

On the Study of Educational and Occupational Life-Paths in Psychology: Commentary on the Special Issue

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These papers represent continuing advances in the study of educational and occupational life-paths in psychology. In this commentary, I discuss the findings of each paper within a developmental systems theoretical framework. In doing so, I highlight the continuing need for psychologists to expand their view of the spectrum of psychological processes on the one hand, and the array of social environmental opportunities and barriers on the other, that co-contribute to how people make consequential life choices involving their education and careers. I conclude by discussing issues of agency, awareness, opportunity, and competing demands in assessing individuals' life choices; as well as the need for psychologists to study issues of equity in education in international contexts.

The process of building a world-class “great society” in terms of worldly power, status, and material wealth is accomplished in no small measure today through the pursuits of math, physical and computer science, and engineering. These pursuits support scientific discovery, technological innovations, and the interests of nations in terms of military power and economic development. The alignment of these fields with the interests of nations may explain why policy-makers often decry national “crises” when the pool of candidates entering these fields dwindles and why societal concerns about educational reform in math and science follow from threats to military and economic interests—whether the threat be a satellite flying overhead in a Cold War (Bruner, 1960) or a job being outsourced to an Indian engineer in Bangalore (Friedmann, 2005). We rarely hear such national level concerns about the state of arts, humanities, or social science education, but that is another story for another time.

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What is of interest here scientifically is that it appears that men tend to aspire more towards these math, science, and engineering-related fields and occupations, on average, compared with women, in certain developed nations like the United States (Jacobs, in press; UNESCO, 2003, 2005). The incentives of these forms of work often (though not always) involve power (often in relation to understanding and controlling nature), social status, and material wealth for both individuals and nations. On the other hand, the processes that make the very development of a “great society” possible through the development of a “good society”—the raising of families, the educating of children, and the caring for the sick, the elderly, and the impoverished tend to be more the province of women, on average, compared with men, in nations all over the world (UNESCO, 2003, 2005). The incentives of these forms of work often (although not always) revolve around issues of nurturance, care, and relationship. These forms of work generally do not, in comparison to jobs associated with math, physical and computer science, and engineering, afford material wealth or sociocultural prestige.

The papers in this Special Issue focus on the question of why fewer women than men choose to participate in courses and careers associated with these fields from the perspective of why individuals are *psychologically motivated* to make certain achievement-related choices rather than others. Several of the authors discuss how inequalities in choice and participation in these fields can lead to inequalities between women and men in career satisfaction, level of career prestige, and salary. Thus, there is an implicit concern running through these papers that differential enrollment in studies and careers in these fields are *social problems* that reflect issues of *social justice* in terms of equality of access, opportunity, and advancement. This is an important *sociological* issue that is not explicitly taken up by any of these papers but that, nonetheless, appears to be an important background assumption of each of them. This set of papers focuses on the *psychological* precursors to education- and career-related choices among males and females during adolescence and beyond, and thus provides a window onto the motivational variables that likely mediate between the social opportunities and constraints that may be differentially afforded to men and women that affect their educational and career-related life choices with regard to these fields.

Below, I describe the main findings of each paper and comment on them. I then discuss how these papers can be understood in relation to a developmental systems perspective on self/identity and its motivational *function* in shaping what I term “educational and occupational life-paths” (Roeser & Peck, 2003). I conclude by raising three “bigger questions” that these papers raised for me as I read through them, including: (a) When is a psychologically motivated *choice* an “authentic” *choice*?; (b) What assumptions do social scientists hold as to what constitutes careers of value and worth?; and (c) Why might it be it important to “go global” in research on gender and education in psychology today?

Comments on Individual Papers

In the first paper, Watt explores “gender imbalances” in high school adolescents’ mathematics course choices and math-related occupational aspirations. Drawing

upon Expectancy–Value Theory (Eccles, 1983), her findings document the existence of greater male participation in anticipated and actual math courses and anticipated math-related careers. Watt provides evidence that math-related self-perceptions of talent and expected success and values mediate gender differences in these outcomes after controlling for math achievement. No formal statistical tests of mediation are undertaken, however, so this interpretation of the findings remains tentative (Baron & Kenny, 1986). The results of this study provide a nice cross-cultural replication of previous work on gendered math coursework participation in other developed nations (see Eccles, Wigfield, & Schiefele, 1998; Nagy, Trautwein, Baumert, Köller, & Garrett, this issue), and further extends this line of enquiry to empirically test relationships with planned *career* math-relatedness. Another major strength of this paper is its examination of both *anticipated* as well as *actual* course choices. This “*back to actual behavioral outcomes*” approach seems essential to complementing research on educational and occupational *aspirations*. The singular focus on the domain of math to the exclusion of other domains, however, precludes examining a motivational perspective that attends not only to the choices individuals are *not* making, but also the ones that they *are* making instead (Eccles, 1983). To investigate this question, a focus on multiple subject-matter domains is needed. We could then understand what female adolescents in Sydney, Australia, might be aspiring towards *instead* of math in their studies and future careers.

The second paper by Nagy, Trautwein, Baumert, Köller, and Garrett also uses Expectancy–Value Theory to explore gender differences in adolescents’ motivational beliefs and actual achievement in mathematics and biology, as well as how these beliefs and levels of achievement predict subsequent course enrollment decisions and occupational aspirations in the German Gymnasium, an institution which university-bound students attend. The findings revealed that males outperformed females on standardized tests of math and biology; that males reported higher levels of perceived competence and values in math than females; and that females reported higher levels of these beliefs in biology compared to males. The authors also provide evidence that academic performance and self-perceived competence in each domain predict subsequent course choices in those domains through the influence of these factors on intrinsic valuing of the subject matter. Course choices in the Gymnasium, in turn, were found to probabilistically forecast the kinds of fields of study individuals wished to study in university. A key strength of this paper was the inclusion of two domains—math and biology, and a theoretical integration of Internal/External Frame of Reference Theory (Marsh & Hau, 2004) with Expectancy–Value Theory (Eccles, 1983) to address intra-individual differences in self-perceived competence and values. In doing so, the authors suggest the intriguing interpretation that females’ perceptions of values for math and biology develop independently of their ability self-perceptions in the opposite domain; whereas males develop values in relation to their self-perceived competence in the opposite domain. This paper provides much food for thought for researchers in terms of thinking about how gendered achievement-related choices may be a function of intra-individual patterns of identity beliefs linked to different subject

matters. This idea can be extended to understanding how other group-based differences in academic achievement and choices (e.g., race) may in part reflect intra-individual configurations of role identities involving the student role, gender roles, racial or ethnic identity, and so on (Roeser & Galloway, 2002). Finally, both this and the previous paper also make a point that is often overlooked in highly achievement-oriented, developed nations: That beyond thinking that one is “smart” or “good” at something, values also matter for our choices (although values are shaped, in part, by actual and perceived competencies among other things). These papers highlight the importance of fostering young people’s intellectual values in educational settings—a suggestion that cannot be under-estimated in its practical import in a world obsessed with the measurement of relative ability, narrow views of intelligence, use of standardized tests, and the promotion of competition in educational settings. Such kinds of practices all focus students on issues of ability in learning rather than on the values and joys associated with learning.

The paper by Shapka, Domene, and Keating examined the predictors of change in the prestige dimension of career aspirations for Canadian adolescents in Ontario between the early high school and post-high school years. Interestingly, and contrary to hypotheses, these authors found no gender differences in the prestige level of the occupations aspired to over this period. Instead, they found that those who did poorly or failed a math course during ninth grade showed near-term, lower job aspirations in terms of occupational prestige. The authors interpreted this as indicative of mathematics achievement in early high school as a “critical filter” in relation to the prestige level of *aspired-to* careers (not *actual* careers). The critical filter hypothesis for mathematics was first proposed by Lucy Sells in 1980 (Sells, 1980). Results of this study suggest that mathematical success is still associated, more than 20 years later, with anticipated educational and occupational outcomes. However, this hypothesis is underdeveloped in this paper. We know little about which math courses are “filters”, which students were more likely to do poorly, and how such hypothesized curricular “filters” translate into less prestigious *actual* careers. The findings of this paper lead to intriguing questions about how mathematics performance is construed by individuals and particular societies, with respect to what constitutes intelligence and the implications of such definitions for the life prospects of various individuals. An important question posed but not taken up by Shapka et al. that I feel is worthy of restating is this: “Is it possible that women are aspiring to careers that are equally prestigious and socially important as careers in physical science and technology, yet non-mathematical (e.g., law, social sciences)?” (p. 348). To answer this question, I think psychologists might critically examine the frames of reference used to establish the “prestige of an occupation” and decide if other frames of reference or characteristics than “prestige” so-defined might be useful in evaluating men and women’s educational and occupational choices. Are there other criteria that are non-economic and non-social status-oriented, reflective of other social goods, which might be important to consider in this regard as well? I discuss this more below.

The paper by Frome, Alfeld, Eccles, and Barber examined why some women who aspired to a career in male-dominated fields at age 18 no longer aspired to such

careers at age 25. When participants were 18 and 25 years of age, they were asked: "If you could have any job you wanted, what job would you like to have when you are 30?" In the responses to this question, the authors found four reasons for why some women, between the ages of 18 and 25, desisted from aspiring to a career in a male-dominated field at age 30. These included: low self-perceived ability in math and low intrinsic valuing of physical science (often a prerequisite for such fields), the high time demands of these careers, and a desire for a flexible job that would offer them an opportunity to balance work and family issues. This paper is interesting in that, once again, it reveals how individuals make career choices not simply on the basis of motivational beliefs in single domains relevant to their career choice, but in terms of beliefs and values *across* subject matter domains and social roles. Thus, the importance of considering patterns of motives is implicated here again. In this case, motivational beliefs related to both math and physical science, and a desire to balance work and family-related goals seemed to predict desistance.

While this paper is interesting in its examination of the factors that predicted desistance from *anticipated* career goals, an examination of the *actual* life situations of the women who changed their aspirations as they looked ahead 5 years would also have been interesting. What kinds of jobs did the women actually hold when they answered these questions at age 25? Were they married and having children? The authors interpret their results as reflective of an (unmeasured) occupational landscape that mitigates against the balance of family and work for women who aspire to high prestige careers (a plausible claim), but the data cannot rule out other interpretations such as changes within the individuals who are reporting on their environments. It may be the occupational landscape that is driving these changes. Alternatively, it may be that the same occupational landscape comes to be viewed differently by *both* men and women as they develop, work for some time, marry, or have children. It would be interesting in this regard to examine how aspirations for high-status, high-demand careers change for men as well, as they gain work experience, marry, and start families. What factors cause *men* to desist from "climbing the ladder" in traditionally male-dominated fields? Finally, it may be the case that married couples, in the face of increasing work demands and rising costs of living, navigate their occupational and family choices to a greater and lesser degree as a *couple together*. Perhaps another reason for desistance among these women is related to the characteristics of their marital partners with regard to family-work balance issues. Studies of dyadic decision-making in these regards may represent a fruitful future direction in this work—moving beyond whole persons to understand life choices in the context of "whole marital relationships". An important take-home message from this paper is that individuals' choices often reflect an analysis of perceived costs and benefits—the psychological aspect of Eccles' (1983) Expectancy-Value Theory that is studied the least. It seems likely that the costs and benefits of various consequential life choices change as a function of individuals' age, work experience, marriage, and child-bearing and rearing. Addressing such cost-benefit analyses across the life course in relation to life choices is another direction for future research.

The paper by Larose, Ratelle, Guay, Sénécal, and Harvey examined trajectories of motivational beliefs and participation in various science-related programs during the years between high school and college among different subgroups of students using pattern-centered analysis. The authors found that females enrolled in technological programs associated with both biology and physics were overrepresented in the subgroup which showed increasing efficacy beliefs in science over time. Furthermore, females who showed either a "high stable" or "increasing" sense of their efficacy for learning science during these years showed more clarification of their vocational goals in science-related fields compared with males. The authors speculate that such positive findings indicate that "some students may have found that the transition [to college] provided them with opportunities to experience new academic situations that are rewarding and less anxiety provoking, a less competitive and more positive academic climate compared to that at the end of high school, and an instruction that is more meaningful than that received in high school by being more relevant to their career aspirations" (p. 389). Unfortunately, as they also note, "our study does not provide any information on the pedagogical, organizational or social changes during the college transition" (p. 390).

This paper and its intriguing findings exemplify both the promise and the problems of research in this area. Scholars have now developed sophisticated social-cognitive personality measures that can predict achievement and choices to a high degree at the proximal psychological level, and are now beginning to use sophisticated techniques to model individual and subgroup differences in these variables in relation to outcomes over time. However, the theorizing about and measurement of social contexts that affect these beliefs remains an area in need of exploration and research. From various theoretical perspectives, it seems likely that Larose et al.'s speculations about why females are doing unexpectedly well in the programs in their study are probably correct—such successes likely reflect something about the educational settings these young women are currently in, as well as the kinds of changes that they experience in science-related educational environments as they move from high school into college (see Eccles & Roeser, 1999). A focus on these "unexpectedly positive outcomes" would be an exciting next step in this research, with a particular focus on the role of educational *contexts* in shaping such outcomes.

The final paper by Jacobs, Chhin, and Bleeker examined (a) how parents' gender-typed occupational expectations for their adolescent sons and daughters are related to children's own occupational aspirations in the short term during adolescence; (b) the "enduring links" between parents' gender-typed occupational expectations and the actual occupations of their sons and daughters 11 years later in adulthood; and (c) the level of job satisfaction that these sons and daughters reported based on whether or not they were in gender-traditional, nontraditional, or gender-neutral jobs. Results show that parents' expectations were related to their children's job aspirations in the near term, as well as their actual job choices over the long term; and that females in general were more satisfied with their jobs than males at age 28. Results also showed that men were most satisfied (compared with other men) in gender-traditional jobs, while women were most satisfied (compared with other

women generally and men in nontraditional jobs) in gender-nontraditional jobs. This is the only paper in the Special Issue that began to investigate the social factors that might shape adolescents' evolving self-perceptions, values, and consequent occupational aspirations. As the authors note, the data do not afford inferences of causality, so whether parents simply reflect adolescents' evolving occupational aspirations, or whether parents socialize the very aspirations that adolescents then "fulfill" is not able to be discerned. What I found most intriguing about this study was that despite the "enduring links" between many parents' aspirations and their child's actual occupations, there were many children who were also "off diagonal" in that they showed "broken links" between the gendered nature of the occupation that their parents thought they would undertake, and the actual job they subsequently undertook (see Table 2 in the article). Intriguingly, sons appeared to show more enduring links and less broken links with their fathers' expectations, suggesting an important set of gendered relations within families. In the future, more sophisticated pattern centered analyses may be useful for exploring these links in more depth. Such analytic techniques allow researchers to fruitfully explore continuities (e.g., "enduring links" between parents' expectations and child's aspired to and actual occupational choices), as well as discontinuities (e.g., "broken links" in these relations) in life-paths over time.

A Developmental Perspective on Educational and Occupational Life-Paths

Each of the papers in this Special Issue uses longitudinal data and incorporates aspects of developmental thinking in approaching the issue of gendered educational and occupational life-paths. This "developmentalization" of motivational research on achievement represents an important advance in the field and can be understood with reference to the key tenets of a systems perspective on human development (Eccles & Roeser, 1999; Roeser & Galloway, 2002).

From a developmental systems perspective, a full understanding of educational and occupational life-paths necessitates a focus on individuals' self/identity development across different stages in the lifespan and the embedded contexts in which such development unfolds. Individuals' self/identity development is fundamentally related to aspects of their biology, social statuses and group memberships, as well as their sociocultural experiences in local contexts like the family, school, peer group, and community (Roeser, Peck, & Nasir, 2006). Local sociocultural contexts, in turn, are embedded within societal structures (e.g., level of economic development) and history. These macrolevel factors influence the nature of individuals' and social groups' local contexts in terms of opportunities, risks, and constraints. In addition to biology, social group memberships, and social contexts, it is important to acknowledge that individuals can and do, through their awareness and agency, interact with aspects of their physical and sociocultural worlds and thereby co-create and self-regulate aspects of their own learning, and development (Roeser et al., 2006). All of these factors—self/identity beliefs, awareness, local social environments, and the distal social structure—shape individuals' life choices. A strength of all of these papers is that they

examine how aspects of individuals' self/identity beliefs and gender are probabilistically associated with trajectories of consequential life choices over developmental time across different cultural contexts, although one only takes up the issue of how individuals' self/identity with respect to choices over time may be shaped by aspects of history within that particular sociocultural context (Jacobs, Chhin, & Bleeker, this issue). More research on the embedded contexts of achievement choices is needed.

A Whole-Person Perspective on Self/Identity

From a developmental systems perspective, individuals' self/identity can be defined in relation to each of these different *levels*—including the *biological level* consisting of the physical body, temperament and the emotions, the *psychological level* consisting of feelings, self- and subject-matter-related knowledge, cognitive abilities, and self-regulatory capacities; the *social interactional level* consisting of verbal and non-verbal feedback from other people about who one *is* or *is not*; and the (related) *social contextual level* consisting of opportunities and constraints regarding the kinds of selves/identities that are available to individuals to develop (Roeser et al., 2006). A levels perspective draws attention to how self/identity is both an “inside out” phenomenon in terms of individuals' perceptions and conceptions of their body and personality, and their awareness of these (e.g., James, 1890); and an “outside-in” phenomenon in terms of (a) how social others interact with and position individuals into certain assigned selves/identities based on characteristics such as physical appearance, age, sex, race/ethnicity, and social class; and relatedly (b) how physical and sociocultural worlds afford and constrain the pallet of selves/identities that individuals with different social and biological characteristics *can* or *cannot*, *should* or *should not* take up as they compose a self/identity portrait (Erikson, 1968).

The papers in this Special Issue take a largely “inside-out” view of self/identity, viewing it in terms of psychological phenomena (e.g., competence beliefs and values) that serve motivational and self-regulatory functions in relation to life choices. However, it appears that each of the papers is also concerned with self/identity as an “outside-in” phenomena in which social forces affect females' life choices by (a) implicitly or explicitly positioning them as less able than men to excel in math, hard science, and engineering-related courses and careers and/or (b) implicitly or explicitly failing to provide rich contextual opportunities for females to develop values leading to their continuing participation in these fields. Whereas the inside-out view of self/identity is explicit in these papers, the outside-in perspective is tacit and seems to form an assumptive framework from which, in part, the authors begin their investigations. Marrying these two perspectives together explicitly would be fruitful in future research.

Self/Identity Dimensions of the Whole-Person

These papers focus on various representational beliefs as a key dimension of individuals' selves/identities that shape their life choices. From a systems perspective,

other dimensions of individuals' selves/identities mediate such choices as well. These include individuals' *cognitive* (abilities, skills, and subject matter knowledge), *conative* (self-regulatory capacities), and *affective* (temperamental traits and dispositional moods) characteristics (e.g., Snow, Corno, & Jackson, 1996). Such characteristics can vary across individuals and groups defined by sex, age, culture, and social class. From this perspective, differences in academic achievement and educational choices are linked to the nature of what Snow (1994), in his Revised Aptitude Theory, called individuals' dispositional yet situationally activated "aptitude complexes" (see Mischel & Shoda, 1995). He defined aptitude complexes as individuals' holistic, situated patterns of cognitive, conative, and affective characteristics. Snow viewed these patterns as situated, insofar as they were integrally related to the nature of the affordances, demands, and constraints of particular learning tasks, and by extension, to particular subject-matter domains as presented and taught in particular sociocultural contexts.

A strength of all of these papers is that they focus on how malleable, psychological aspects of "aptitude complexes" such as efficacy, talent, and expectancy for success beliefs and task-related values serve motivational and regulatory functions with regard to life choices over time. This social-cognitive view of self/identity provides educators with "levers for change" that they can target in their efforts to enhance motivation and choice in a particular content domain in a way that more global, personality-trait-like views do not. Furthermore, several of the papers attend to how choices are motivated by self- and task-related cognitions related to not just one, but two subject-matter domains (e.g., Nagy et al., this issue) or social roles (e.g., Frome et al., this issue). This represents an important future direction in motivation research—the focus on (patterns of) multiple goals and roles in the shaping of life choices (Roeser & Galloway, 2002). Several papers also included measures of academic achievement—a proxy of sorts for underlying cognitive abilities and knowledge in a domain, and showed that these factors influence life choices primarily through their influence on self-perceptions of talent, ability, efficacy, and expectancies for success (Nagy et al., this issue; Watt, this issue; see also Lau & Roeser, 2002). In terms of self-regulation, some of the papers differentiated between intrinsic and identified forms of motivation and regulation in regard to the different components of values (e.g., Watt, this issue), however none addresses the issue of whether or not individuals are making life choices with awareness and volition or not. Issues of agentic awareness, as I discuss below, go right to the heart of whether or not gender differences in educational and occupational choices are a social problem in addition to a scientific problem in the countries examined.

In terms of social demography, although these papers attend to gender differences in motivation and choice, they are rather silent with respect to how majority/minority status, race/ethnicity, social class, and the largely semi-urban/urban nature of the samples in conjunction with sex may shape the findings. Incorporating multiple domains of functioning, multiple subject-matter identities, and populations with varying social demographic characteristics within one design will ultimately improve

our ability to understand the life choices of whole persons, with their multiple selves and social group memberships, in context. Furthermore, it may be fruitful to examine social ecologies that seem exemplary in changing the very social phenomenon (or problem) that forms of the focus of this research. This might include, for example, parents and families that are particularly good at nurturing awareness of nontraditional educational and occupational routes for sons and daughters (Jacobs et al., this issue), schools that promote exemplary math participation among young women (e.g., Boaler, 1997), universities that have higher than expected rates of enrollment and retention of women in engineering or science courses (e.g., Larose et al., this issue), work places that are particularly conducive to work-family balance issues, and so on. I now conclude by briefly raising three “bigger questions” that I had as I read these papers.

When is a Choice an Authentic Choice?

Whenever psychologists study life choices, the issue of free will versus determinism is an important, although often implicit, issue that is important to consider. When is a choice a freely determined, authentic one? In saying that a “motivated choice” is one linked to a belief of some kind (e.g., competence, efficacy, goal), motivational psychologists often do not address the more significant issue of the *quality* of the motivation behind the choice. Research on self-determination and the “unbearable automaticity of being” in motivated behavior suggests the importance of differentiating between choices that reflect controlling or volitionally espoused motivational beliefs (Ryan & Deci, 2000); as well as between those that are made with agentic (conscious) awareness or through automatic (unconscious) habit (see Bargh & Chartrand, 1999). Furthermore, different social environments provide different opportunities to individuals with different demographic characteristics with respect to the cultivation of self-determined (vs. other-determined) beliefs and self-aware (vs. non-conscious) forms of self-regulation and choice. Thus, the issue of whether a motivational choice is one made in freedom and awareness, ignorance, or some form of social influence (coercive or benign) goes to the heart of the issue of whether or not the *social phenomenon* of gendered choices in these fields is reflective of a *social problem*. These studies may be about self-aware choices, unconscious socialized habits, socialized inequality, or some mixture of these. We cannot know without addressing issues of awareness, self-determined versus controlled forms of belief, and the nature of related opportunity structures whether a “motivated choice” is what we might consider an “authentic choice”.

What Are Choices of Value and Worth?

The question of “what kind of motivated choices” are studied in these papers raises another issue—namely, how do social scientists construe educational and occupational life-paths among women and men that are worthy and valuable? One criterion that is important involves equality of opportunity. An authentic choice of value is one

that is made in a context of possibility and opportunity. A second criterion for determining the value and authenticity of choices involves the self-determined and self-aware nature of the choice, given equality of opportunity. A choice of value is one in which we are aware of what we are and are not choosing and why. A third criterion involves the valuation of the incentives that various domains of study and occupations afford. These papers emphasize valued incentives such as income, prestige, and power in understanding educational and occupational life choices and their significance. Given equality of opportunity, might there be other incentives that define equally valuable life choices? For instance, some have suggested that the use of criteria such as wealth, power, and prestige to define a “good life” (after a certain modest standard of living is attained) do not actually capture the kinds of lifestyles and life choices that actually confer greater happiness and fulfillment (Csikszentmihalyi, 1999). It seems important that we question the kinds of criteria that are being used to define educational and occupational life choices that are of “value and worth” for different individuals and groups of individuals, in different countries, at different points in history.

Going Global in Gender and Achievement Research

The question of value and worth in relation to females’ and males’ educational and occupational choices in the Western world raises more fundamental questions about the value and worth of the actual physical lives and basic educational opportunities of women when we look to the developing world, especially in rural areas of Africa, India, and elsewhere. Whereas these papers explicitly took up the issue of the inequality of educational choices between the sexes across a number of developed countries, and suggested that these were a function, at least in part, of inequality of educational opportunity in developed nations—the picture is vastly clearer concerning inequality of educational access, opportunity, and outcome in developing nations (UNESCO, 2003, 2005). If educational psychologists continued to press on in the spirit of this issue—going cross-cultural in research on gendered educational and occupational choices—the inclusion of samples in developing nations may lead to a greater understanding of how these kinds of life choices are made in contexts of varying gendered opportunity structures and levels of economic development. Such questions are usually left to those who study international comparative education, but psychologists need to involve themselves in such issues in an increasingly globalized world (Arnett, 2002). It might also be interesting for researchers to examine countries (including developing nations) where gender differences in areas of study and occupations may not be so pronounced, or where differences become more or less pronounced with economic development (UNESCO, 2003, 2005). How does the desire for economic advancement in a developing nation, or the privilege of economic security in a developed nation, affect the occupational choices of men and women across historical time? Throughout the social sciences, the need for a global and interdisciplinary perspective seems clear (see Friedman, 2000). Psychologists interested in issues of authentic choices, equity of opportunity, education, culture,

and gender could fruitfully join this gathering global movement. The papers of this Special Issue take important steps in such a direction.

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