A. Agency

Self-Agency and the Life Course

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The course of our lives is shaped by many forces and events, not the least of which by ourselves. For good and bad, we are to a large extent architects of our life course. Within the constraints imposed by biology, history, social structure, good and bad fortune, and other factors we may or may not be aware of, we try to control the direction of our lives by exerting our will, pursuing our goals, and affecting our circumstances. While we are indeed products of social and physical forces, we are also causal agents in the construction of our environments and ourselves.

At the core of human agency is the self. It is involved in most cognitive and affective processes, such as regulating perception, processing experience, memory, emotion, and motivation. The self as a source of agency is a prominent feature of most contemporary social psychological theories, especially symbolic interactionism. The view of the self as an active and creative agent in its environment—managing impressions, making decisions, negotiating, controlling, manipulating, deceiving, etc.—is, in Blumer's (1969) terms, one of the "root images" of symbolic interactionism, eloquently demonstrated in Goffman's (1959) insightful observations of impression management and self-presentation in everyday interactions. Emphasis on self-agency is also conspicuous within cognitive social psychology. Baumeister (1999) calls it the self's "executive function," involved in making choices, taking responsibility, initiating action, and exerting control over the environment. Snyder (1981) maintains that individuals play a very active part in choosing, influencing, and structuring the situations in their lives, in keeping with their self-conceptions as well as other attitudes and dispositions. Also, self-agency is central to Bandura's (1982, 2001) sociocognitive theory of self-efficacy, which views people as agentic, self-reflecting, self-regulating, creative, and proactive and not

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simply reactive creatures shaped by external events. For Bandura and these other self-theorists, the self is at the heart of causal and agentic processes.

Reflexivity, the defining quality of the self for Mead (1934) and most self-theorists, is a major source of the self's agency. Reflexivity refers to the capacity of humans to be both subjects ("I") and objects ("me") to themselves, to reflect on themselves, and to act toward themselves as objects. Reflexivity enables a wide range of what Rosenberg (1988) calls self-objectification processes, such as self-evaluation, self-control, self-criticism, and self-motivation. These self-objectification processes are typically guided by one's self-concept, also a self-objectification consisting of role identities, values, morals, aspirations, and other elements of self-definition. Reflexivity, therefore, is the foundation for numerous, more specific manifestations of the self's agency.

Of the various specific manifestations and mechanisms of self-agency, none is more important than people's beliefs in their causative and agentic capabilities, that is, in their self-efficacy (Bandura, 1997). Self-efficacy is an aspect of the self-concept critically relevant to agency and motivation. It refers to the perception of oneself as a causal agent in one's environment, as having some control over one's circumstances, and being capable of carrying out actions to produce intended effects. Individuals with high self-efficacy think of themselves as competent, effective, and able. Those with low self-efficacy are more likely to see themselves as powerless, helpless, and fatalistic. A large body of evidence has accumulated on the beneficial consequences of self-efficacy for individual functioning and well-being (e.g., academic and occupational achievement, recovery from illness, general physical and mental health, life satisfaction). Much of this research is provided by Bandura and his colleagues (see Bandura, 1997, for a review).

Such beliefs are a major basis of action and inaction over the life course. Those with high self-efficacy, especially in such consequential domains as education, interpersonal relations, and occupational contexts, are more likely to be architects of their lives and to see themselves as such. Those with a low sense of personal efficacy are more likely to see their lives as products of forces and circumstances beyond their control. The life courses of both types of persons may correspond to their self-efficacy expectations, since there is a self-fulfilling prophecy element to such beliefs.

There is also a motivational component to self-efficacy. People are motivated to *experience* themselves as causal, efficacious agents. White's (1959) concept of "effectance motivation" emphasized the motivational aspect of self-efficacy. He conceptualized effectance motivation as intrinsic and pleasurable, typically expressed in such activities as play, exploration, and creativity. Baumeister (1999) states that "the nature of the self includes a strong desire for control and choice. The motive to control is as pervasive and as well established as the motivation for self-esteem. Moreover, the desire to achieve control is more beneficial and adaptive than the desire for esteem" (p. 12). A number of other theories, such as DeCharms (1979) theory of personal causation and Deci's (1979; Ryan & Deci, 2000) theory of self-determination (see Gecas, 1989, for a review), have stressed the experience of agency, control, and efficacy as powerful motivations in personal and interpersonal conduct.

The motivational significance of self-efficacy is underscored not only by the efforts people expend in developing and maintaining this self-motive, which may involve self-improvement as well as self-deception, but also in observations of what happens when self-efficacy is undermined or destroyed. Seligman's (1975) theory of "learned helplessness" deals with the chronic sense of inefficacy resulting from learning that one's actions have no effect on one's environment, leading to apathy and depression. Many aspects of modern societies can undermine self-efficacy, with negative consequences for individual wellbeing.

A major basis of Marx's critique of capitalism was that it undermined workers' sense of agency and efficacy by depriving workers of control over the products of their labor, thereby leaving them powerless and alienated. The inability to affect outcomes in other spheres of life, such as government, school, or even one's family, can lead to a sense of powerlessness and alienation as well. The amount of control one has is, of course, a matter of degree and is typically relative to specific domains. Sense of control, agency, and efficacy in one domain (e.g., the workplace) may or may not carry over into another domain, such as family. Nevertheless, people are motivated to feel efficacious in the important spheres of their lives.

Self-efficacy is an important self-motive both in its own right and in its relationship to other self-motives, especially self-esteem and self-authenticity (Gecas, 1991, 2001)—two other components of self-agency. Self-authenticity refers to the motivation to experience one-self as meaningful, real, and true to one's core values and standards. Much of authenticity involves the moral domain of self-conception (Taylor, 1989). Agency directed towards moral conduct involves self-sanctions as well as actions guided by moral standards and precepts (Bandura, 2001). Self-efficacy in the form of moral agency (i.e., the perception of one's ability to live up to one's values and moral standards) is relevant to this self-motive. With regard to the self-esteem motive, that is, the motivation to have a positive view of oneself, self-efficacy as reflected in efficacious action is an important source of self-esteem and is a more solid basis than favorable reflected appraisals for maintaining a positive self-image (Gecas & Schwalbe, 1983).

As a major aspect of the self's agency, self-efficacy is a key factor in life course construction. Actions are more likely to be initiated, goals and plans are more likely to be pursued, efforts to change oneself and one's circumstances are more likely to be undertaken by those with a strong sense of self-efficacy and personal agency. The vision of one's desired future self in the form of goals and aspirations (what Markus & Nurius [1986] call "possible selves" and Buhler & Massarik [1968] conceptualized as "the goal-directed life") is more likely to be actualized by those with high self-efficacy. One's life course is more likely to be viewed as one's own construction by those with high self-efficacy. Those with a low sense of personal efficacy are more likely to feel little control over the direction and course of their lives, to view their lives as products of external forces beyond their control.

Some empirical evidence for the long-term consequences of efficacy beliefs developed in childhood and adolescence for the course of adult lives is provided by Elder (1974) and Clausen (1993), both utilizing the same unique longitudinal data sets of the Berkeley and Oakland studies. Elder's (1974) influential study *Children of the Great Depression* demonstrated (among many other findings) how the experience of economic hardship by adolescent boys had beneficial consequences later in their lives. These boys were called upon and were able to contribute to their families' resources during the Great Depression, often when the father was out of work, thereby gaining confidence, self-efficacy, and higher status within the family. These agency-relevant qualities contributed to economic, educational, and even marital success in later life. By contrast, the younger cohort of boys (the Berkeley sample) were too young to be of much help to their families, while still suffering the privations of the Great Depression. Their self-efficacy and self-worth suffered as a result and had negative consequences later in their life course. Similarly, Clausen (1993) found that a cluster of personality characteristics which he called "planful competence" (in which self-confidence is a prominent component), measured during the adolescent years of the Oakland and Berkeley cohorts, had pronounced effects over the life course. Adolescents high in planful competence, through their actions and the choices they made, set their life courses on trajectories leading to greater economic and personal success later in life.

The consequences of planful competence during adolescence, however, are not uniformly positive or consequential, but rather are contingent on historical circumstance (Shanahan, Elder, & Meich, 1997; Shanahan, Hofer, & Miech, 2002). Drawing on the longitudinal data from the Stanford–Terman sample, Shanahan et al. (1997) found that planful competence of adolescents has little consequence for later life when historical circumstances substantially restrict occupational or educational choices. They found that, for men whose lives were severely disrupted by the Great Depression and World War II, high levels of planfulness did not matter for later life. By contrast, for men born a few years later (the younger cohort), these same historical events were less disrupting for their life course and the levels of planfulness of these men had significant consequences for their occupational attainment and marital stability.

One of the major principles of life course theory, as developed by Elder (1995, 1997), is the importance of human agency in life course construction: "Individuals construct their own life course through the choices and actions they take within the constraints and opportunities of history and social circumstances" (p. 961). However, people vary greatly in their sense of self-efficacy and control over the direction of their lives. And these beliefs regarding personal agency have important consequences for the direction and outcome of their lives. Self-efficacy is not the only aspect of human agency or even self-agency, but it is among the most important. In the pages that follow, I will discuss the processes and factors affecting the development of self-efficacy within significant contexts of interaction at key points in the life course. I will also consider how some of these processes and outcomes regarding self-efficacy vary by gender, race, class, and culture.

THE DEVELOPMENT OF SELF-EFFICACY

Self-efficacy, which encompasses the individual's beliefs about personal agency, causality, and competence, develops primarily out of the interactions between individual and environment. Specifically, it is the environment's *responsiveness* to the individual's actions that is critical to the development of self-efficacy, as well as the development of mind and self in general (Mead, 1934; Piaget, 1954). Among the earliest and most important lessons that the infant learns is that events are causally related (e.g., shaking a rattle produces a sound) and that the infant can produce that effect. Causing things to happen is the means by which the infant begins to understand causality and to exercise some control over its environment. The process begins very early in life, within the first few months. The developmental progression of the sense of personal agency goes from perceiving causal relations between events, to understanding causation through action, and finally to recognizing oneself as the agent of the action (Bandura, 1997, p. 164). The quality of the environment matters. Environments that are responsive to the infant's actions promote the development of causal agency, whereas those that are unresponsive to the infant's actions or where events occur independently of the infant's actions retard the development of personal agency. Watson's (1977) experiments with mobiles over infants' cribs supported this proposition. He found that mobiles that responded (i.e., made sounds and motions) to the infant's actions, such as touching or kicking, accelerated the development of agency (and other cognitive abilities) in infants, whereas the automatic (wind-up) mobiles did not. The intentional production of effects and the recognition that they produced it creates the initial, rudimentary sense of personal agency in infants, even before the emergence of "self" (which requires language and role taking). However, with the acquisition of language (around age 2), the development of personal agency becomes

intertwined with the developing self and self-efficacy and the range of environmental processes affecting self-agency greatly increases.

Although efficacious actions continue to be the most important source of self-efficacy, beyond infancy other sources that depend more on symbolic interaction emerge as consequential. Bandura (1997) discusses three other sources of efficacy information: vicarious experience (i.e., seeing others successfully perform challenging or dangerous activities), verbal persuasion (i.e., information from others about one's abilities), and emotional arousal (i.e., inferences individuals make about their capabilities from their emotional states, such as fear). But the most effective source of efficacy information remains the individual's actions and their consequences. Not surprisingly, these processes overlap with the more general processes of self-concept formation: self-attribution, social comparison, and reflected appraisals, which are all relevant to the development of self-efficacy, but not equally so. Self-attribution refers to the process of making inferences about oneself from observing one's behavior and its consequences. As discussed above, inferences about one's efficacy and competence are often based on observations of one's performance. Such self-observations are the most important source of efficacy beliefs. It should be noted, however, that a person's self-efficacy corresponds only roughly to self-observations of performance or actions. Usually there is plenty of room for misinterpretation (especially if standards of evaluation are ambiguous) and the occurrence of rationalization, disclaimers, excuses, the "illusion of control," and other manifestations of bias and self-defense are not uncommon. Of course, distortions and illusions apply to most other aspects of self-concept as well. Self-motives are the main sources of distortion in the perception and processing of self-relevant information. People utilize various mechanisms in order to protect a positive self-image, self-efficacy, and self-authenticity.

The processes of social comparison and reflected appraisals also affect self-efficacy. Our judgment of how we compare to others on some ability or achievement factors into our sense of self-efficacy. Social comparison processes are pervasive in peer group interactions, as well as sibling relations. Reflected appraisals refer to our perceptions of how others, especially significant others, view and evaluate us. Evaluative feedback from significant others, such as parents, teachers, mentors, or friends, regarding our abilities and accomplishments can be expected to affect our self-efficacy, depending on the importance of the ability or accomplishment evaluated, the credibility of the source, and other qualifiers. Mechanisms of self-defense and distortion operate in muting the influence of reflected appraisals and social comparison processes, as they do in self-attributions, in affecting the development of self-efficacy. These defenses and distortions are another manifestation of the self's agency.

The quality of the individual–environment interaction, primarily with regard to the opportunities it provides for engaging in efficacious action (i.e., a stimulating, challenging, responsive environment and the freedom to engage it), is the major condition for the development and maintenance of self-efficacy throughout a person's life. Environments vary greatly with regard to the opportunities they provide for exercising agency and self-efficacy. Social environments are characterized by social structures of various power and role relationships, differential access to resources, degree of complexity, formality, and interdependence, among other things. Occupancy of different roles or positions within a social structure—as defined, for example, by gender, class, age—gives people access to different kinds and amounts of resources and therefore different possibilities for efficacious action (Sewell, 1992). In general, the higher one's position within a social structure or stratification system, the greater one's opportunities for efficacious action and the greater one's sense of self-efficacy (Gecas & Schwalbe, 1983). We should keep in mind, however, that the relationship between individual and environment is highly reciprocal and mutually constitutive.

Social structure is both a constraint on action and a product of action (Giddens, 1984). Even though environments (social and physical) set constraints and provide differential opportunities, individuals exercise their self-efficacy (at whatever level) to select, avoid, and manipulate their environments to their own advantage.

DEVELOPMENTAL CONTEXTS OF SELF-EFFICACY

Different periods of life are associated with certain developmental or socialization contexts that present the individual with challenges and competency demands. Family, peer groups, and school are especially important developmental contexts for children and adolescents. Workplace and family of procreation are important contexts for developing self-efficacy and exercising agency for most adults. For some adults there are other important developmental contexts as well, such as the military, prison, and other voluntary and involuntary or coercive institutions. These contexts vary considerably in structure, purpose, duration, and consequences for self-efficacy.

Family

Initially, the family is the most important context for developing self-efficacy. Agency and competencies in many aspects of life develop from the family experiences of children—learning language, motor skills, knowledge of the physical and social worlds, the rules and values of one's family and how to live by them. Of the first four stages of Erikson's (1959) developmental theory, which cover the first 12 years of life, three deal directly with agency-related issues and conflicts ("autonomy," "initiative," and "industry"), mostly played out in the family context.

Parents are the most significant aspect of the family environment for the child. The child's developing sense of agency and efficacy is facilitated by parents who encourage problem solving, experimentation, exploratory behavior, learning by doing, questioning, and, in short, a learning environment that is engaging, stimulating, and responsive to the child. The voluminous research on child socialization has consistently found that parental responsiveness, support, and encouragement, use of inductive control (i.e., control that relies more on reasoning than coercion), and high achievement demands are significantly related to the development of children's self-efficacy and a number of other positive socialization outcomes, such as achievement motivation, self-confidence, self-esteem, and moral development (for reviews, see Grolnick, Deci, & Ryan, 1997; Rollins & Thomas, 1979). In particular, the combination of parental support/encouragement with the use of inductive control is most conducive to the development of competent, efficacious children, who also perceive themselves as competent and efficacious. Parents affect children's self-efficacy in other ways as well. The feedback or reflected appraisals they give with regard to their child's mastery attempts can either build the child's efficacy and confidence in further mastery attempts or squelch them. High performance expectations and supportive encouragement to pursue them can increase the child's motivation and efforts. Parents also serve as role models for their children and children may learn to be efficacious (or inefficacious) by modeling their parents.

Parents are the first and in many ways the most important teachers for their children. Children learn a great deal from their parents through direct instruction, through selective reinforcement and observation, and through the continuous feedback parents give children on

their behavior—socializing children to become competent and moral adults is a big part of the job description of parents. Parents are often judged in terms of their success in developing moral agency and instrumental competence in their children, qualities that are critical in shaping the life course. It should be noted, however, that influence in the parent–child relationship is highly reciprocal, with children having a substantial effect on their parents as well as the reverse. From early infancy, children are continually asserting themselves in ways that are pleasing or displeasing to parents. These self-assertions elicit parental responses which, in turn, may affect the child's behavior and disposition. The temperament of the child (e.g., some children are active, some passive, some more rebellious, others more accommodating), as well as that of the parent and a host of other factors set the stage for the continuing reciprocal influences in parent–child relations throughout the life course.

Family structure affects children's self-efficacy in a number of ways, although the nature and valence of effects is not always clear. Children in single-parent as compared with those in two-parent families may be considered at a disadvantage in developing self-efficacy because they have fewer social and economic resources available. On the other hand, they may be given greater responsibility for household tasks and perhaps for caring for younger siblings, thereby increasing their self-efficacy and sense of worth. The self-efficacy of older children is more likely to benefit and that of younger children to suffer from this family situation, but there are many qualifying and conditional factors involved. For example, helpfulness with household chores does not necessarily contribute to adolescents' sense of competence and efficacy. Call, Mortimer, and Shanahan (1995) found that it might even have the opposite effect if it is imposed on the adolescent. The positive benefits of helpfulness may only accrue if it is voluntarily undertaken.

Family size seems to have a negative effect on children's sense of control. Blake (1989) found that children from large families did more poorly on most indicators of academic and intellectual achievement. She explained these findings in terms of resource depletion, that is economic and social resources are less available for any one child in a large family compared with a small family. Rodin (1976) found children's sense of personal control to decrease with family size. She suggests that the increase in the density of living conditions associated with large families increases the probability that events will be more unpredictable and resources, including personal "space," more constrained. Furthermore, as family size and density increase, parental control tends to become more rigid and authoritarian (Elder & Bowerman, 1963), thereby restricting children's freedom and opportunities for efficacious action. Large families may also be restrictive for parents, with negative consequences for their self-efficacy (Duncan & Morgan, 1980).

Large families also mean a large number of siblings. Sibling interaction is almost as important as parent–child interaction in shaping the child's self-efficacy and other aspects of personality and self-concept. Children are more likely to aggress against, to resist control attempts of, to compete with, and to compare themselves with siblings than with parents. Social comparison processes are pervasive in sibling relations. Siblings close in age and same sexed are most likely to engage in rivalrous comparisons. The older sibling has an advantage in these comparisons. Younger siblings compensate by trying to develop skills in areas in which their older siblings do not excel. For example, if an older sibling is good at sports, the younger sibling may try to excel in academics or, if both want to be good students (perhaps because of parental pressure), they may focus on different subjects. Such adaptations by younger siblings, what Sulloway (1996) refers to as "niche picking," diminish or neutralize to some extent the potentially negative consequences for self-efficacy and self-esteem of social comparisons with an older sibling.

Position in the sibling stratification system is a major factor in family dynamics, affecting relations with siblings as well as parents. Even though the research on birth order is notoriously problematic (Schooler, 1972), there is enough basis for extracting a few observations about the consequences of ordinal position for the child's self-efficacy and related characteristics. Conventional wisdom claims that firstborns are rule enforcers and keepers of the faith, seeking self-efficacy and self-expression in the pursuit of conventional goals, while later borns are rebels, expressing their agency in activities that challenge conventions. There is some truth in this. Sulloway (1996) provides an interesting and wide-ranging historical analysis in support of his thesis that rebels are overrepresented among later borns and that establishmentarians are overrepresented among firstborns. He finds overwhelming support for this birth order effect in his analysis of 28 important scientific controversies over the last four centuries (as well as the French Revolution and the Protestant Reformation) and the birth orders of the major figures involved (but see Modell, 1997, for a critique).

Children differently located in the sibling order experience different patterns of interaction with parents and siblings. Firstborns receive more parental attention, are more likely to be given responsibility and control over younger siblings, and have higher expectations associated with their performance. The high parental support and control they receive, combined with high performance expectations, contributes to the greater tendency of firstborns to identify with parents, to internalize parental values, to be more achievement oriented, to do better in school, and to have high self-efficacy (Adams, 1972; Zajonc, 1976). Because younger children in the birth order are subject to more child-level interaction, especially in large families and are at a power disadvantage compared to firstborns, they tend to develop better role-taking skills, enabling them to adjust to the moods and dispositions of their older siblings better. These skills also enable smoother interactions with peers. But there are many factors that mitigate these relationships, such as family size, spacing between ordinal positions, sex composition of sibship, families' social class, and parents' education level. Since research on birth order rarely takes all of these factors into account, support for birth order effects is weak and inconsistent (see Blake, 1989; Zajonc, Markus, & Markus, 1979, for critical appraisals).

Peers

Next to family, the peer group is the most important context for the development of children's self-efficacy. In terms of structure and function, the peer group is a very different developmental context from family. Peer groups are relatively voluntary associations of individuals of more or less equal age and experience and are based essentially on friendship bonds (see Crosnoe [2000] for a review of theory and research on the developmental implications of children's friendships). These conditions are most conducive to social comparison processes. Bandura (1997, p. 173) observes that, because of similarities in age and experience, peers provide the most relevant points of reference for children's efficacy appraisals and verification. Consequently, children are especially sensitive to their relative standing among their peers with regard to competence, prestige, and popularity.

Children's peer groups are typically segregated by sex and differ in organizational patterns: girls' peer groups tend to be closely knit and egalitarian friendships, whereas boys' peer groups tend to be loosely knit, larger groups, with more pronounced status hierarchies (Kuttler, LaGreca, & Prinstein, 1999; Thorne, 1993). Maccoby (1998) observes that even young children segregate play activities by gender and punish attempts of their peers at cross-sex interaction. Sex segregation in children's peer groups and friendships create subcultures

of opposition between boys and girls that exaggerate gender roles and norms (Adler & Adler, 1998; Crosnoe, 2000; Thorne, 1993). An important socialization consequence of intensive association with same-sex peers and involvement in sex-typed activities is that it strongly reinforces identification with one's sex. It also contributes to the development of stereotypical and negative attitudes towards the opposite sex. The development of gender identities and much of children's sexual socialization occur in the context of peer rather than family associations.

Peer interactions have a wide range of consequences for children's self-concept and self-efficacy (Adler & Adler, 1998; Eder, Evans, & Parker, 1995). In his field studies of pre-adolescent boys, Fine (1987) observed that friendship groups are especially appropriate contexts for the mastering of self-presentation and impression management skills, often in displays of exaggerated masculinity, since inept performances are usually ignored or corrected without severe loss of face. A wider latitude of behavior is allowed in peer groups and even encouraged, since friends, unlike parents, are not responsible for child-rearing.

Peers provide an alternate reference group for children, an alternate source of self-efficacy and identity, and a context for the exercise of independence from adult control. Often they provide "arenas of comfort" or safe havens where adolescents can relax and rejuvenate from the pressures and stresses of family and school (Call & Mortimer, 2001). Peers may also give rise to subcultures with values and behavior distinct from and in opposition to the culture of adults, such as the adolescent subcultures described by Coleman (1961) and in much of the literature on juvenile delinquency. The self-agency developed and fostered in peer groups may be directed toward constructive or to destructive ends and may serve the individual well or poorly later in the life course.

School

Even though they are very different in structure and function, there is an ecological relationship between peer groups and schools as developmental contexts for children. Schools provide favorable circumstances for the emergence of peer groups—the presence of large groups of children, divided into same-age groupings, and exposed to similar social circumstances. School is the first formal organization that children experience and it constitutes a large part of most children's lives. The primary mandate of schools is to educate children and to develop their cognitive skills. It is the setting where knowledge and thinking abilities are constantly tested, evaluated, and compared with other students and where children develop a sense of their intellectual efficacy (Bandura, 1993).

Many school activities have implications for the child's self-efficacy. One of the most important is evaluation of the student's academic performance and this evaluation is more public than evaluations by parents and peers. Success in academic performance is good for self-efficacy and self-esteem. But failure is not and public failure is worse. Schools in which students are evaluated against their classmates (i.e., grading on a curve), rather than against their previous performance or on the basis of cooperative activities, guarantee that some students will succeed and some will fail, thereby increasing self-efficacy for some and decreasing it for others. Performance evaluations may also result in the labeling of students by teachers and classmates as "smart," "dumb," "lazy," etc. Such labels affect the way others respond to the student and thereby influence the student's conception of self, including their self-efficacy, affecting their motivation and subsequent academic performance (Wilkins, 1976).

Of course students and others are not passive recipients of the pressures they experience. Some resist negative labels, some try to change them by working harder, some withdraw emotionally and intellectually, and some adopt strategies of rationalizing failure that enable them to maintain self-esteem but at the expense of academic performance (Covington & Beery, 1976). U.S. public schools, concerned with this problem, began to develop strategies to enhance children's self-esteem. By the mid-1980s, self-esteem enhancement became part of the curriculum in many public (especially elementary) schools. Grading and public evaluation of students were discouraged, negative feedback of any kind was also discouraged, and positive feedback and affirmations of self-worth were encouraged. In short, the demonstration of competence and mastery were no longer the primary basis for teachers' evaluative feedback. This focus on self-esteem enhancement resulted in more problems than it solved, by diverting schools from their main mission of enhancing children's substantive knowledge and increasing their cognitive skills. Furthermore, in a culture that is already highly individualistic, self-preoccupied, and inclined to "look out for number one," as Hewitt (1998) argues, the emphasis on self-esteem enhancement contributes to even more self-centeredness and self-preoccupation.

Although high self-esteem is generally a good quality to have, how it is obtained matters. Effective performance is a more solid and constructive basis of self-esteem than is reflected appraisals (Gecas & Schwalbe, 1983). Self-enhancement programs in public schools tended to emphasize the enhancement of self-esteem primarily through positive reflected appraisals and to diminish its association with competence and effective performance. Children may have felt good about themselves, but their school performance declined and public criticism of these school programs increased. By the early 1990s, this social experiment in self-esteem enhancement in public schools began to decline.

Education has a pervasive influence on self-efficacy, affecting one's overall sense of efficacy as well as developing specific skills and competencies. As individuals gain knowledge, either through formal instruction in schools or through independent study, they gain self-efficacy. Kohn and Schooler (1983) found education to be as important as occupational conditions (both are considered indicators of socioeconomic status and are strongly interrelated) for adults' intellectual flexibility and related personality variables. Mirowsky and Ross (1983) and others (Gurin, Gurin, & Morrison, 1978) have found that education increases the sense of mastery and personal control, which in turn increases the pursuit of higher educational and occupational goals. Grabowski, Call, and Mortimer (2001) found that domain-specific self-efficacy (i.e., economic self-efficacy) of high school students had a significant effect on their pursuit of postsecondary education.

Schools are also the settings for the development of skills and capabilities other than intellectual. Opportunities are available in most schools, especially at the high school level, for the development of athletic, social, artistic, musical, and other skills, providing children and adolescents with a wide range of self-efficacy possibilities. With the possible exception of children's early family experiences, no social context and stage of life is more focused on the development of efficacy and agency than are the school years. And some of the most important decisions (concerning career, life goals, interpersonal relations, and identity issues) that the person will make occur near the end of those years (Shanahan, 2000).

Work and Occupation

For most adults, work is the context of greatest relevance for the development and expression of self-efficacy and other aspects of agency and self-definition. Considering the amount of time men

and women spend working and preparing for occupational roles, as well as the importance of work for personal identity and lifestyle, we would expect it to be consequential for self-efficacy and personal agency. But workplace and occupational conditions vary considerably with regard to factors affecting the development and expression of self-efficacy, such as the nature of the work involved, power relations, degree of structure, presence of co-workers, and degree to which the worker has autonomy and control over the conditions and the products of their labor. Work enhances self-efficacy when it is complex, challenging, and interesting and when the worker has a high degree of autonomy and responsibility (Mortimer & Lorence, 1995). The opposite conditions, for example, boring, routinized work in which the worker has very little autonomy and decision-making responsibility, depress self-efficacy and increase workers' alienation and dissatisfaction (a theme that Marxist scholars have emphasized in their critique of capitalism).

There is substantial research supporting these relationships between work environment and worker's self-efficacy and related aspects of psychological functioning. The most extensive empirical support is provided by Kohn and Schooler (1969, 1983) and their colleagues. In a series of studies spanning over three decades, Kohn examined how work conditions affect the values and psychological functioning of workers. He focused on several conditions of work that enable or inhibit self-direction: degree of supervision, degree of routinization, and the substantive complexity of work. These occupational conditions are highly related to social class, with occupations located in the upper end of the class structure characterized by work activities high in self-direction, while those in the lower classes are low in self-direction. Occupational conditions, then, are a major means by which social class impinges on people. The extensive research conducted by Kohn and Schooler and others (for reviews, see Kohn & Schooler, 1983; Miller, 1988; Schooler & Oats, 2001) has found that the greater the freedom experienced on the job and the more complex and challenging the work, the more likely is the worker to value self-direction, to be intellectually more flexible, and to have greater self-efficacy (as measured by indicators of self-confidence, powerlessness, and fatalism). Kohn and his colleagues have found these occupational conditions (especially work complexity) to have substantial psychological consequences not only for U.S. workers, but also for workers in socialist countries (Kohn & Slomczynski, 1990) and for women as well as men (Miller, Schooler, Kohn, & Miller, 1979). It should be noted that these relationships are not unidirectional but rather reciprocal, that is individuals try to choose work that is congruent with their dispositions (including their self-efficacy) and then to affect their work environments as much as possible. However, Kohn and Schooler (1973) maintain that this reciprocity is not equal: "In all cases (of their analysis of relative influence), job affects man more than man affects job" (p. 114). On the other hand, as workers' self-direction and efficacy increase, because of job conditions or other factors, their influence on their jobs also increases.

Other scholars have also found that work autonomy, flexibility, and complexity are conducive to the development of workers' self-efficacy. Mortimer and Lorence (1979) and Mortimer, Lorence, and Kumka (1986) found, in their panel study of college students, that work autonomy significantly affects self-perceived competence. Staples, Schwalbe, and Gecas (1984) found the degree of routinization and supervision at work to affect workers' occupational self-efficacy negatively. Gecas and Seff (1987) found these same occupational conditions to be related to general self-efficacy for a sample of employed men. Spenner and Otto (1985) found that work complexity had a significant effect on the sense of personal control for men and women. Schwalbe (1986) found that problem-solving demands at work were positively related to workers' intellectual flexibility and negatively related to "reification" (i.e., belief in external control). It is evident from this line of research that occupational conditions that enable efficacious action enhance the development of self-efficacy.

Income is also positively related to self-efficacy and personal control (Downey & Moen, 1987), especially when the income is earned rather than received from charity or welfare (Duncan & Morgan, 1980). Income provides resources that individuals use in exercising agency and increases their range of choices and options. Not surprisingly, disruptions in income and employment status—being laid off, downgraded, losing one's job because of injury, etc.—decrease individuals' sense of efficacy and increase powerlessness and associated psychological distress (Pearlin, Leibermann, Menaghan, & Mullan, 1981; Seff, Gecas, & Ray, 1992).

Other Developmental Influences: Race and Ethnicity

Evidence for the effects of race and ethnicity on self-efficacy and perceived control is sparse, but what there is suggests that racial and ethnic minorities have lower self-efficacy (Gurin et al., 1978; Mirowsky, Ross, & Van Willigen, 1996). Some of this effect is due to the association of race and ethnicity with social class, since racial and ethnic minorities disproportionately occupy the lower levels of the social class structure. Gurin et al. (1978) found African Americans to have a significantly lower sense of personal control than White Americans. However, they did not find any difference between the races in "control ideology," that is the belief in the degree to which people in general have control over their lives. This is somewhat surprising since control ideology, in the form of "system blame," has been suggested as a psychological defense used by the powerless to account for their subordinate status (Taylor & Walsh, 1979).

The lower self-efficacy of Blacks compared to Whites may be a function of economic disadvantage and racial discrimination and their consequences for power, control, and access to resources. Their lower sense of personal control may indeed be a realistic assessment of their circumstances. Interestingly, these conditions of economic disadvantage and racial discrimination do not seem to affect Black self-esteem in the same way. Studies have generally found little or no difference in the self-esteem of Blacks and Whites (Jackson & Lassiter, 2001; Rosenberg & Rosenberg, 1989). One explanation of these findings is that self-esteem is primarily dependent on one's interpersonal context (i.e., local contexts of interaction and frames of reference, namely friends, neighbors, and kin), whereas self-efficacy is more affected by social structural influences (Gecas & Schwalbe, 1983). Hughes and Demo (1989) provide empirical evidence for this observation in their study of the self-perceptions of Black Americans.

Culture may be more important than social structure in influencing ethnic differences in self-efficacy, although both sources play a part: social structure because of the disproportionate representation of ethnic minorities in the lower classes and culture because of the differential emphasis on agency beliefs in the cultures of ethnic minorities. Cultures and world views that emphasize fatalism and external control (divine or secular) are associated with lower self-efficacy. Much of the evidence for cultural influences on self-efficacy comes from comparisons of Hispanics and Anglos. Hispanics are found to have stronger beliefs in external control and weaker beliefs in personal agency than Anglos, even after the effects of social class are controlled (Madsen, 1973; Ross, Mirowsky, & Cockerham, 1983). Fatalism is not as prominent a feature in the cultures of ethnic minorities from Japan, Korea, and other Asian countries, where the emphasis on personal agency and efficacy (especially academic efficacy) is as great or greater than it is in mainstream U.S. culture.

GENDER DIFFERENCES IN SELF-EFFICACY

Research indicates that males and females differ in their sense of self-efficacy, with males being perceived (by self and others) as having a stronger sense of general self-efficacy and

personal control than females in our society. Several extensive reviews of the child develop-ment research on sex differences (Block, 1976, 1983; Maccoby & Jacklin, 1974) indicate that boys are more active, impulsive, aggressive, engage in more exploratory and risk-taking behavior, seek opportunities to exert control over their environments, and have more self-confidence than do girls. Based on her extensive review of this research, Block (1983, pp. 1339–1340) concludes that the self-concepts of males, in contrast to females, include stronger beliefs in being able to control the external world. The self-descriptions of males are more likely to include concepts of agency, power, control, and instrumentality—all reflections of a self-concept in which efficacy and mastery are important components. In contrast, females describe themselves as more generous, sensitive, nurturing, and considerate of oth-ers. The self-concepts of females emphasize interpersonal relations and communion and not competition and mastery in the way that they relate to their environments.

These observations on general self-efficacy, while important, tend to gloss over sex differ-ences on domain-specific self-efficacies, especially those based on actual abilities. Males tend to do somewhat better at spacial and analytical tasks, whereas females are more efficacious in lan-guage and role-taking abilities (Maccoby & Jacklin, 1974). These domain-specific competencies are reflected and exaggerated (because they are sex typed) in the self-conceptions of males and females—there is a tendency for boys to overestimate their efficacy in mathematics and for girls to underestimate theirs (Betz & Hackett, 1981; Hackett, 1985). These self-conceptions have important consequences for academic and career decisions, with substantially more men than women choosing careers in scientific and technical fields (Eccles & Hoffman, 1984).

Most of the research on sex differences in self-efficacy is done on children. But these differences are also found in studies of adults (Gurin et al., 1978). They tend to vary, however, by age and stage of family life course. The largest sex differences in the self-efficacy of men and women (as indicated by male-instrumental and female-expressive self-perceptions) occur dur-ing the active parenting stage of the family. By contrast, postparental men and women are more likely to identify cross-sex traits in their self-conceptions, making sex differences in self-efficacy less evident with increasing age (Bengtson, Reedy, & Gordon, 1985).

Explanations of gender differences in self-efficacy are predominantly cultural and social structural. Cultural explanations maintain that sex differences in self-efficacy reflect cultural conceptions of "masculinity" and "femininity," with the former stressing agency, independ-ence, and assertiveness and the latter emphasizing passivity, dependence, and sensitivity. Through sex-role socialization, primarily in the family but also in schools and peer groups, boys and girls acquire the sex-appropriate gender identities with their differential implications for self-efficacy. While there has been substantial change in our culture over the last half cen-tury toward greater emphasis on equality between the sexes and de-emphasis of gender differ-ences, the early socialization experiences of boys and girls still differ with regard to the development of gender identities. For example, Eccles, Jacobs, and Harold (1990) found, in their longitudinal studies of children and adolescents, that parents distort their perceptions of their children in gender stereotypic activities such as mathematics and sports, that the child's sex affects parents' causal attributions for their children's performance in sex-role stereotypic activities (i.e., exaggerating the child's success in sex-stereotypic activities and diminishing it in cross-sex activities), and that these parental biases influence the children's self-conceptions and activity choices. Similarly, in his longitudinal study of parents' socialization values, Alwin (1991) found that sex-based differentiation in parental values have not changed substantially, despite the changes found over the past five decades or so of increasing parental preferences for autonomy and decreasing emphasis on obedience in child-rearing (Alwin, 1988).

Gender stereotypic socialization is even more pronounced within children's same-sex peer groups, as discussed above and structural explanations of children's play and games also

recognize these processes. Structural explanations of sex differences in self-efficacy emphasize power differences between men and women in society, women's more restricted occupational opportunities, division of household labor along sex-role lines, and the nature of women's jobs (Mirowsky & Ross, 1986). Lever (1978) provides one of the most interesting structural explanations, focusing on the nature and organization of children's play and games. Through careful observations of children's (fifth graders) playground activities Lever (1978) found that boys' and girls' games differed with regard to degree of complexity, role differentiation, player interdependence, number of players involved, explicitness of goals and rules, and team formation, with boys' games high and girls' games low on these dimensions of complexity (the typical boys' game was baseball and the typical girls' game was hopscotch). Lever (1978) suggests that boys' games further independence training, the development of organizational skills, and seeing things from the perspective of the team or group. By contrast, girls' games may enhance the development of socio-emotional skills, since they occur in smaller, more intimate groups. In Meadian terms, boys develop the ability to take the role of the *generalized other*, while girls develop greater competence in role taking *particular others* (Lever, 1978). These peer group activities, Lever (1978) speculates, better prepare boys for occupational roles and girls for domestic roles and occupational roles in which interpersonal skills predominate.

However, children's games have been undergoing considerable change over the past 20 years, for girls. With the increased emphasis on girls' participation in team sports (such as soccer, basketball, and baseball) and de-emphasis of sex role differences, the playground observations of girls' games that Lever (1978) observed in the 1970s are less apparent today. To the extent that the structure of girls and boys games is more similar now, the cognitive consequences may be more similar as well (see Maccoby [1998] for analyses and discussion of the differential socialization consequences of the structure of boys' and girls' play and games).

STABILITY AND CHANGE IN
SELF-EFFICACY OVER THE LIFE COURSE

There seems to be a curvilinear pattern of self-efficacy and sense of control over the life course, with efficacy increasing through childhood and early adulthood, reaching a plateau in middle age, and gradually declining after age 60 or so. But empirical support for this overall pattern is spotty and weak, since there are few longitudinal studies of self-efficacy over large segments of the life course (Gurin & Brim, 1984). The research evidence is strongest for the uphill slope of this pattern. McAdams (1989), in his follow-up of the Mississippi Freedom Summer participants, found political activism and efficacy to still be high for these men and women 20 years later and to have a major effect on the course of their lives.

The stability of self-efficacy and its effect on life course construction suggest that there is an element of self-fulfilling prophecy in operation. Mortimer et al. (1986) found a high level of stability in "self-competence" in their 10-year panel study of college men. Mortimer, Finch, and Kumka (1982) demonstrate how self-competence in the college years shaped the lives of these men in the areas of work and family and how this, in turn, had an independent effect on self-competence 10 years later. In addition, success or failure in education and early occupational experiences during adolescence effect self-efficacy, motivation, and levels of aspiration which have consequences in adulthood (Mortimer, Harley, & Aronson, 1999). Gecas & Mortimer (1987) suggest that efficacy beliefs give rise to spiraling patterns of increasing success or failure. Conceptions of self-efficacy formed early in life tend to become self-fulfilling prophecies, by either encouraging or discouraging persons from taking risks and undertaking new and

challenging tasks. Subsequent success in new endeavors fosters an increasing sense of personal efficacy over time: subsequent failure has the opposite effect. This process of spiraling reciprocity is well illustrated in Clausen's (1993) analysis of the Berkeley longitudinal studies, mentioned above: "planful competence" in adolescence leads to the kinds of decisions these men and women made, especially during times of opportunity (Shanahan et al., 1997), affecting the quality of their family and work lives into the middle years. Elder's (1974) work as well has documented the long-term consequences of efficacy-relevant childhood experiences for the shaping of adult lives. In spite of fluctuations associated with role transitions, historical events, and successes and failures in various domains of self-agency, general self-efficacy may be one of the more stable aspects of personality over the life course, at least into middle age.

It seems reasonable to expect a gradual decline in self-efficacy and personal control in the later years of life, when physical and cognitive abilities decline, social networks contract, and occupational and family roles decrease in importance. But evidence for the downward slope of self-efficacy in the later years comes mostly from cross-sectional studies, which have a tendency to confound maturational with historical or cohort effects (Bengtson et al., 1985; Elder, 1997). There is reason to suspect that at least some of the difference in self-efficacy found in these non-longitudinal studies is due to cohort differences. The earlier cohorts (i.e., those born in the 1920s and 1930s) had less formal education and perhaps less benefit of other intellectual experiences (e.g., computer technologies) than persons born later, accounting for some of the differences in self-efficacy (Bandura, 1997; Schaie, 1995). This is not to say that self-efficacy does not decline in old age, but that the documented decline based on cross-sectional studies may be exaggerated.

Our conceptions of the elderly may also exaggerate the extent to which their abilities have declined. Riley, Kahn, and Foner (1994) argue that there is a "culture lag" in our conceptions of the elderly that is a carry-over of conceptions from an earlier time, when the elderly were indeed more feeble, infirm, and dependent than the majority of the elderly are in contemporary society. Greater affluence, technological changes, and modern medicine have increased longevity and the quality of life for the elderly in modern societies, and undoubtedly have enabled the maintenance of higher levels of self-efficacy than was possible for past generations of elderly.

When physical and mental capabilities do decline, as they inevitably do if one lives long enough, people minimize the negative consequences for self-efficacy in a number of ways. Gains in wisdom, knowledge, and expertise compensate for some of the physical declines (Baltes, 1987). People also engage in various "self-immunizing" processes (Brandtstädter & Greve, 1994) that protect and stabilize their self-concepts. These include advantageous social comparisons (e.g., comparing one's abilities with people the same age or older makes one's declining abilities less evident), selective reflected appraisals (e.g., paying more attention to evaluative feedback from one's peers than from younger folks), and selective attributions (e.g., attributing inefficacy in a particular domain to lack of interest, motivation, or to external circumstances), as well as selective memory, perception, and other defense mechanism we use to protect our sense of efficacy and self-worth (Fung, Abeles, & Carstensen, 1999). So, while physical and mental abilities decline with old age, the self-efficacy of old people may not show the same level of decline because of these compensatory processes, shifts in arenas of comparison, and other self-protective mechanisms.

CONCLUDING OBSERVATIONS

We all exercise agency in the construction of our lives through the choices we make and the courses of action we pursue. But agency can be constructive or misguided, have desirable or

undesirable consequences, lead to self-fulfillment or regret. To say that we are architects of our lives is not to say that our lives turn out as we intended. The self as a reflexive phenomenon and a motivated system is a multidimensional source of human agency (see Gecas, 2001, for an elaboration). A major aspect of self-agency affecting life course construction is our sense of self-efficacy, that is our belief in our efficacy and personal control. The main theme of this paper is that self-efficacy is a positive and constructive force in the life course. Those with high self-efficacy are more effective in shaping their circumstances and their lives in the intended direction.

Beliefs about one's efficacy are among the earliest beliefs formed, developing out of the initial interactions between the individual and his or her environment and shaped by subsequent contexts of socialization across the life course. Environments that are complex, stimulating, challenging, and responsive are most conducive to the development and maintenance of self-efficacy at any stage of life. Exposure to such environments varies with one's position in systems of stratification (e.g., social class, race, gender, birth order), among other things. In general, those higher in a system of stratification have more power, autonomy, and greater access to resources, enabling efficacious action. Social struggles for racial and gender equality are not only struggles for resources and justice, but also for greater opportunity for self-determination.

While my discussion of self-efficacy is hopefully not a parochial view, I have been considering it largely within the framework of modern Western societies. U.S. society in particular, with its ethos of individualism and self-reliance, might be an especially favorable cultural context for the development of beliefs in personal control and efficacy. Mirowsky et al. (1996), in a study based on a representative national sample, found that over 90% of Americans think that they control their own lives. Self-efficacy might have somewhat different relevance and implications for life course construction in non-modern or non-Western societies. For example, self-efficacy may be less important in cultures or societies that are less individualistic and more collectivistic than ours, although Bandura (1997) argues strongly against this suggestion, maintaining that self-efficacy is important to the achievement of personal or collective goals irrespective of cultural orientation. Nevertheless, cultural orientations could affect the development and maintenance of self-efficacy by their emphasis on fatalism and de-emphasis of personal control ideology. Sastry and Ross (1998) found that respondents from Asian countries were significantly less likely to report that they had control over their lives than respondents from Western countries. Furthermore, responses to success and to failure, with implications for the development of self-efficacy, seem to differ for these cultures. Heine et al. (in press) found that the Japanese work harder when focusing on their shortcomings (e.g., in response to failure at a task), whereas North Americans work harder when focusing on their strengths (e.g., in response to successful performance), suggesting that the Japanese are motivated more by self-improvement and Americans by self-enhancement. In addition, cultural differences in attitudes toward the elderly may have implications for self-efficacy in this segment of the life course. Cultures in which the elderly are honored and revered and in which they maintain substantial authority may not show the pattern of decline in self-efficacy found among the elderly in Western cultures.

U.S. society and culture, along with most modern societies, have been undergoing major and rapid changes, giving rise to a number of new questions and concerns regarding self-agency and the life course. Will the emerging postmodern, high tech information society give us a greater sense of agency and efficacy or will it make us feel less in control of our lives, more powerless and vulnerable in the face of powerful and increasingly invasive bureaucracies? Which social groups (e.g., social classes, minority groups) are most affected by these

major social changes and at what points in the life course? Considering the major cultural and social structural changes in modern societies regarding gender roles, is the gap between men and women narrowing with regard to general self-efficacy as well as domain-specific (especially, gender stereotypic) self-efficacy? How have changes in self-efficacy for girls and women affected their choices and decisions at key points in the life course? At a more fundamental level we might ask, is self-efficacy an unequivocal good? Throughout this chapter I have been arguing for the positive consequences of self-efficacy. But is there also a down side to self-efficacy? For example, what if self-efficacy is largely illusory, that is, not based on one's actual abilities or achievements? Illusion, of course, is a matter of degree and most aspects of self-concept are illusory to some extent. But when the gap between one's abilities and one's self-efficacy is great, is this "illusion of efficacy" functional for the individual? Taylor and Brown (1988) think so. I am not so sure. We could use more research on these issues.

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