

Agency and Structure in Human Development

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In this manuscript, I discuss the impact of Glen Elder's work on my own research. I pay particular attention to his perspectives on life course development and the role of agency and structure in shaping people's life decisions and life trajectories.

Over the course of my career, my intellectual energies have focused on academic achievement and motivation, subjects that stand at the intersection of psychology and sociology. It was the life course paradigm formulated by Glen H. Elder, Jr., that animated my thinking about the sociological component of my research. Today, Elder's perspective is widely appreciated but in the 1970s, during a formative period of my career, this was not the case. Indeed, the success of life course sociology owed much to individual scholars applying the perspective to their own research, a challenging and exciting task best understood prospectively.

I first became aware of Glen's work while I was a graduate student at UCLA in the years between 1969 and 1974. I was a graduate student in psychology in a department that focused largely on laboratory studies of children and college students. I went there for family reasons rather than the relevance of developmental faculty members' research for my interests – which focused on a more life course perspective on education and achievement. Needless to say, I felt a bit like the proverbial “fish out of water” in the UCLA program until I discovered Glen's work. His early work on the role of the family and the larger cultural and historical setting in which people grew up in shaping educational patterns was exactly what I had been looking for. His 1967 paper “Age integration and socialization in an educational setting”, published in the *Harvard Educational Review*, opened

my mind to the possibility of studying adolescent development in a holistic, integrated manner. His 1968 chapter “Adolescent Socialization and Development” provided more insights and encouragement for the research path I hoped to take (see also Elder, 1973). Finally, his work on the children of the Great Depression completed my recruitment (Elder, 1974/1999). Even though I would not meet Glen for many years, I was hooked on the Elder view of human development and have never left his intellectual family.

In this article, I describe two lines of my research that draw heavily from Glen’s perspective on life-course development: achievement-related trajectories and academic motivation and achievement. These two lines were heavily influenced by the following basic life course principles: (1) behavior and mental health are jointly and interactively influenced by human agency and contextual structure; (2) the life course is influenced by social clocks that shape the shared sequences of experiences individuals within a culture are likely to experience; (3) when things happen in one’s life-course matters (i.e., age will modify the impact of any experience on individuals’ life course); (4) because individuals are nested within complex social systems that include multiple levels of functioning, human development involves complex mediated and moderated processes that operate at many different levels of influence; and (5) longitudinal studies that are historically informed are necessary to the study of human development.

THE COMPLEXITY OF UNDERSTANDING ACHIEVEMENT-RELATED LIFE TRAJECTORIES

Initially captivated by an interest in gender differences in achievement-related choices, my colleagues and I drew upon life-course theory to design a model of achievement that integrated notions of human agency with an expanded sociocultural view (see Figure 1). We were especially interested in the ways in which contextual structures in the home, the school, and the larger culture influence the kinds of achievement-related choices individuals make particularly during adolescence and early adulthood. We elaborated a comprehensive theoretical model that links achievement-related choices, like the decision to remain or leave high school, to two sets of beliefs directly related to notions of human agency: 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 the relation of these beliefs to individual experiences, aptitudes, other psychological beliefs and attitudes (such as causal attribution, locus of control beliefs, various social role stereotypes, short- and long-term goals, and social and individual identities) that are commonly assumed to be associated with achievement-related activities (see Eccles, 1994; Eccles [Parsons], 1983). Finally, with regard to the role of structure in shaping human development, we specified the

General Model of Achievement Choices

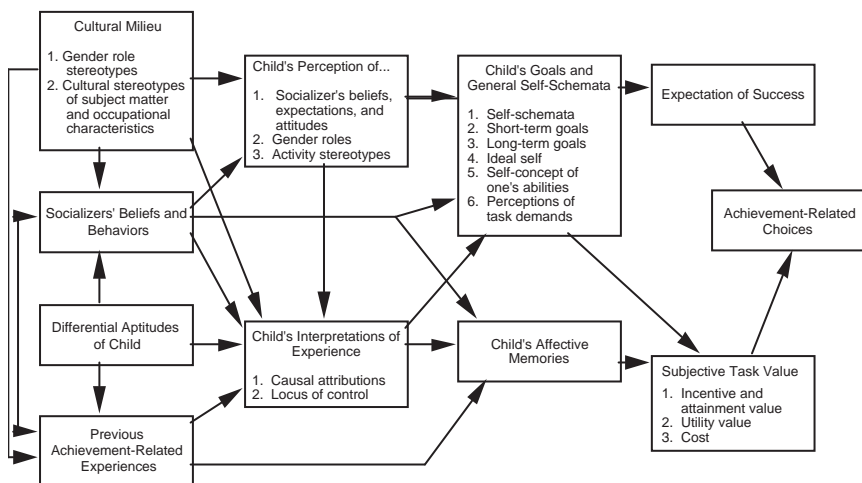


FIGURE 1 General Eccles Expectancy-Value Model of Achievement Choices.

relation of individual differences in all of these psychological determinants to cultural and historical norms, mediated through the beliefs and behaviors of parents, teachers, peers, the mass media, and so on. In particular, we linked achievement-related beliefs, outcomes, and goals to interpretative systems such as causal attributions and other meaning-making beliefs linked to achievement-related activities and events, to the input of socializers (parents, teachers, peers, media, members of one's neighborhood and other social groups), to various social roles and other culturally and historically based beliefs about the nature of various task in a variety of achievement domains and the "appropriateness" of participation in such tasks, to self-perceptions and self-concept, and to one's perceptions of the task itself, and to the processes and consequences associated with identity formation. We hypothesized that each of these factors influences the expectations one holds for future success at the various achievement-related options and the subjective value one attaches to these various options. These expectations and the value attached to the various options, in turn, are assumed to influence choice among these options.

For example, let us consider being engaged in one's own learning in school and persisting through high school graduation. My early colleagues and I (Judith Meece, Allan Wigfield) predicted that people will be most likely to continue in school and engage fully in learning if they have confidence in their ability to do well and place high value on doing well in school. Evidence and theory suggest that having high confidence in one's academic potential results from a history of

doing well in school subjects, as well from strong messages that one is academically competent from one's parents, teachers, and peers (see Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006). Thus, if one has had many failure experiences during the early years of school and one's parents and teachers express low confidence in one's academic abilities, then it is unlikely one will move into secondary school with sufficiently high confidence in one's own academic abilities to overcome the stresses such a transition entails.

Similarly, we assumed that the personal value one attaches to learning in school is also influenced by several factors. For example, does the person enjoy the subject material? Is the learning activity required by one's school or one's parents? Is the learning activity seen as instrumental in meeting one of the individual's long- or short-range goals? Is the person anxious about his or her ability to successfully master the learning material being presented? Does the person think that the learning task is appropriate for people like him or her? Do the person's parents and teachers think doing well in school is important and have they provided advice on the utility value of school success for various future life options? Finally, does working on the learning task interfere with other more valued options?

Four features of our approach are particularly important for understanding individual and group differences in life-course trajectories and are particularly linked to Glen's perspective: First, we focused on the choice/human agency dimension of achievement-related behavior. We believe that the conscious and nonconscious choices people make about how to spend time and effort lead, over time, to marked differences between groups and individuals in school achievement and engagement. Of course, with regard to Glen's emphasis on importance of structure, we hypothesize that these academic choices are influenced greatly by the experiences one has had in school and at home.

Focusing attention on achievement-related choices reflects a second important component of our perspective: namely, the issue of what becomes a part of an individual's field of possible choices. Although individuals do choose from among several options, they do not actively, or consciously, consider the full range of objectively available options in making their selections. Many options are never considered because the individual is unaware of their existence or the individuals think these options are not realistically available to them. For example, one reason to engage fully in school learning tasks is that what one learns through this investment of time and energy will increase future educational and occupational options. If students' visions of the future do not include continued education and the types of occupations linked to college education, then spending a lot of time mastering what is being taught in primary and secondary school to gain access these future options is not likely to provide a positive motivational incentive. Similarly, if doing well in school itself is not seen as part of one's social or personal identities or is not encouraged by one's family and friends,

then putting in the time and effort to do well in school is likely to have relatively low personal value.

Of course, the array of options that are available to each individual is heavily influenced by a variety of sociocultural conditions and structures. Individuals may have little opportunity to engage in schooling due to limited availability of educational opportunities in their life space; for example, many children in the world live in communities that have no schools or have schools with very limited resources. Similarly, many children live in communities where attending school is difficult or even dangerous due to characteristics of the school itself or the values and survival needs of the children's families or siblings, or the dangers in the neighborhoods where the children live—dangers linked to community violence or discrimination or war. For such children and families, few opportunities exist that would allow them to make decisions about being engaged in the academic content of school.

A third important feature of our perspective is the explicit assumption that achievement-related decisions, such as the decision to invest large amounts of time and energy into one's school work, are made within the context of a complex social reality that presents each individual with a wide variety of choices; each of which has long-range and immediate consequences. Furthermore, the choice is often between two or more positive options or between two or more options that each has positive and negative components. For example, the decision to invest time in studying and mastering one's school work is typically made in the context of other important decisions such as whether to spend time with one's friends, or to spend time perfecting other skills, or to help out at home, or to avoid being bullied at school or discriminated against at school, or to fulfill pressing family or social obligations. One critical issue is the relative personal value of each option. Given high likelihood of success, we assume that people will then choose those tasks or behaviors that have relatively higher personal value.

However, as has been made clear by Elder's work on poverty, social class, and the Great Depression. Not all people have the opportunity to even make this choice. Some attend schools with quite limited resources and inadequately trained teachers who may also be incapable of making the material they teach relevant to their students' lives. Others may have no schools to attend or may be prevented from attending schools because of such things as: (1) family obligations, restrictions, or inadequacies; (2) dangers in their communities related to war, violence, intolerance, or discrimination; (3) social norms about who may attend school; or (4) personal physical, cognitive, or emotional disabilities.

The fourth feature of our approach that is directly derived from Glen's life-course theories is that the processes linked to academic confidence and perceived values are developmental and dynamic. Like many researchers interested in self processes, we assume that personal states and situational characteristics make the

various components of the self-system more or less salient at different times. As a result, the immediate personal value of various behaviors will fluctuate depending on the salience of different components of the self-system. We also assume that the components of the self-system change across developmental time in response to experience with specific tasks, changing cognitive abilities and interpretative beliefs, changing socialization pressures, and changing sociocultural influences.

In our subsequent research, we have found strong support for the predictions inherent in our theoretical model (see Eccles, Wigfield, & Schiefele, 1998; Meece, Wigfield, & Eccles, 1990). For example, we have found that the sex differences in enrollment in high school math and physical science courses, in completing college majors in physical science, engineering, and computer science versus the biological and medical sciences, and in gender-stereotyped occupational choices result primarily from sex differences in the value females and males attach to these choices (Eccles, 2007; Eccles, Barber, & Jozefowicz, 1999). In fact, women's desire for a job that directly helps other people and involves working collaboratively with other people is the key discriminator between mathematically talented women who go into the biological and medical sciences instead of the physical sciences and engineering (Vida & Eccles, 2003). Furthermore, we have found strong support for our predictions regarding the central role of parents in creating these sex differences in values and self-perceptions (see Eccles, 1993).

In the process of doing this research, we noticed major age declines in our participants' interest in school and confidence in their ability to succeed at school. Given Glen's findings on the importance of age in explaining the differential impact of the Great Depression on children's development, we were intrigued by the possibility that these declines reflected the grade-related changes in our early adolescents' experiences at school. Addressing this question became the focus of the next 10 years of our work.

CHANGES IN ACADEMIC MOTIVATION AND ACHIEVEMENT

In reviewing the literature, my colleagues and I (Carol Midgley, Harriet Feldlaufer, Janis Jacobs, Allan Wigfield) found strong evidence of negative changes during the early adolescent years in many aspects of achievement motivation; including declines in interest, general engagement, and feelings of belonging in school (Gottfried, Fleming, & Gottfried, 2001; National Research Council [NRC], 2004; Ryan & Patrick, 2001), in the valuing of particular subjects such as math (Fredricks & Eccles, 2002; Wigfield, Eccles, Mac Iver, Reuman, & Midgley, 1991), and in self-concepts/self-perceptions and confidence in one's intellectual abilities, especially following failure (Dweck, 2002; Eccles

et al., 1989; Simmons, Blyth, Van Cleave, & Bush, 1979; Wigfield et al., 1991). In addition, several researchers reported marked declines in some early adolescents' school grades as they moved into junior high school (Alspaugh, 1998; Eccles et al., 1993; Roderick, 1993)—declines that predicted the drop in confidence in one's expectations for success and the value attaches to school, as well as subsequent school failure, school disengagement, and school dropout (Alspaugh, 1998; Fine, 1991; Roderick, 1993; Simmons & Blyth, 1987).

A variety of explanations have been offered for these negative changes. For example, Simmons and her colleagues suggested that the concurrent timing of the junior high school transition and pubertal development accounts for the declines in the school-related measures and self-esteem among girls (Simmons & Blyth, 1987). Drawing upon cumulative stress theory, they suggested that declines in motivation and mental health indicators occur because so many young adolescent girls must cope with at least two major transitions: pubertal change and the move to middle or junior high school. To test this hypothesis, Simmons and her colleagues compared the pattern of change on early school-related outcomes for adolescents who moved from sixth to seventh grade in a K–8, 9–12 system with the pattern of change for adolescents who made the same grade transition in a K–6, 7–9, 10–12 school system. They found clear evidence of greater negative change among adolescent females making the junior high school transition than among adolescent females remaining in the same school setting. Furthermore, as they followed these youth through high school, they found that the broader declines in school engagement and academic achievement were not evident in those youth who had been enrolled in the K–8 schools.

Similarly, Eccles, Lord, and Midgley (1991) compared the motivation and well-being of eighth graders in K–8 schools with eighth graders in either the classic middle school or junior high school grade configuration, using the National Educational Longitudinal Study 88 data set. We found that eighth graders (males and females) in the K–8 school system were more engaged and motivated for school than the eighth graders in either of the other two grade configurations, who did not differ from each other. Furthermore, the eighth-grade teachers in the K–8 schools were more engaged in their teaching and more enthusiastic about their students than the teachers in either of the other two school grade configurations. Together these two studies, along with other similar studies and reports (Darling-Hammond, 1997; Juvonen, Le, Kaganoff, Augustine, & Constant, 2004; Felner et al., 1997; Lipsitz, Mizell, Jackson, & Austin, 1997; Mac Iver, Young, & Washburn, 2002; Maehr & Midgley, 1996; Wentzel, 2002) suggest that the nature of the school transition in some districts, rather than pubertal processes *per se*, is responsible for average level declines in the students' school-related motivation during the early adolescent period.

My colleagues and I argued that changes in the nature of the learning environment associated with the junior high or middle school transition provide a plausible

explanation for the declines in the school-related motivation experienced by many youth during their early adolescent years. Drawing upon person–environment fit theory, Eccles and Midgley (1989) proposed that the motivational and behavioral declines evident during early adolescence could result from the fact that junior high schools are not providing appropriate educational and social environments for early adolescents. According to person–environment fit theory, behavior, motivation, and mental health are influenced by the fit between the characteristics individuals bring to their social environments and the characteristics of these social environments. Individuals are not likely to do very well, or be very motivated, if they are in social environments that do not meet their psychological needs. If the academic and social environments in the typical junior high or middle school do not fit with the psychological needs of adolescents, then person–environment fit theory predicts a decline in motivation, interest, performance, and behavior as adolescents move into and through this environment. What is critical to note about this argument is that my colleagues and I are not proposing that any transition is bad at this age. Instead we propose that it is the specific nature of the transition that matters. Drawing specifically on Glen’s notions of the developmental timing of specific experiences, we proposed our stage–environment theory. We argued that the particular types of structural changes typical of the elementary school to middle/junior high school shift are inappropriate for early adolescents.

To test this hypothesis, we first reviewed the literature regarding typical differences between elementary school classrooms and middle grades classrooms. Several differences emerged with great regularity: Compared to sixth-grade elementary school classrooms, seventh-grade junior high school classrooms were characterized by greater concern with controlling and disciplining their students, coupled with less opportunities for autonomy supporting behaviors; less trusting and emotionally supportive teacher–student relationships; more whole-class instruction coupled with less individualized instruction and cooperative learning opportunities; and more socially comparative grading based on relative performance rather than amount learned. In addition, junior high schools are typically much larger than elementary schools and teachers have to teach many classes of different students across the day—both of which can lead to decreased teacher–student connection and increased anonymity, which, in turn, can lead to alienation and disengagement. Glen’s work on school size suggested that this one difference alone could help explain the increased alienation we found in our participants (Elder & Conger, 2000). Finally, we also found that middle school and junior high school teachers report lower levels of confidence in their own ability to teach all of their students—perhaps because they have so many students to deal with over the course of each day and so little contact with each one.

Changes such as these are likely to have a negative effect on students’ motivational orientation toward school at any grade level. But we, along with others,

have argued that these types of school environment changes would particularly harmful at early adolescence. For example, Simmons and Blyth (1987) stressed that early adolescents need a reasonably safe, as well as an intellectually challenging, environment to adapt to these shifts—an environment that provides a “zone of comfort,” as well as challenging new opportunities for growth. In light of these needs, the environmental changes often associated with school transitions in Grades 6–9 seem especially harmful in that they emphasize competition, social comparison, and ability self-assessment at a time of heightened self-focus; they decrease decision making and choice, at a time when the desire for control is growing; and they undermine social networks and increase anonymity at a time when adolescents are especially concerned with peer relationships and may be in special need of close adult relationships outside of the home.

My colleagues and I argued that the nature of these environmental changes, coupled with the normal course of individual development, results in a developmental mismatch between the needs of the early adolescent and the structural characteristics of many middle/junior high classroom and schools, increasing the risk of negative motivational and psychological outcomes, especially for adolescents who are having difficulty succeeding in school academically.

To test this hypothesis, we conducted a large longitudinal study in 10 southeastern Michigan public school districts—The Michigan Study in Adolescent Live Transitions, (MASLT). All adolescents in this study moved from a sixth-grade classroom in an elementary school to a seventh-grade classroom in a junior high school. We carefully monitored the nature of their experiences in each year. The majority of our participants moved from more supportive elementary school classrooms into less developmentally appropriate secondary school classrooms and, as a result, experienced declines in their school motivation and engagement (see Eccles et al., 1993). For example, the sixth-grade elementary school math teachers of our participants reported less concern with controlling and disciplining their students than these same students’ seventh-grade junior high school math teachers reported one year later (Midgley, Feldlaufer, & Eccles, 1988). In addition, using a measure that assesses the congruence between the adolescents’ desire for participation in decision making and their perception of the opportunities for such participation, Midgley and Feldlaufer (1987) found a greater discrepancy when the adolescents were in their first year in junior high school than when these same adolescents were in their last year in elementary school. The fit between the adolescents’ desire for autonomy and their perception of the extent to which their classroom afforded them opportunities to engage in autonomous behavior decreased over the junior high school transition. More important, school disengagement increases for those participants who experienced the biggest drop in this fit.

Similarly, students and observers rated junior high school math teachers as less friendly, less supportive, and less caring than the teachers these students had

one year earlier in the last year of elementary school (Feldlaufer, Midgley, & Eccles, 1988). In addition, the seventh-grade teachers in this study also reported that they trusted the students less than did these students' sixth-grade teachers (Midgley, Feldlaufer, & Eccles, 1989). Not surprisingly, those youth who experienced the biggest drop in perceived social support also reported the biggest declines in the value they attached to doing well in their school subjects. So, at a time when most early adolescents are confronted with an uncertainty about themselves that derives from the often-daunting tasks of establishing a sense of coherent personal identity and negotiating new found social roles in the face of a myriad of changes, they are met with distrust by the very people who could provide support for them during the negotiation of these tasks. The importance of feeling emotional connected to the adults in one's school at this particular age period has been stressed by many scholars (e.g., Furrer & Skinner, 2003; Goodnow, 1993; Juvonen et al., 2004; Lehr, Johnson, Bremer, Cosio, & Thompson, 2004; NRC, 2004; Roderick, 1993). This is the time when young people are looking to adults outside the home for guidance in their development. For many youth in the United States, teachers are the most stable group of nonfamilial adults in their lives. Consistent with Glen's ideas about the critical moderating role of the maturity of the individual for any structural effects on human development, school structures, such as large, impersonal junior high schools, that reduce the likelihood of close teacher–student relationships are quite problematic at this particular age.

Other studies have since confirmed our results (see Eccles et al., 1993; Eccles & Wigfield, 2002; Juvonen et al., 2004; Wigfield et al., 2006). In addition, several studies have documented one other major difference between junior high and middle school teachers and elementary school teachers: junior high and middle school teachers use a higher standard in judging students' competence and in grading their performance than do elementary school teachers (Alspaugh, 1998; Eccles & Midgley, 1989; Roderick, 1993). There is no stronger predictor of students' self-confidence and sense of efficacy than the grades they receive. If grades change, then we would expect to see a concomitant shift in adolescents' self-perceptions and academic motivation. There is evidence that junior high/middle school teachers use stricter and more social comparison-based standards than elementary school teachers to assess student competency and to evaluate student performance, leading to a drop in grades for many early adolescents as they make the junior high school transition. For example, Simmons and Blyth (1987) found a greater drop in grades between sixth and seventh grade for adolescents making the junior high school transition than for adolescents who remained in K–8 schools. Roderick (1993) documented the devastating impact of a drop in grades following the middle school transition on high school completion. Finally, Roderick and Camburn (1999) showed a similarly devastating impact of a drop in grades following the transition to high school.

Our study also showed that the declines in confidence in one's academic abilities and in the value that one attaches to academic achievement have long-term consequences for later educational success. For many youth, these declines crystallized a downward trajectory that leads to further school withdrawal, failure, and dropping out. Together with the results emerging from many studies, these results suggest that a transition into a developmentally inappropriate middle grades situation puts one at risk for further problems during the high school years.

CONCLUSION

I began this article by noting the intellectual debt I owe Glen Elder for providing me with a vision for integrating psychological and sociological approaches to understanding human development. Over the years, I continually return to Glen's work for inspiration and theoretical guidance. Thus, it is not surprising that our research paths continue to cross. We continue to share an interest in the critical role that schools and families play in development. We incorporated an interest in out-of-school and extracurricular activities at about the same time and have continued to pursue this interest over the last 15 years. Most recently, we have become interested in how best to incorporate biological processes into our models of human development. Finally, we have continued to grapple with the methodological issues involved in studying the full complexity of human development. The methodological advances over the last 20 years have expanded our abilities to conduct such research. Glen and I strive to design studies that honor the complex interactions between human agency and social structure, that take into account historical and cultural forces, and that inform public policies aimed at improving the human condition. Glen taught me how to do this type of research and for this gift I am eternally grateful.

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