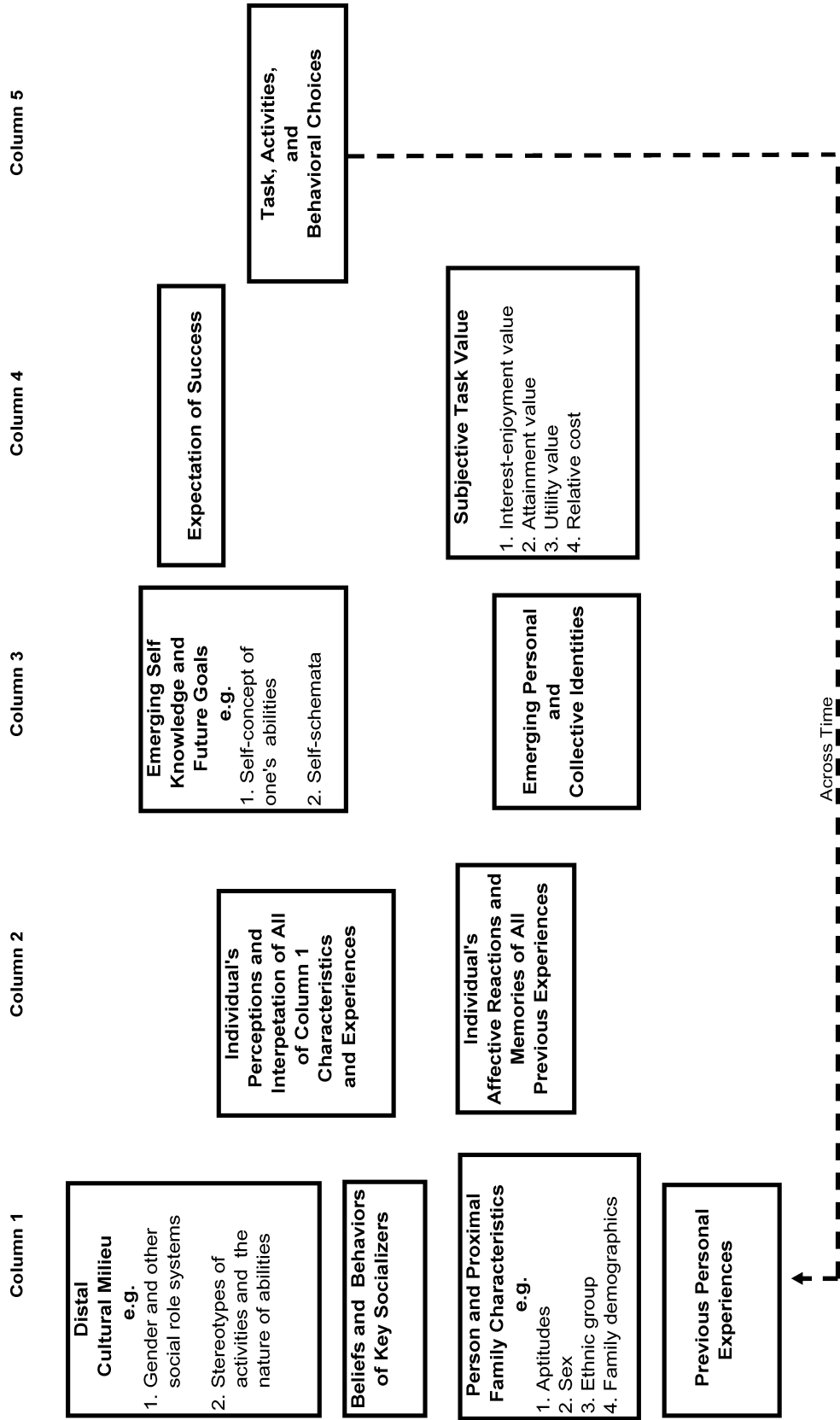


FIGURE 1 Simplified version of the Eccles et al. Expectancy Value Model of Motivated Behavioral Choice. *Note.* The number items within several of the boxes are just examples. Boxes represent large categories of constructs at the same theoretical level. Causal influences is assumed to go predominantly from left to right. I have left out the arrows for simplicity. By and large, constructs within a column influence each other reciprocally. Since the models plays out over time, I have included one arrow to illustrate the fact that today's choices become part of tomorrow's history of experience. This arrow includes the agentic effects of individual's choices on subsequent behaviors of socializers and the larger cultural milieu.

In addition, with maturation, further development will be informed by at least two processes. First, every cultural group has notions about the ordering of developmental tasks and experience. Consequently, every cultural group structures sequences of experiences accordingly. As a result, individuals will be exposed to different types of situations that have different behavioral norms and provide different types of challenges with which the individual must cope as they mature. These situational demands, as they are interpreted and interacted with by each individual, provide abundant new information that can be used by the individual to shape new views of the self and the world and thus new personal and collective identities. Second, with increasing maturity, each individual will become better able to pick social contexts and experiences that also allow the individual to shape their own sets of beliefs—creating new sets and modifying existing sets of self and task/activity/behavior-related beliefs. These new beliefs may be incorporated in the salience, centrality, and content of many possible personal and collective/social identities. Thus, the process of forming “Me” and “We” selves and then of attaching differential values and importance to the various aspects of these selves is a very fluid and dynamic process both across contexts at one point in time and within contexts across time.

In essence, I believe that individuals develop a set of beliefs about who they are and who they would like to be become (similar to Higgins’s, 1987, notion of real selves, ideal selves and ought selves; Harter’s, 1998, notion of self perceptions of competence; Markus and Nurius’s, 1986, notion of self schema and possible selves). When these views of the self become a salient and central part of a person’s identity, they become part of what I am referring to as personal and collective identities. In this sense, personal and collective identities include beliefs regarding both the importance of various personal and collective selves and the content of what behaviors, tasks, and activities are associated with the successful enactment of these selves.

I have now come to believe that the motivational aspects of identity and identity formation processes (those aspects linked to task/activity behavioral choice whether made consciously or nonconsciously) are directly related to my sociocultural expectancy-value model of motivated behavioral choices. I think it is useful to think of at least this one aspect of identity in terms of a set of beliefs about one’s abilities, personality, and characteristics (the Jamesian “Me” self and the “We” self I discussed earlier that is linked to collective/social identities) and the personal value one attaches to these characteristics and their associated personal goals. For example, let us consider the decision to major in science at college. The model predicts that people will be most likely to select this college major only if they are both confident of their ability to do well in the courses required by this major and place high value on majoring in science—in other words, if their ME self includes the competencies believed to be necessary to do well in science and the belief that majoring in sci-

ence is personally more valuable than majoring in something else.

As noted previously, we assume that these subject-area beliefs about one’s abilities in these specific subject areas and the value of developing these abilities and skills are shaped over time by individuals as they interact with experiences linked to the related subject areas, as well as by the individual’s subjective interpretation of those experiences (e.g., does the person think that her/his successes are a consequence of high ability, lots of hard work, luck, or high-quality teaching; does the person believe that competencies in different subject areas are incremental or entity-based?). Likewise, we assume that the relative value of a particular college major rather than another to each individual is influenced by several factors. For example, does the person enjoy studying science more than reading literature? Is majoring in science seen as more instrumental in meeting one of the individual’s long- or short-range goals than other majors? Have the individual’s parents or counselors insisted that she or he major in science or, conversely, have people tried to discourage the individual from majoring in science? As I discuss next, I believe that the answers to each of these questions can sometimes be found in individuals’ developing personal and collective identities. I discuss personal-identity-related processes first and then apply these ideas to the possible role of gender collective identities to behavioral choices.

EXPECTATIONS AND PERSONAL EFFICACY AS MEDIATORS OF ACHIEVEMENT-RELATED CHOICES

Expectations for success, confidence in one’s abilities to succeed, and personal efficacy have long been recognized by decision and achievement theorists as important mediators of behavioral choice (see Eccles, Wigfield, & Schiefele, 1998). There have been numerous studies demonstrating the impact of task specific expectations for success and related constructs on a variety of behavioral choices (see Eccles et al., 1998) including educational and vocational choices among both average and gifted populations. For example, Betz and Hackett (1986) demonstrated a link between ratings of personal efficacy in various academic subjects and career choice. It is clear in this work that individuals’ expectations for success vary across tasks and that people are much more likely to select those tasks for which they have high expectations for success and a high sense of personal efficacy. In addition, my colleagues and I believe that task/activity/behavior choices are influenced by the intraindividual’s hierarchy of success expectations and personal efficacies. We predict that people select those activities for which they feel most efficacious (or for which they have the highest expectations for success). By and large evidence supports this prediction (see Eccles et al., 1998).

What influences these intraindividual hierarchies of expectations for success? In our model, we predict that ability self concepts and perceptions of task difficulty interact as the primarily psychological predictors of expectations for success. Empirically, we have found that ability self-concepts are so directly linked to expectations for success that it is quite difficult to distinguish between these two constructs. Thus it seems that the “Me” self ideas about one’s competencies across a wide range of tasks are very direct determinates of expectations for success. But where do these self concepts come from? Like several other scholars (e.g., Bandura, 1986; Marsh, 1986; Ruble, 1983; Ruble & Martin, 1998), I believe that both external and internal comparison processes are key—people assess their own skills by comparing their performances with those of other people and with their own performances across domains. They also likely compare the amount of effort it takes them to succeed across different domains and conclude that some tasks are easier for them to master than others. This may involve comparing tasks or activities in terms of the current level of effort needed to do well or the ease with which they improved their skills over time. All of these types of comparisons help individuals answer questions like: How good am I at X? and Which areas am I better at or more likely to do well at?

But these types of comparisons are not the only source of information for these types of questions. Psychological interpretative processes linked to causal attributions are also important. We know that people who attribute their success in a particular domain to high levels of aptitude come to rate their related abilities higher and to have higher expectations for future success in that domain (relative to other domains). Similarly, we know that people who attribute difficulties in mastering a particular domain to lack of effort or inadequate instruction rather than lack of talent or aptitude maintain higher expectations for future success and persist in trying to master the material longer than people who attribute their difficulties to lack of sufficient aptitude.

Social influences are also important. Parents, teachers, and peers tell people what they are good at or not good at, often with very little information on which to base such conclusions (see Eccles, 2006). Often such statements are based on stereotypes and other socially constructed belief systems. Similarly, socializers provide causal attributions for other people’s performance that are likely to influence how individuals come to make attributions for their own experiences over time. Individuals also draw inferences about their likely abilities through processes associated with modelling and vicarious learning (see Ruble & Martin, 1998).

Finally, individuals play a very agentic role in co-constructing with others beliefs about what they are good at and what are their likely aptitudes for mastering various possible tasks and activities. This can be done through communication patterns or through individuals actively seeking out particular experiences in which they get the opportunity to both learn new skills and demonstrate existing skills.

What is important here is to note that all of these sources of information feed into the identity formation process linked to the development of various components of the ME self. These identity components, in turn, can motivate or demotivate behavior when they are activated in relevant situations and contexts. Thus there is constant development over time as individuals are exposed to, or select, more experiences and interpret these experiences in ways that inform their growing “Me” selves.

SUBJECTIVE TASK VALUES AS MOTIVATORS OF ACTIVITY CHOICES

Subjective Task Value is the second major component of the expectancy/value model of achievement-related choices shown in Figure 1. My colleagues and I predict that life-defining choices such as those linked course enrollments, college majors, and occupational choice are influenced by the value individuals attach to the various achievement-related options they believe are available to them. Extensive evidence supports this prediction (see Eccles et al., 1998). I now believe that subjective task value is directly related to personal and collective/social identities and the identity formation processes underlying the emergence of these identities. To make this association clearer, I want to outline exactly how I think about the notion of subjective task value.

Like others (e.g., Raynor, 1974), I assume that subjective task value is a quality of the task that contributes to the increasing or decreasing probability that an individual will select it. My colleagues and I suggest that this quality is influenced by at least four components: (a) intrinsic interest in, and enjoyment of, the task; (b) the utility of the task in facilitating one’s long range goals or in helping the individual obtain immediate or long-range external rewards; (c) attainment value or the value an activity has because engaging in it is consistent with one’s self-image and personal and collective/social identities; and (d) the cost of engaging in the activity in terms of financial and emotional costs, as well as in terms of the potential meaning of the behavior for either disconfirming a salient personal or collective identity or preventing one from engaging in other behaviors that are key to confirming a salient personal or collective/social identity. The last two of these are especially important for my discussion of the relation of personal and collective identities to subjective task value. But let me say a bit about each of these four components.

Interest Value

Interest value is based on anticipated enjoyment of the engaging in the activity or behavior itself. This aspect of value relates most directly to the activity itself and the pleasure it provides the individual while engaged in it. It is quite likely that, over time, the individual will develop competence at the

task and thus skill at this activity will become part of the individual's "Me" self. It is also likely through classical conditioning that the person will come to value this aspect of his or her "Me" self because of both growing competence and enjoyment. Thus a task that begins being valued primarily because of interest can over time become valued because of its attainment value. In fact, it is quite likely that one will need to incorporate this domain into one's personal identity structures to have sufficient motivation to engage in the types of challenging and effortful practice needed to become a true expert in any particular skill area.

Attainment Value

In the past, I conceptualized attainment value in terms of the needs and personal values that an activity/behavior or task fulfills. Today I am conceptualizing it more in terms of personal and collective identities. As they grow up individuals develop an image of who they are and what they would like to be. This image is made up of many component parts including (a) conceptions of one's personality and capabilities, (b) long-range goals and plans, (c) schema regarding the proper roles of men and women, (d) instrumental and terminal values (Rokeach, 1973), (e) motivational sets, (f) ideal and ought images of what one should be like, and (g) social scripts regarding proper behavior in a variety of situations. Those parts of an individual's self-image that are central or critical to self-definition should influence the value the individual attaches to various educational and vocational options; these differential values, in turn, should influence the individual's achievement-related choices (Eccles, 1994; Markus & Nurius, 1986). For example, if helping other people is a central part of an individual personal or collective identity, then this individual should place higher value on "helping" occupations than on "non-helping" occupations.

Essentially, I am arguing that personal and collective identities operate in ways that both decrease the probability of engaging in those activities or roles perceived as inconsistent with one's central values and identities as well as increase the probability of engaging in roles or activities perceived as consistent with one's definition of self—that is, one's personal and collective identities. More specifically, I believe that individuals perceive tasks in terms of certain characteristics that can be related to their needs, values, and both personal and collective identities. For example, a difficult task requiring great effort for mastery may be perceived as an achievement task; if it also involves pitting one's performance against others, it may be perceived as a competitive task. Other tasks may be perceived in terms of nurturance, power, or aesthetic pleasure. Participating in a particular task will require the demonstration of the characteristics associated with the task. Whether this requirement is seen as an opportunity or a burden will depend on the individual's needs, motives, personal values (i.e., their personal identity) and on the individual's

desire to demonstrate these characteristics both to himself or herself and to others.

In summary, I assume the following: (a) Individuals seek to confirm their possession of those characteristics central to their self-image and both personal and collective identities, (b) various tasks provide differential opportunities for such confirmation, (c) individuals place more value on those tasks that either provide the opportunity to fulfill their identities or are consistent with their identities and long-range goals, and (d) individuals are more likely to select tasks with high subjective value than tasks with lower subjective value. To the extent that individuals have different self-images and identities, various activities will come to have different subjective value for them. This aspect of subjective task value is much like what Deci and Ryan (see Deci & Ryan, 2004) have referred to as behaviors that are motivated by integrated regulation—that is behaviors for which individuals have integrated both internal and external sources of motivation into their own self-schema and are now performing the behaviors because they are central to their personal identity.

Utility Value

Utility value is the value a task has because it fulfills a less personally central goal. It is much like attainment value but I reserve the term attainment value for the value a task or behavior takes on because of role it plays in fulfilling a part of the individual's personal and collective identities. The distinction I am drawing here is quite similar to the distinction Deci and Ryan make between identified versus integrated regulation.

Perceived Cost

According to our model, the value of a task should also depend on a set of beliefs that can best be characterized as the cost of participating in the activity. Cost is influenced by many factors, such as anticipated anxiety, fear of failure, and fear of the social consequences of success. Cost can also be conceptualized in terms of the loss of time and energy for other activities that may be more central to one's personal and collective identities. People have limited time and energy. They can not do everything they would like. They must choose among activities. To the extent that one loses time for Activity B by engaging in Activity A and to the extent that Activity B is high in one's hierarchy of importance, then the subjective cost of engaging in A increases. Alternatively, even if the attainment value of A is high, the value of engaging in A will be reduced to the extent that the attainment value of B is higher and to the extent that engaging in A jeopardizes the probability of successfully engaging in B.

Empirical Support

Now let me return to the question of whether individual differences in the relative subjective task value of a variety of

occupations mediate individual differences in occupational choice. As predicted in the model in Figure 1, several studies provide support for the hypothesized link between personal values and achievement-related choices. Dunteman, Wisenbaker, and Taylor (1978) studied the link between personal values and selection of one's college major using a longitudinal, correlational design. They identified two sets of values both that predicted students' subsequent choice of major and differentiated the sexes: the first set (labeled thing-orientation) reflected an interest in manipulating objects and understanding the physical world; the second set (labeled person-orientation) reflected an interest in understanding human social interaction and a concern with helping people. Students who were high on thing-orientation and low on person-orientation were more likely than other students to select a math or a science major. Not surprisingly, female participants in their study were more likely than male participants to be person-oriented and to major in something other than math or science; in contrast, the male participants were more likely than the female participants both to be thing-oriented and to major in math and science.

We have also studied this question in our longitudinal study of approximately 1,000 adolescents from southeastern Michigan (The Michigan Study of Adolescent Life Transitions [MSALT]). Our results provide further support for the predicted relation between personal values, subjective task values, and occupational choice. When these adolescents were seniors in high school, we assessed the following constructs: occupational aspirations, the value and importance they attached to a wide array of occupations and of occupational characteristics (e.g., work that allows one to help other people, work that allows one to earn a lot of money, etc.), and their personal efficacy for success in the same array of occupations. We then used discriminant function analysis to determine the strongest predictors of occupational choice within gender (for details, see Eccles, Barber, & Jozefowicz, 1999). As predicted in the model in Figure 1, for every occupational category, the relevant dimension of personal efficacy/expectations for success was an important predictor (e.g., efficacy for health-related occupations was a strong predictor only of plans to enter a health-related profession; efficacy for working with people was a strong predictor only of plans to enter a human service occupation).

In addition, as we predicted, the values attached to relevant job characteristics were significant predictors of occupational aspirations. But the findings for values were more complex in that values had both positive and negative predictive power. As we predicted, for any given occupational category, the extent to which the individual valued characteristics associated with the occupation predicted plans to enter that occupational category (e.g., valuing creativity predicted women's plans to become artists or writers, valuing helping others predicted women's plans to enter either human service or health-related professions). In addition, however, and consistent with the notion that it is the individual hierarchy of values that is most

important, valuing helping others predicted *not aspiring* to either a physical science-related profession or a business/law related profession. Similarly, valuing occupational prestige predicted *not aspiring* to a human service occupation.

These results suggest that although expectations for success and personal efficacy do predict occupational choice, they are not the only predictors. The evidence suggests that positive expectations are a necessary but not sufficient predictor of occupational choice. Believing that one can succeed at an occupation is critical to one's decision to enter that occupational field. But, as predicted by the Eccles et al. model of task choice, which particular occupation one selects also appears to depend on the value one attaches to various occupational characteristics. These findings support the hypothesis that individuals select the occupation that fits best with their hierarchy of occupationally-relevant values.

SUMMARY

It is clear that self-related beliefs regarding both one's relative competences and the relative subjective task value are critical influences on behavioral choices. Together, I believe these two sets of hierarchical beliefs form one source of the motivational contribution of personal identities to behavior. William James argued that ability self concepts should only affect mental health to the extent that the abilities were highly valued. Individual should not care about being incompetent in domains that have no value to them. Similarly, I argue that the motivational power of ability self concepts to influence task choice is, at least partially, determined by the value individuals attach to engaging in the domain.

I also believe that these two sets of self-perceptions and identity fragments influence each other synergistically over time through processes that could be seen as central to personal identity formation. It is likely that the value one attaches to different activities will influence the development of one's ability self concepts in that domain and vice versa. On one hand, because subjective task values influence the likelihood of engaging in specific activities, they should also influence one's developing competencies in various activities. As a result, one should develop greater competence for those activities that have high subjective task value. In turn, because actual competence is a strong predictor of self concepts of ability, subjective task values should influence the differentiation of individuals' ability self concepts over time. On the other hand, differential competencies should also influence the ontogeny of subjective task value for several reasons. First, because experiences of success and failure influence individuals' emotional reactions to the associated tasks and activities, individuals, through processes associated with classical conditioning, come to value the tasks they do well in more than the tasks in which they do not do well. Furthermore, because experienced pleasure is likely to be the highest for those activities that provide both a challenge and

the opportunity to achieve mastery, success at moderately difficult but achievable tasks is likely to lead to the greatest increases in expectancy related self concepts and subjective task value.

Second, it is also likely that psychologically healthy individuals will work to bring their ability self concepts and subjective task values in line to maximize their opportunities to have mastery experiences. One very adaptive means of coping with failure on achievement-related tasks and activities is to reduce the subjective task value one attaches to competence in these domains. Such a psychological system would lead individuals to place the greatest subjective task value on those tasks and activities at which they are most likely to both enjoy and excel. Such a behavioral strategy would optimize their achievement-related behavioral investments, which would also optimize the time and energy they have to devote to other non-achievement-related activities that have high subjective task value. I believe that these types of psychological processes are central to personal identity formation.

COLLECTIVE IDENTITIES: GENDER ROLES, GENDER-ROLE IDENTITY, AND MOTIVATED BEHAVIORAL CHOICES

This analysis has a number of important implications for our understanding of the ways in which social roles like gender, social class, and ethnicity end up influencing motivated life choices through the relation of collective or social-role identity formation, collective identities and the hierarchies associated with individuals' expectancies for success (domain specific personal efficacies) and subjective task values. Such an analysis also helps us understand socially defined group differences in life choices (e.g., gender, race, ethnic group, and social class group differences in the educational and vocational choices). For illustrative purposes, I focus on gender in this article. I believe a similar analysis can be and should be applied to a wide variety of socially defined groups of individuals.

Because experiences linked to both external socialization and more agentic self-socialization shape both individuals' self-perceptions and their goals and values, men and women should acquire different self-concepts, different patterns of expectations for success across various activities, and different values and goals through the processes associated with gender-role socialization and self-socialization. Through their potential impact on both expectations for success and subjective task value, these externally and internally generated experiences can affect educational vocational choices in several ways.

For one, gender-role related experiences could lead male and female individuals to have different hierarchies of core personal values (such as their terminal and instrumental values; Rokeach, 1973). For example, among the high school

seniors in our longitudinal study of adolescent life transitions (MSALT), young women placed more value than young men on the importance of making occupational sacrifices for one's family and on the importance of having a job that allows one to both help others and do something worthwhile for society. In contrast, the young men placed more value on becoming famous, making lots of money, seeking out challenging tasks, and doing work that involves the use of math and computers (Eccles et al., 1999). These women and men did not differ in the value they attached either to doing one's best at whatever job one takes on or to doing creative and/or intellectually stimulating work. To the extent that these differences exist, tasks embodying various characteristics should have different attainment and cost value for women and men. Our data support this prediction. We followed the MSALT sample until they were in their 20s. Both college major and occupational choices were predicted by these beliefs. Furthermore, the primary reasons that the women were less likely than the men to go into engineering and physical science was because the women were more likely than the men to want jobs that directly helped people. This job value predicted NOT going into physical science and engineering professions (see Eccles, 2007).

Gender-role related experiences can also lead male and female individuals to place different values on various long-range goals and adult activities. The essence of gender roles (and of collective/social roles in general) is that they define the activities that are central to the role. In other words, they define what one should do with one's life to be successful in that role. If success in one's personally defined gender role is a central component of one's personal and/or collective identities, then activities that fulfill this role should have high attainment value and activities that hamper efforts at successfully fulfilling one's gender role be seen as having high cost. Gender roles mandate different primary activities for women and men. Traditionally, women are supposed to support their husbands' careers and raise their children; men are supposed to compete successfully in the occupational world in order to confirm their worth as human beings and to support their families. To the extent that a woman has internalized this cultural definition of the female role, she should rank order the importance of various adult activities differently than her male peers. In particular, she should rate the parenting and the spouse-support roles as more important than a professional career role and she should be more likely than her male peers to resolve life's decisions in favor of these family roles. We found evidence of these gender differences in our longitudinal study of adolescents (Eccles, 2007; Eccles et al., 1999). In contrast, men should rate family and career roles as equally important. In fact, because they can fulfill their family role by having a successful career, men should expect these two sets of roles to be compatible. Consequently, aspiring after a high-status, time-consuming career should not pose as much of a conflict for men and such careers should have high subjective value not only because of the

rewards inherent in these occupations but also because they fulfill the male gender-role mandate.

Similarly, gender roles can influence the definition one develops of successful performance of those activities considered to be central to one's identity. Consequently, women and men may differ in their conceptualization of the requirements for successful task participation and completion. If so, then men and women should approach and structure their task involvement differently even when they appear on the surface to be selecting a similar task. The parenting role provides an excellent example of this process. If men define success in the parenting role as an extension of their occupational role, then they may respond to parenthood with increased commitment to their career goals and with emphasis on encouraging a competitive drive in their children. In contrast, if women define success in the parenting role as high levels of involvement in their children's lives, they may respond to parenthood with decreased commitment to their career goals. Furthermore, if staying home with her children and being psychologically available to them most of the time are central components of a woman's gender-role schema, then involvement in a demanding, high-level career should have reduced subjective value precisely because it conflicts with a more central component of her identity.

Women and men could also differ in the density of their goals and values. There is some evidence suggesting that men are more likely than women to exhibit a single-minded devotion to one particular goal, especially their occupational goal. In contrast, women seem more likely than men to be involved in, and to value, competence in several activities simultaneously (Baruch, Barnett, & Rivers, 1983; Maines, 1983; Terman & Oden, 1947). If this is true, then the cost of devoting a lot of time to one goal at the expenses of other goals should be higher for women than men. Several researchers have suggested that the perceived conflict of traditional female values and roles with the demands of male-typed achievement activities is very salient to women (e.g., Baruch et al., 1983; Eccles, 1994; Farmer, 1985). How this conflict affects women's lives is a complex issue. Some studies emphasize its negative consequence.

This conflict in gifted girls' lives is well illustrated by an ethnographic study of a group of gifted elementary school girls by Lee Anne Bell (1989). She interviewed a multiethnic group of third- to sixth-grade gifted girls in an urban elementary school regarding the barriers they perceived to their achievement in school. Five gender-role related themes emerged with great regularity: (a) concern about hurting someone else's feeling by winning in achievement contests, (b) concern about seeming to be a braggart if one expressed pride in one's accomplishments, (c) over reaction to nonsuccess experiences (apparently not being the very best is very painful to these girls), (d) concern over their physical appearance and what it takes to be beautiful, and (e) concern with being overly aggressive in terms of getting the teacher's

attention. In each case the gifted girls felt caught between doing their best and either appearing feminine or doing the "caring" thing.

Similarly, in his study of the worries of doctoral students in mathematics, Maines (1983) found that the men were most concerned about their professional status and about their mentors' estimates of their professional potential. In contrast, the women were most concerned about the impact of their graduate training on their families and their other interests; they felt that graduate training was taking too much time and energy away from other activities that they valued just as much. Thus, the women appeared to place high attainment value on several goals and activities; in contrast, the men appeared more likely to focus on one main goal: their professional development. If this is true then the psychological cost of engaging in their primary goal in terms of time and energy lost for other important goals would certainly be less for these men than for their female colleagues.

In contrast, several investigators have pointed out that this conflict results, in part, from the fact that women have multiple roles and multiple goals (e.g., Baruch et al., 1983; Crosby, 1991; Eccles, 1994; Grossman & Chester, 1990). These multiple roles provide richness to women's lives as well as stress. There is growing evidence that women with multiple roles are healthier both mentally and physically than women with few roles and than men in general (Baruch et al., 1983; Crosby, 1991).

Finally, as predicted in the model in Figure 1, gender roles could affect the subjective value of various educational and vocational options indirectly through their influence on the behaviors and attitudes of the people individuals are exposed to as they grow up. If, for example, parents, friends, teachers, and/or counselors provide boys and girls with different feedback on their performance in various school subjects, with different advice regarding the importance of various school subjects, with different information regarding the importance of preparing to support oneself and one's family, with different information regarding the occupational opportunities that the student should be considering, and with different opportunities to develop various skills, then it is likely that girls and boys will develop different self-perceptions, different patterns of expectations for success, and different estimates of the value of various educational and vocational options. Similarly, if the girls and boys around the children engage in different educational and vocational activities, then girls and boys should develop different ideas regarding those activities for which they are best suited. Finally, if one's peers reinforce traditional gender-role behaviors and values, girls and boys will likely engage in different activities as they are growing up and thus are likely acquire different competencies, different patterns of expectations or success and different values and long-term goals. There is growing evidence that each of these processes operate in the lives of American children as they grow up in this culture (see Eccles, 1993; Ruble & Martin, 1998).

My colleagues and I are currently working most intensively on the roles of parents and teachers. Our findings clearly indicate that parents and teachers distort their perception of the competencies of particular female and male individuals in various domains in a gender-role stereotypic fashion. That is, when parents who endorse the traditional gender-role stereotypes regarding the distribution of talent and interests among girls and boys are asked to rate their children's competencies in a male-typed activity like athletics or physics, they underestimate their daughters' talent and overestimate their sons' talent (Eccles, 2006; Eccles et al., 1990). Furthermore, parents provide girls and boys with very different experiences and with different messages regarding their talent and their best educational and vocational options. For example, they provide boys with more opportunities to do sports and computing; in contrast, they provide girls with more opportunities to read and to interact socially with their peers (Eccles, 1993). They also make different attributions for daughters' versus sons' academic successes and failures (Yee & Eccles, 1988). In turn, these gendered experiences and messages appear to undermine girls' confidence in their own math abilities and interest in applied math-related courses and fields, particularly relative to other abilities and interests.

My colleagues and I predict that gender differences in these identity-related beliefs should help explain the gender differences we see in educational and occupational choices. Our own data support this hypothesis. In a longitudinal study of the math course enrollment decisions of intellectually able, college-bound students, gender differences in students' decisions to enroll in advanced mathematics were mediated primarily by gender differences in the value the students' attached to mathematics (Eccles et al., 1983; Updegraff, Eccles, Barber, & O'Brien, 1996). More specifically, the girls were less likely than the boys to enroll in advanced mathematics primarily because they felt that math was less important, less useful, and less enjoyable than did the boys. We also found clear evidence of gender differences in the value attached to various school subjects and activities in our study of elementary-school-aged children enrolled in a gifted program (Eccles & Harold, 1992). Even though there was no gender difference in expectations for success in mathematics, these girls reported liking math less than the boys; the girls also rated math as less useful than the boys. In addition, the boys also attached greater importance to sports than did the girls.

In summary, there is substantial evidence of gender differences in the both expectancy-related and subjective task value related beliefs related to educational and occupational options. Furthermore, these gender differences mediate, to a very large extent, the gender differences in the educational and occupational choices of American women and men. I believe these differences are directly related to the collective identity formation processes associated with gender in our society. Furthermore, I believe that thinking of collective identities in terms of these motivational-self-related beliefs

provides a powerful theoretical tool for understanding how membership in particular socially defined groups influences the motivated choices people make for their lives.

DEVELOPMENTAL CHANGE IN THE CONTENT, SALIENCE, AND VALENCE OF GENDER AS A COLLECTIVE IDENTITY

Gender roles provide an excellent example of the types of developmental changes we discussed at the start of this article. Most theorist of gender role development agree that the salience of gender roles shift over the life course and that the centrality of gender roles for one's collective identities changes as well (see Ruble & Martin, 1998). Gender roles appear to be particularly salient during the preschool years, again during early and middle adolescence and again at various points in the life cycle linked to family formation and parenting. Not surprisingly, measures of gender-role identity yield particularly high scores during these periods of life (Ruble & Martin, 1998); so do measures of gender-role behavioral enactments (i.e., behavioral choices). Gender-role theorists also agree that these shifts in salience reflect processes linked to both self-socialization (the agentic incorporating and then acting out of stereotypic gender-role related behavior patterns) and external socialization pressures to conform to stereotypic gender roles and behavioral norms. For example, it now appears that very young boys and girls identify themselves as male or female and then become highly motivated to learn about, and enact, the gender norms associated with their own sex even in families in which such behaviors are not modeled and are actively discouraged (Ruble & Martin, 1998).

Change in the centrality of one's gender and of the valence of particular contents of gender-role stereotypes also change over the life course. A growing awareness of the limitations of gender roles and the discriminatory nature of female gender roles begins for many young girls during middle childhood and then accelerates in the late adolescent and early adult years (Eccles & Bryan, 1994). Stage theorists of gender-role development point to these periods as times of questioning and conscious raising (Eccles & Bryan, 1994). For many young women, this questioning becomes a turning point in terms of both the centrality and content of one's gender-related collective identity—a shift to a more feminist collective identity that includes decreasing centrality of the traditional gender role identity beliefs, increasing centrality and salience of a feminist collective identity, and a shift in the attainment value of behaviors, tasks, and activities linked to both of these collective identities.

Similarly, gendered collective identities provide an excellent example of the fluidity of these processes over contexts at one point in time. Markus and Nurius (1986) argued that the demands and norms associated with different contexts would make one's membership in a gender category more

or less salient and thus would make the attainment value of behaviors linked to one's understanding of the content of one's preferred gender-role identity vary across contexts. If this is true, then the likelihood of specific behavioral enactments would depend on the salience of the content of one's gendered collective identity fragments in each context.

CONCLUSION

In this article, I have tried to link a classic form of expectancy-value models of behavioral choices to the processes linked to the enactment of personal and collective identities. In this, I have stressed the motivational role of personal and collective identities. I have argued that identities have at least three components: (a) a value component that captures the salience, centrality, and valence a person attaches to specific individual characteristics and collective groups of which one is a member; (b) a content component that includes all of the beliefs the person has about which tasks, behaviors, mannerism, activities, and so on, are associated with the successful enactment of various personal and collective identities; and (c) an efficacy or expectancy component that includes the individual's beliefs about his or her ability to enact these various behaviors. I then argued that these three components interact with each other and a wide range of experiences and interpretative processes over time to shape each other and thus to influence behavioral choices at any one point in time. Finally, I outlined various ways in which these identities and beliefs develop over the life course and provided one example—the collective identities associated with gender—of how my research has used these ideas to study the life choices of women and girls. Do I believe that the processes and mechanisms I have outlined are the only ways in which identities manifest themselves? Absolutely not! I have tried to provide just one possible view of the link between personal and collective identities and motivation in educational settings regarding educational decisions.

REFERENCES

- Adams, G. R., Ryan, J. H., Hoffman, J. J., Dobson, W. R., & Nielsen, E. C. (1984). Ego identity status, conformity behavior, and personality in late adolescence. *Journal of Personality and Social Psychology*, *47*, 1091–1104.
- Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin*, *130*, 80–114.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Baruch, G., Barnett, R., & Rivers, C. (1983). *Life prints*. New York: McGraw-Hill.
- Bell, L. A. (1989). Something's wrong here and it's not me: Challenging the dilemmas that block girls' success. *Journal for the Education of the Gifted*, *12*, 118–130.
- Betz, N. E., & Hackett, G. (1986). Applications of self-efficacy theory to understanding career choice behavior. *Journal of Social and Clinical Psychology*, *4*, 279–289.
- Crosby, F. J. (1991). *Juggling*. New York: Free Press.
- Cross, W. (1991). *Shades of black: Diversity in African-American identity*. Philadelphia: Temple University Press.
- Deci, E. L., & Ryan, R. M. (2004). *Handbook of self-determination theory*. Rochester, NY: University of Rochester Press.
- Duntzman, G. H., Wisenbaker, J., & Taylor M. E. (1978). *Race and sex differences in college science program participation* (Report to the National Science Foundation). Research Triangle Park, NC: Research Triangle Park.
- Eccles, J. S. (1993). School and family effects on the ontogeny of children's interests, self-perceptions, and activity choice. In J. Jacobs (Ed.), *Nebraska Symposium on Motivation, 1992: Developmental perspectives on motivation* (pp. 145–208). Lincoln: University of Nebraska Press.
- Eccles, J. S. (1994). Understanding women's educational and occupational choices: Applying the Eccles et al. model of achievement-related choices. *Psychology of Women Quarterly*, *18*, 585–609.
- Eccles, J. S. (2006). Families, schools, and developing achievement-related motivations and engagement. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 665–691). New York: Guilford.
- Eccles, J. S. (2007). Where are all the women? Gender differences in participation in physical science and engineering. In S. J. Ceci & W. M. Williams (Eds.), *Why aren't more women in science? Top researchers debate the evidence* (pp. 199–210). Washington, DC: American Psychological Association.
- Eccles, J. S., Barber, B., & Jozefowicz, D. (1999). Linking gender to education, occupation, and recreational choices: Applying the Eccles et al. model of achievement-related choices. In W. B. Swann, J. H. Langlois, & L. A. Gilbert (Eds.), *Sexism and stereotypes in modern society: The gender science of Janet Taylor Spence* (pp. 153–192). Washington, DC: APA Press.
- Eccles, J. S., & Bryan, J. (1994). Adolescence and gender-role transcendence. In M. Stevenson (Eds.), *Gender-roles across the life span: A multidisciplinary perspective* (pp. 111–148). Muncie, IN: Ball State University Press.
- Eccles, J. S., & Harold, R. D. (1992). Gender differences in educational and occupational patterns among the gifted. In N. Colangelo, S. G. Assouline, & D. L. Ambrosio (Eds.), *Talent development: Proceedings from the 1991 Henry B. and Jocelyn Wallace National Research Symposium on Talent Development* (pp. 3–29). Unionville, NY: Trillium Press.
- Eccles, J. S., Wigfield, A., & Schiefele, U. (1998). Motivation. In N. Eisenberg (Ed.), *Handbook of child psychology, Vol. 3* (5th ed., pp. 1017–1095). New York: Wiley.
- Eccles (Parsons), J., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., et al. (1983). Expectations, values and academic behaviors. In J. T. Spence (Ed.), *Perspective on achievement and achievement motivation* (pp. 75–146). San Francisco: W. H. Freeman.
- Erikson, E. H. (1980). *Identity and the life cycle*. New York: Norton.
- Farmer, H. S. (1985). Model of career and achievement motivation for women and men. *Journal of Counseling Psychology*, *32*, 363–390.
- Grossman, H., & Chester, N. L. (Eds.). (1990). *The experience and meaning of work in women's lives*. Hillsdale, NJ: Erlbaum.
- Harter, S. (1998). The development of self-representations. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology* (Vol. 3, 5th ed., pp. 553–617). New York: Wiley and Sons.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*, 319–340.
- James, W. (1892/1963). *Psychology*. New York: Fawcett.
- Kroger, J. (2004). *Identity in adolescence: The balance between self and other* (2nd ed.). London: Routledge.
- Maines, D. R. (1983, April). *A theory of informal barriers for women in mathematics*. Paper presented at the annual meeting of the American Educational Research Association, Montreal.

- Marcia, J. E. (2002). Identity and psychosocial development in adulthood. *Identity: An International Journal of Theory and Research*, 2, 7–28.
- Markus, H. R., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954–969.
- Marsh, H. W. (1986). Verbal and math self-concepts: An internal/external frame of reference model. *American Educational Research Journal*, 23, 129–149.
- Oyserman, D., & Markus, H. R. (1990). Possible selves and delinquency. *Journal of Personality and Social Psychology*, 59, 112–125.
- Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin*, 108, 499–514.
- Phinney, J. S. (1996). When we talk about American ethnic groups, what do we mean? *American Psychologist*, 51, 918–927.
- Raynor, J. O. (1974). Future orientation in the study of achievement motivation. In J. W. Atkinson & J. O. Raynor (Eds.), *Motivation and achievement* (pp. 121–154). Washington, DC: Winston Press.
- Rokeach, M. (1973). *The nature of human values*. New York: The Free Press.
- Ruble, D. (1983). The development of social comparison processes and their role in achievement-related self-socialization. In E. T. Higgins, D. N. Ruble, & W. W. Hartup (Eds.), *Social cognition and social development: A sociocultural perspective* (pp. 134–157). New York: Cambridge University Press.
- Ruble, D. N., & Martin, C. L. (1998). Gender development. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology* (5th ed., Vol. 3, pp. 933–1016). New York: Wiley and Sons.
- Sellers, R. M., Smith, M. A., Shelton, J. N., Rowley, S. A. J., & Chavous, T. M. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality and Social Psychological Review*, 2, 18–39.
- Terman, L. M., & Oden, M. H. (1947). *Genetic studies of genius: Volume IV: The gifted child grows up*. Stanford, CA: Stanford University Press.
- Updegraff, K. A., Eccles, J. S., Barber, B. L., & O'Brien, K. M. (1996). Course enrollment as self-regulatory behavior: Who takes optional high school math courses. *Learning and Individual Differences*, 8, 239–259.
- Yee, D., & Eccles, J. S. (1988). Parent perceptions and attributions for children's math achievement. *Sex Roles*, 19, 59–68.