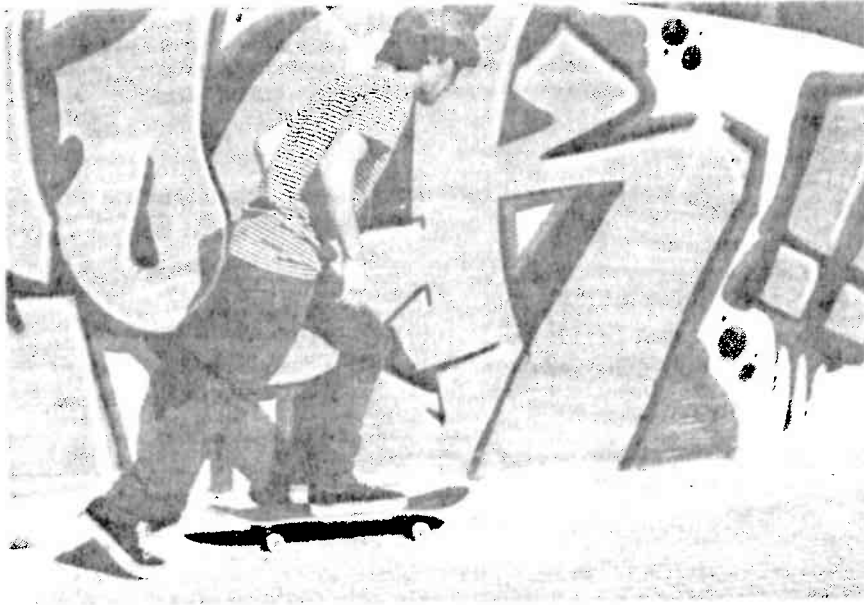


Social Change and Human Development

Concept and Results



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GLOBALIZATION, SOCIAL INEQUALITY, AND INDIVIDUAL AGENCY IN HUMAN DEVELOPMENT: SOCIAL CHANGE FOR BETTER OR WORSE?

Jutta Heckhausen

There is much attention in life-course sociology and life-span psychology to processes of deregulation and individualization believed to become dominant in the wake of economic globalization. Some researchers focus on the risks in terms of social exclusion, marginalization, and downward social mobility that these processes of deregulation and destabilization of the social structure bring along (Bynner & Parsons, 2002; Furstenberg, Kennedy, McLoyd, Rumbaut, & Settersten, 2004). In contrast to this critical view of social change associated with globalization, many life-span developmental psychologists and life-course sociologists emphasize the potential that modernity (Beck, 1986) and the effects of globalization on society bring about for self-direction and individualization in development across the life course (Heinz, 2002b; Shanahan, Mortimer, & Krüger, 2002; Wrosch & Freund, 2001), constructing an individualized career (Hall, 2004), and even envisage new arenas and developmental phases for self-fulfillment (Arnett, 2000). However, other life-course sociologists and life-span psychologists have warned to not throw the baby out with the bathwater and declare the end of social structure and institutions when they continue to shape life courses and trajectories of development (Brueckner & Mayer, 2005; Heckhausen, 1999).

This chapter brings together our motivational psychology approach to individual agency in life-span development (Heckhausen & Heckhausen, 2008; Heckhausen & Schulz, 1995, 1999; Heckhausen, Wrosch, & Schulz, in press; Schulz & Heckhausen, 1996) and a life-course sociological approach to globalization and its impact on individual life courses (Blossfeld et al., 2007; Buchholz et al., 2009). The life-span theory of control provides

a motivational and action-theoretical framework to conceptualize how biological and societal conditions and their changes across the life-span interface with the development-related agency of the individual. Regarding the societal conditions, the life-course sociological approach of Blossfeld and colleagues identifies the pertinent changes associated with globalization, and how these vary in different countries. When integrating the two approaches, we arrive at hypotheses about which individual differences in developmental regulation should be more adaptive in which society. Finally, we discuss some recent empirical findings from our research program about motivation in life-span development in light of these new conceptual ideas about individual agency under conditions of social change. It is important to keep in mind that these empirical studies were originally not planned with the goal to investigate individual striving in settings of social change, and therefore the findings are merely suggestive and may serve as guideposts for future research.

How societal structure and institutions set up the action field for developmental agency of the individual

The life-span theory of control addresses the role of human agency in life-span development (Heckhausen, 1999; Heckhausen & Schulz, 1995; Heckhausen et al., in press; Schulz & Heckhausen, 1996). Human development and behavior across the life span is only weakly determined by biological processes and changes. Within the phylogeny of mammals, a biological strata characterized by open behavioral programs (Mayr, 1974), humans have evolved as a species with unprecedented variability and flexibility in the regulation of behavior and ontogeny. There is an immense degree of freedom for human developmental change, particularly during adulthood. The great variability and flexibility of human behavior and development is an advantage in terms of enhanced adaptive potential. However, the organism needs to organize his/her resource investment by making choices and focusing resources accordingly. Thus, life-span development inherently raises the question of how to decide on which domain or goal to select (Baltes & Baltes, 1990; Carstensen, Isaacowitz, & Charles, 1999; Freund & Baltes, 2002; Marsiske, Lang, Baltes, & Baltes, 1995), and how to remain focused on a domain or goal that has been chosen (Heckhausen, 1999; Heckhausen & Schulz, 1999).

Many decisions individuals make about career and family goals and life-course paths are strongly influenced by the societal structure and age-graded institutions such as schools, career and promotion patterns, and retirement. These social institutions provide 'adaptive challenges' (Heckhausen, 1999) by channeling the individual's goal investments into

constrained developmental pathways (Heckhausen & Schulz, 1993, 1999) and offering age-graded and sequential timetables for the individual's attempts to co-produce his or her own development. Under conditions of globalization, these developmental pathways become (at least partially) deregulated and thus may lose some of their constraining but also some of their supporting and guiding capacity.

Developmental regulation as goal engagement and disengagement

Individual agency plays a crucial part in human development across the life span (Baltes, Lindenberger, & Staudinger, 1998; Brandtstädter, 2006; Heckhausen, 1999; Lerner & Busch-Rossnagel, 1981). In a given society there is much consensus about normative developmental tasks for each age segment of the life course (Havighurst, 1952). Individuals base their own mental representations about desired outcomes of life-course transitions and developmental processes on these normative conceptions. Typically, these desired outcomes or developmental tasks are adopted by the individual as goals to strive for and can thus organize the active attempts of individuals to influence their own development. Many developmental researchers therefore focus on goal-related concepts when investigating individual contributions to life-span development and life-course events and transitions (Brandtstädter, Wentura, & Rothermund, 1999). Development-related goal concepts are adapted for the life-course context by addressing developmental processes of life-course transitions, and aim at intermediate levels of aggregation (e.g., enroll in college, find a girl friend, become less dependent on my parents) and intermediate future time extension (i.e., five to ten years). (Heckhausen, 1999)

The way in which individuals can actively influence their own development and life-course is by choosing and pursuing developmental goals. Just encountering opportunities for entering college in a given developmental ecology (e.g., a high school graduate in a middle-class American family) is in itself not sufficient to put the individual on the trajectory for a college education. The individual has to make an active choice for the respective developmental goal of attaining a B.A., volitionally commit to it, and persist in goal pursuit until the goal is attained. This goal engagement requires the activation of certain control strategies of *primary control* (i.e., invest time and effort into goal pursuit) and typically also selective *secondary control* to maintain the focus and commitment on the goal in spite of challenges and distractions (Heckhausen, 1999; Heckhausen et al., in press; Wrosch & Heckhausen, 1999). When thinking in terms of the example of striving for a career promotion, the person who has set this goal for herself will invest more time and effort into work (i.e., selective primary control), imagine the positive consequences and pride that would come with achieving the

promotion (i.e., selective secondary control), and seek advice from more advanced colleagues on effective strategies to foster career success (i.e., compensatory primary control).

As the individual moves along the age axis, the capacity for primary control in most domains of life will change and force the individual to respond to this loss of control by disengaging from the goal (Heckhausen & Schulz, 1993; Heckhausen et al., in press; Wrosch, Scheier, Carver, & Schulz, 2003). In contrast to the motivational mind set of goal engagement, *goal disengagement* requires *compensatory secondary control*. Compensatory secondary control encompasses deactivating the obsolete goal, and using self-protective strategies, such as self-protective causal attribution (avoiding self blame), the focusing on successes in other domains, and downward social comparisons.

Changing opportunities and constraints across the life course

Individuals have to adjust, cope with, and take advantage of the changing opportunities and constraints to what they can accomplish at different points in life. Biological maturation and aging, and societal institutions (e.g., education, labor market, retirement) set up a roughly inverted U-shape curve of control capacity across the life span, with a steep increase during childhood and adolescence, a peak in young adulthood, and a decline in advancing age. This more general life-course encompassing trajectory of first increasing and then decreasing opportunities is overlaid with more domain-specific trajectories of improving and declining opportunities for achieving specific developmental goals. Societal institutions such as the educational system, vocational careers, and welfare systems elaborately structure the life span in terms of critical transitions (e.g., school entry, promotions, retirement) and sequential constraints (e.g., educational qualifications as prerequisites for certain careers). These time-organized opportunity structures present significant regulatory challenges to the individual to take advantage of the opportunities in a time/age-sensitive way. Moreover, the individual needs to come to terms with diminished chances to attain important life goals, once the opportunities vanish. In summary, any effective theory of life span development needs to address the way in which life-course variations of opportunities and constraints are met with individuals' attempts to master their own development.

Societal canalizations of human life-course development

In a given society, mechanisms of life-course canalization perpetuate social inequality both across generations and within individual life courses. For example, across generations access to higher education can be facilitated or

hindered by parents' own educational background and experience. Within individual life-courses, people can use a major life-course transition (e.g., after graduating from high school) as a spring board to launch an upwardly mobile trajectory into a higher social strata (e.g., by entering college and going on to medical school training). Changing one's social position in society between normative life-course transitions is less common, particularly in societies with less flexible career patterns, and might well involve an extraordinary event that either derails the individual in his path (e.g., by a severe illness, large inheritance) or disrupts societal canalization processes (e.g., by extensive societal transformation, such as associated with German reunification). These mechanisms of societal canalization of individual life courses vary across historical time and across different countries in terms of how rigid, stable, and impermeable they are, leaving more or less potential control to the individual agent. Societal canalization mechanisms within a system of social inequality have an ambivalent nature. On the one hand, they constrain an individual's upward mobility, and on the other hand they serve as adaptive scaffolds for an individual's developmental goal setting and goal engagement, and protect from an otherwise ubiquitous risk for downward social mobility.

Globalization-related social change and how it affects life courses in different countries

One of the major questions, if not the key question for evaluating social change in its effects on individual life courses, is whether or not and in what way it affects social inequality in a given society. Major social change typically affects the way in which social inequality in a given society is transferred from one generation to the next and/or how it is maintained across an individual's life course. Societies across historical time and across different continents, or across developed versus developing countries, vary greatly in the extent they allow individuals to break loose from their social origins and across their life-course climb socially into classes of higher social status and greater access to resources than their parents belonged to. The flip-side of this potential for upward social mobility is, of course, the risk of downward social mobility. Modern societies offer greater overall social mobility, which entails both the chance for social ascent and the risk of social descent. The following paragraphs provide a brief summary of the findings of GLOBALIFE, a research program on globalization processes and their impact on life courses (Blossfeld et al., 2007; Buchholz et al., 2009) and also a discussion of some implications from a life-span developmental and motivational psychology perspective. The focus here is to view the dimensions of social change identified by GLOBALIFE as parameters of the

action field for the individual agent who is trying to optimize his or her life course in the context of the respective society's system of social inequality.

Blossfeld and colleagues (Blossfeld et al., 2007; Buchholz et al., 2009) have identified the major consequences of the globalization process in terms of challenges for individual agents in managing their life courses. Specifically, these are decreasing transparency, decreasing predictability of long-term consequences of individual decisions, increasing erosion of social security, and increasing asymmetry in power relations between employers and employees.

In their multi-country research program GLOBALIFE on the consequences of globalization processes, Blossfeld and his colleagues identified different consequences for young adults just entering the workforce and women and older adults leaving the workforce. The hardest hit by increasing lack of transparency and greater uncertainty about one's life-course trajectory, were younger adults (Blossfeld, Klijzing, Mills, & Kurz, 2005). They had to put up with lower income, part-time or short-term jobs, often without or with fewer benefits (health insurance, social security, retirement benefits). Some authors who study the mental health consequences of such patterns of employment refer to it as 'underemployment' (Dooley, 2003), and show that it is associated with plummeting self-esteem and depression (Dooley, Prause, & Ham-Rowbottom, 2000), and even with lower birth weight in babies born to mothers experiencing a switch to such inferior forms of employment during their pregnancy (Dooley & Prause, 2005). Another group that was disproportionately affected were women at midlife (Blossfeld & Hofmeister, 2006), particularly those that had interrupted their careers to raise their children. On the other hand, men at midlife, and particularly those with high vocational or professional qualifications, seem to be protected from unemployment and hardship in most countries (Blossfeld, Mills, & Bernardi, 2006). Finally, older adults were also disadvantaged by the consequences of globalization processes in terms of more rapidly outdated qualifications and skills.

However, these consequences for the different groups of the population are not universal, but critically depend on the rigidity versus flexibility of the labor market and its career tracks, and on the kinds of welfare provisions the respective national states offer, and also on the role of the traditional family to support members that get pushed out of traditional forms of employment (Blossfeld et al., 2007; Buchholz et al., 2009). These state and family-based support systems provide a filter or buffer for the impact of universal globalization processes on the individual (Hofäcker, Buchholz, & Blossfeld, Chapter 4 this volume).

Table 6.1 shows the five categories of countries identified by the GLOBALIFE research program and indicates how these countries differ in important ways for individual life-course agency. Individuals try to exert

Table 6.1 GLOBALIFE categories of welfare states (Blossfeld et al., 2007) and their characteristics as societal contexts for individual agency directed at social mobility across one's life course

	Liberal	Social-democratic	Conservative	Family-oriented	Post-socialist
	USA, GB, Canada	Sweden, Denmark, Norway	Germany, France	Italy, Spain, Ireland, Mexico	Hungary, Estland, Poland, Czech Rep.
Flexibility, permeability	High	High	Low	Low	???
Individual responsibility	High	Medium	Low	Low	???
Opportunity for upward mobility	High	High	Low	Low	???
Resources from community	Low	High	For insiders	For insiders	???

their own control over where they stand and where they end up over time in the respective society's system of social inequality. Countries in the different GLOBALIFE categories differ in important parameters that determine the effectiveness of individual agency directed at social mobility. First of all, there is the issue of flexibility in vocational careers, a dimension Hamilton referred to as 'permeability' (Hamilton, 1994) which sets the stage for individual action. Low flexibility or permeability seriously constrains the individual's range of effective action in moving from a lower social trajectory to a higher one. The conservative and family-oriented welfare states provide relatively little flexibility and thus less potential for social mobility than the liberal and the social-democratic welfare states. Next is the degree to which an individual is expected to assume responsibility for their life-course trajectory. Individual responsibility is high in the liberal welfare states, moderate in the social-democratic welfare state, and low in the conservative and family-oriented welfare states. Flexibility and individual responsibility are pre-conditions for the effectiveness of individual agency, but as we discussed in the previous section, individual agency is incapacitated when there are no or few opportunities for upward mobility in the sense of educational and training institutions and supportive contexts for upward mobility (e.g., step and ladder-type educational institutions). Such upward-mobility opportunities are relatively plentiful in liberal and social-democratic welfare states, but underdeveloped or absent in conservative and family-oriented welfare states. Finally, societal systems differ with regard to

the degree of resources the social community (e.g., state, family) provides for individuals who try to move up in society. Here liberal and social-democratic welfare states differ. Liberal welfare states such as the U.S. provide relatively few resources, whereas social-democratic welfare states provide relatively rich support. Conservative and family-oriented welfare states show their preference for supporting insiders (those that hold qualified jobs) while outsiders can expect little support.

Given the findings from GLOBALIFE, it seems that globalization processes do not level the playing field by conveying greater opportunity for upward mobility to individuals. Instead, disadvantaged groups with low personal and social capital, such as youth, older adults and women, are more vulnerable to become marginalized and relegated to precarious forms of employment. This is particularly true for countries with conservative or family-oriented welfare states, such as Germany, France, Italy, Spain, Ireland, and Mexico, because they are founded on a labor market with relatively inflexible and non-permeable vocational career paths, which leave little room for individual agency and provide sparse opportunities for upward mobility. Conditions for individual agents to fight off the risks and optimize the chances for upward mobility are better in countries that offer more flexibility in career paths, such as those with liberal and social-democratic welfare states. The next section will address the question how young adults as a group that is vulnerable to globalization losses, try to attain optimal outcomes under the conditions of contrasting societal conditions in the U.S. with its liberal welfare state on the one hand and Germany with its conservative welfare state on the other hand.

Individual agency of youth in the transition to adulthood: A contrast between liberal and conservative welfare states

In this final section, we will take a look at the individual agency during the transition after graduating from secondary education (high school or equivalent) in work or college. First, the increasing role of education under conditions of globalization is considered. Second, I outline a set of research questions addressing individual agency during the transition to adulthood in societies varying along the four dimensions (see rows in Table 6.1) of permeability of educational and career tracks, individual responsibility, community resources supporting individual agency, and opportunities for upward mobility. Moreover, as a first empirical example, the characteristics of goal choice and goal engagement of youth in two different educational and career systems, California, USA and Berlin, Germany, are considered. It is important to note that neither of these longitudinal studies was planned with a systematic comparison of the societal canalization in mind. The findings, however, were indicative of country-specific characteristics

in the societal organization of the school to work and college transition as the critical cause of differences in the choice and effectiveness of individual agents' strategies. These differential effects in turn are suggestive of how globalization-related social change may affect the choices individual agents make in their developmental regulation and how effective these choices may turn out to be.

As a general consequence of the decreased predictability, greater permeability of career paths, and uncertainty of long-term careers that comes with globalization processes across different countries with their varying welfare systems, the role of general education as a form of personal capital has become ever more important (Blossfeld, Klijzing, Mills, & Kurz, 2005; Bynner, 2005; Bynner & Parsons, 2002; Mills & Blossfeld, 2003). Reading, writing, mathematics, computer literacy and knowledge of information technology are essential intellectual skills required in a wide variety of careers and industries. In addition, advanced degrees reflect higher level intellectual abilities, problem-solving and self-regulatory skills, and an expertise that can serve as a blueprint for developing expertise in other domains. As it turns out, many youth respond to the increased uncertainty and their reduced prospects to enter a vocational career with long-term employment and promotion prospects, by spending a longer time in educational institutions and thus delaying both the entry into the labor market and the beginning of a family. Far from this being a reflection of identity search in emerging adults (Arnett, 2000), most such strategies are rational if desperate responses to the increase in uncertainty, long-term predictability, and decreasing value of highly specialized and non-transferable knowledge and training (Bynner, 2005).

When we look at the different categories of welfare states, the role of personal resources in terms of aptitude, education, and motivational self-regulatory skills, can be expected to be greatest in liberal welfare states, where not only the flexibility and opportunities for upward mobility is high, but also individual responsibility is high with low support from the community (Schoon, 2007, August). In such societal settings, individuals with high ambitions (and the motivational propensity for high investments (selective primary control) and strong commitment (selective secondary control) to overcome the status of their family of origin in the system of social inequality have better chances to fulfill their ultimate goals, particularly when opportunities for upward mobility are institutionalized in the educational or career system.

In contrast, the conservative and family-oriented welfare states offer far less degrees of freedom for individual agency. In these countries, individuals have to focus on fitting in and aligning themselves with the 'insiders' who hold stable employment and serve as gate-keepers (Blossfeld, Klijzing, Mills, & Kurz, 2005; Buchholz et al., 2009). These societal

settings would provide good developmental ecologies for those who are content to strive for goals that are closely calibrated to what they already achieved (e.g., previous school grades), and attuned to getting support from others (compensatory primary control). Career agency orientations that focus on a role in a given company are likely to be more successful in such societal settings than agency orientations that are directed at autonomy, self-growth and self-employment. Heinz has identified among young adult workers in Germany types of 'biographical agency,' for example 'company identification' and 'wage worker habitus,' that would represent an orientation towards fitting in with an insider system. This may be contrasted to other types identified in Heinz' research that express an orientation towards individual autonomy and breaking free from insider systems (e.g. 'personality growth or autonomy,' 'self-employment habitus') (Heinz, 2002a, 2008). These types of orientations in individual life-course agency are both a result of self-socialization within a given societal system, and may have the potential to contribute towards social change.

Another intriguing area of research is the relationship between educational and career systems. In more conservative systems, educational qualifications and career prospects are very closely related, and offer little flexibility once a certain path (e.g., vocational versus academic track) is taken. In such a system, ambitious educational goals and motivational investments work hand in hand with career aspirations. The more flexible liberal systems do not necessarily require certain educational qualifications for many careers. Instead, individuals can learn on the job and work their way up. This might well mean that among young high-school graduates aspirations and motivational investment in educational and career goals compete with each other, so that, for example, a high commitment to ambitious career goals takes away motivational resources from educational pursuits.

Finally, individual agents and globalization processes are involved in transactional influences, such that individuals adapt to the increase in uncertainty and non-contingency of vocational tracks and societal institutions become transformed in the process. An example may be young Germans who complete their apprenticeships and instead of waiting for an employment within the same vocation, which due to globalization-based de-regulation of vocational career tracks has become extremely rare, venture out to neighboring or even further removed careers. In a sample of about 1,000 apprentices (Heinz, 2002b), Heinz found that within the first year after completing the apprenticeship about one-sixth of the freshly graduated journey-men worked in other occupations, and eight years after graduation about half of the 1,000 journey-men had worked in occupations they were never specifically trained for. In the long run, the combination of de-regulated vocational careers and individual choices

will render apprenticeships less dominant and may even erode them as institutions of vocational training.

Empirical example: School to work and to college transition in Germany and the United States

The increasing relevance of education as personal capital for channeling the individual's life-course potential under conditions of globalization, moves the question of how access to post-secondary and vocational education is regulated, to center stage. The question arises whether the same individual characteristics of ambitiousness of goal setting and intensity and persistence in goal engagement lead to superior outcomes in terms of educational attainment and career entry across societies differing in critical features of their welfare states. Our life-span developmental and motivational approach proposes that those individuals fare better who have motivational preferences which match their countries' characteristics of the labor market and welfare state.

Under conditions of relatively stable and non-permeable education and employment tracks as in Germany, youth should closely calibrate their goals for vocational training and careers and pursue their goals with intense primary control, striving to achieve better outcomes. In contrast, high-school graduates in the U.S. with its more permeable educational and career system, should profit more from very ambitious goals which lead them to find their way from lower to higher education and employment, sequentially utilizing educational and employment opportunities along an upward social trajectory. Two empirical examples of contrasting social institutionalization of a life-course transition are briefly discussed here: (1) The transition from high school (middle-tier track) to vocational training and work in Germany, and (2) the transition from high school to college in California, USA. Note that these studies were not jointly planned, but do speak to the possible differential effect of non-permeably segregated versus step-by-step accessible (i.e., California Master Plan of Higher Education) transition outcomes.

The transition from the German middle-tier high school 'Realschule' (after completing grade 10) to vocational training in the dual system (i.e., two days of school combined with three days of vocational training in company-based apprenticeships) is highly institutionalized and follows narrow channeling according to a youth's previous school performance and behavior in a personnel interview or test (Heckhausen & Tomasik, 2002). Vocational training positions are in short supply, and therefore over-ambitious goals for apprenticeships with high social prestige (e.g., for banking and insurance careers) bear the risk of not obtaining any training position. As a consequence, closely adjusted vocational aspirations should

be most adaptive when trying to secure one of the coveted vocational training positions in company-based apprenticeships. Moreover, the scarcity of positions makes it mandatory that goal engagement is high.

We studied 768 students from two East and two West-Berlin middle-tier schools (Realschule), one school each for lower-class and middle-class neighborhoods, and followed three cohorts throughout the 10th (final) grade of school and two years after graduation. The study was funded by the German Research Foundation. We found a substantial relationship between vocational aspirations measured as social prestige score for the vocation a youth expressed an interest in, and school achievement measured as school grades in core subjects (mathematics, German, history) (Heckhausen & Tomasik, 2002). The indices were standardized within school to allow for an optimized local validity. Students overall kept their school grades in mind when expressing preferences for vocations ($r = .37$). Students with lower aspirations were more likely to obtain an apprenticeship. In further analyses utilizing the bi-monthly data collections during grade 10, we investigated trajectories most likely to result in apprenticeships with relatively high vocational prestige given a youth's level of school achievement. Such trajectories were conceptualized to start slightly above one's own achievement level and then adjust downward until an apprenticeship is obtained (Tomasik, Hardy, Haase, & Heckhausen, 2009). It is noteworthy that youth who exhibited this adaptive trajectory of vocational aspirations were also the ones who reported the strongest control strivings for goal engagement (selective primary control and selective secondary control) and the lowest levels of goal disengagement (compensatory secondary control). High goal engagement with searching for an apprenticeship was also found to be decisive for girls in their success with attaining an apprenticeship, and predictive of positive changes in affective well-being for both girls and boys (Haase, Heckhausen, & Köller, 2008).

In the United States, we studied the transition after high school (12th grade) into post-secondary education and work (only the educational trajectory will be discussed here). The educational system in the U.S. differs fundamentally from the German system in that it is integrated until high-school graduation, whereas the German system is three-tiered starting at 4th grade (in some states 6th grade). This is not so say that the U.S. school system is egalitarian. Far from it, high schools in neighborhoods of varying social-economic status differ greatly in their quality of instruction and the number of graduates that go on to enroll in four-year colleges. However, the educational system does not constrain upward mobility by formalized institutional barriers as it does in the German educational system. To the contrary and particularly in California, the college system provides educational institutions for everyone which are regulated by the California Master Plan for Higher Education, an educational masterplan in such a way

as to allow a step-by-step upward mobility from high-school graduate to community college student to then transfer either to the California State system or the University of California system (California Code, 1960). Such a societal context enables highly ambitious students to make their way upward step by step from humble beginnings to high-flying educational qualifications.

In our longitudinal study of high-school graduates in the Los Angeles Unified School District, we surveyed 1,183 high school seniors and then followed up one, two, three and four years after graduation (Chang, Chen, Greenberger, Dooley, & Heckhausen, 2006; Chang, Greenberger, Chen, Heckhausen, & Farruggia, in press; Heckhausen, et al., 2007). Vocational and particularly educational aspirations were high, with a large majority anticipating to complete a Bachelors degree, even if their own senior-year grades were too low to enter a four-year college right after high school (Heckhausen, et al., 2007). Such high aspirations would lead to unrealistic choices and failure in a system that is more segregated and less permeable. However, in California the youth with the most ambitious educational expectations ended up being most successful in enrolling in and completing four-year college degrees (Heckhausen, et al., 2007). Moreover, strong goal engagement with highly activated selective primary and secondary control strategies also predicted better subjective well-being and mental health after high-school graduation.

In sum, the societal differences between Germany and the United States in facilitating individual agency in the school to work and college transition reflect three important dimensions: flexibility or permeability of educational tracks, individual responsibility, and opportunity or institutional scaffolding of upward mobility. The three dimensions facilitate upward mobility in the context of the postsecondary educational system in California, USA. In the German educational and vocational training system, youngsters are channeled into segregated paths. However, with the demise of traditional vocational career paths from apprenticeship to employment, individuals manage to break out of traditional employment patterns and may play a role in the transformation of vocational training systems in this conservative welfare state.

These examples illustrate how certain characteristics of the social and institutional structure in a given society can foster different patterns of social mobility across major life course transitions, and how this differentially may affect subgroups of the population with more or less access to educational, social support, and individual agency resources. Accordingly, social change into and out of such life-course conditionings will affect the effectiveness of individual agency in human development. Thus, social change associated with economic globalization is rendering the playing field less even for individual agents with unequal access to personal and social resources.

References

- Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469–480.
- Baltes, P.B. & Baltes, M.M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P.B. Baltes & M.M. Baltes (Eds), *Successful aging: Perspectives from the behavioral sciences* (pp. 1–34). New York: Cambridge University Press.
- Baltes, P.B., Lindenberger, U., & Staudinger, U.M. (1998). Life-span theory in developmental psychology. *Handbook of Child Psychology*, 5, 1029–1143.
- Beck, U. (1986). *Risikogesellschaft. Auf dem weg in eine andere moderne [Risk society. On the way into another modernity]*. Frankfurt, Germany: Suhrkamp Verlag.
- Blossfeld, H.-P. & Hofmeister, H. (2006). *Globalization, uncertainty and women's careers in international comparison*. Cheltenham, U.K.: Edward Elgar.
- Blossfeld, H.-P., Mills, M., & Bernardi, F. (2006). *Globalization, uncertainty and men's careers in international comparison*. Cheltenham, U.K.: Edward Elgar.
- Blossfeld, H.-P., Klijzing, E., Mills, M., & Kurz, K. (Eds). (2005). *Globalization, uncertainty and youth in society*. London, U.K.: Routledge.
- Blossfeld, H.-P., Buchholz, S., Hofäcker, D., Hofmeister, H., Kurz, K., & Mills, M. (2007). Globalisierung und die veränderung sozialer ungleichheiten in modernen gesellschaften. *Köln Zeitschrift für Soziologie und Sozialpsychologie*, 59, 667–691.
- Brandstädter, J. (2006). Action perspectives on human development. In R.M. Lerner & W. Damon (Eds), *Handbook of child psychology* (6th Ed.) (Vol. 1, *Theoretical models of human development*, pp. 516–568). Hoboken, NJ: John Wiley & Sons.
- Brandstädter, J., Wentura, D., & Rothermund, K. (1999). Intentional self-development through adulthood and later life: Tenacious pursuit and flexible adjustment of goals. In J. Brandstädter & R.M. Lerner (Eds), *Action and self development: Theory and research through the life span* (pp. 373–400). Thousand Oaks, CA: Sage.
- Brueckner, H. & Mayer, K.U. (2005). De-standardization of the life course: What it might mean? And if it means anything, whether it actually took place? *Advances in Life Course Research*, 9, 27–53.
- Buchholz, S., Hofäcker, D., Mills, M., Blossfeld, H.-P., Kurz, K., & Hofmeister, H. (2009). Life courses in the globalization process: The development of social inequalities in modern societies. *European Sociological Review*, 25.
- Bynner, J. (2005). Rethinking the youth phase of the life course: The case for emerging adulthood? *Journal of Youth Studies*, 8, 367–384.
- Bynner, J. & Parsons, S. (2002). Social exclusion and the transition from school to work: The case of young people not in education, employment or training (neet). *Journal of Vocational Behavior*, 60, 289–309.
- California Code (1960). The California master plan for higher education (Vol. 66010.1–66010.8): California Education Code.
- Carstensen, L.L., Isaacowitz, D.M., & Charles, S.T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist*, 54, 165–181.
- Chang, E.S., Chen, C., Greenberger, E., Dooley, D., & Heckhausen, J. (2006). What do they want in life? The life goals of a multi-ethnic, multi-generational sample of high school seniors. *Journal of Youth and Adolescence*, 35, 321–332.

- Chang, E.S., Greenberger, E., Chen, C., Heckhausen, J., & Farruggia, S.P. (in press). Non-parental adults as social resources in the transition to adulthood. *Journal of Research on Adolescence*.
- Dooley, D. (2003). Unemployment, underemployment, and mental health: Conceptualizing employment status as a continuum. *American Journal of Community Psychology*, 32, 9–20.
- Dooley, D. & Prause, J. (2005). Birth weight and mothers' adverse employment change. *Journal of Health and Social Behavior*, 46, 141–155.
- Dooley, D., Prause, J., & Ham-Rowbottom, K.A. (2000). Underemployment and depression: Longitudinal relationships. *Journal of Health and Social Behavior*, 41, 421–436.
- Freund, A.M. & Baltes, P.B. (2002). Life-management strategies of selection, optimization and compensation: Measurement by self-report and construct validity. *Journal of Personality and Social Psychology*, 82, 642–662.
- Haase, C.M., Heckhausen, J., & Köller, O. (2008). Goal engagement during the school-to-work-transition: Beneficial for all, particularly for girls. *Journal of Research on Adolescence*, 18, 671–698.
- Hall, D.T. (2004). The protean career: A quarter-century journey. *Journal of Vocational Behavior*, 65, 1–13.
- Hamilton, S.F. (1994). Employment prospects as motivation for school achievement: Links and gaps between school and work in seven countries. In R.K. Silbereisen & E. Todt (Eds), *Adolescence in context: The interplay of family, school, peers, and work in adjustment* (pp. 267–303). Cambridge, UK: Cambridge University Press.
- Havighurst, R.J. (1952). *Developmental tasks and education*. New York: McKay Company.
- Heckhausen, J. (1999). *Developmental regulation in adulthood: Age-normative and sociostructural constraints as adaptive challenges*. Cambridge, U.K.: Cambridge University Press.
- Heckhausen, J. & Heckhausen, H. (Eds). (2008). *Motivation and action*. New York: Cambridge University Press.
- Heckhausen, J. & Schulz, R. (1993). Optimization by selection and compensation: Balancing primary and secondary control in life span development. *International Journal of Behavioral Development*, 16, 287–303.
- Heckhausen, J. & Schulz, R. (1995). A life-span theory of control. *Psychological Review*, 102, 284–304.
- Heckhausen, J. & Schulz, R. (1999). Biological and societal canalizations and individuals' developmental goals. In J. Brandtstädter & R. Lerner (Eds), *Action and self-development: Theory and research through the life-span* (pp. 67–103). Thousand Oaks, CA: Sage Publications.
- Heckhausen, J. & Tomasik, M.J. (2002). Get an apprenticeship before school is out: How German adolescents adjust vocational aspirations when getting close to a developmental deadline. *Journal of Vocational Behavior*, 60, 199–219.
- Heckhausen, J., Chang, E.S., & Lessard, J. (2007, August). Developmental regulation in German and American adolescents during the transition from school to work. Paper presented at the 13th European Conference on Developmental Psychology, Jena, Germany.
- Heckhausen, J., Wrosch, C., & Schulz, R. (in press). A motivational theory of lifespan development. *Psychological Review*.

- Heinz, W.R. (2002a). Self-socialization and post-traditional society. In R.A. Settersten & I.J. Owens (Eds), *Advances in life-course research: New frontiers in socialization*. New York: Elsevier.
- Heinz, W.R. (2002b). Transition continuities and the biographical shaping of early work careers. *Journal of Vocational Behavior*, 60, 220–240.
- Heinz, W.R. (2008). The many faces of emerging adulthood: Social pathways from youth to adulthood. Unpublished manuscript, Bremen, Germany.
- Lerner, R.M. & Busch-Rossnagel, N.A. (Eds). (1981). *Individuals as producers of their development: A life-span perspective*. New York: Academic Press.
- Marsiske, M., Lang, F.R., Baltes, P.B., & Baltes, M.M. (1995). Selective optimization with compensation: Life-span perspectives on successful human development. In R.A. Dixon & L. Backman (Eds), *Compensating for psychological deficits and declines: Managing losses and promoting gains* (pp. 35–79). Hillsdale, NJ: Erlbaum Associates.
- Mayr, E. (1974) Behavior programs and evolutionary strategies. *American Scientist*, 62, 650–659.
- Mills, M. & Blossfeld, H.P. (2003). Globalization, uncertainty and changes in the early life course. *International Journal of Behavioral Development*, 2, 188–218.
- Schoon, I. (2007, August). School engagement and transitions into adult roles. Paper presented at the European Conference for Developmental Psychology. Retrieved.
- Schulz, R., & Heckhausen, J. (1996). A life-span model of successful aging. *American Psychologist*, 51, 702–714.
- Shanahan, M.J., Mortimer, J.T., & Krüger, H. (2002). Adolescence and adult work in the twenty-first century. *Journal of Research in Adolescence*, 12, 99–120.
- Tomasik, M.J., Hardy, S., Haase, C.M., & Heckhausen, J. (2009). Adaptive adjustment of vocational aspirations among German youths during the transition from school to work. *Journal of Vocational Behavior*, 74, 38–46.
- Wrosch, C. & Freund, A.M. (2001). Self-regulation of normative and non normative developmental challenges. *Human Development*, 44, 264–283.
- Wrosch, C. & Heckhausen, J. (1999). Control processes before and after passing a developmental deadline: Activation and deactivation of intimate relationship goals. *Journal of Personality and Social Psychology*, 77, 415–427.
- Wrosch, C., Scheier, M.F., Carver, C.S., & Schulz, R. (2003). The importance of goal disengagement in adaptive self-regulation. When giving up is beneficial. In *Self and Identity*, 2, 1–20.