BECOMING AN ADULT IN AMERICA: WHAT DOES IT MEAN AND HOW IT HAS CHANGED IN THE PAST 20 YEARS?

Elisabeta Minca

Center for Gerontology and Health Care Research

and

Population Studies and Training Center

Brown University

Providence, Rhode Island 02912

Phone: 401.863.1822

Elisabeta_Minca@brown.edu

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INTRODUCTION

In recent decades, most Western countries, including the U.S., have witnessed large changes in what researchers define as the transition to adulthood. Messages from both social scientists and journalists emphasize the profound shift that young adulthood has undergone. They point to the postponement of marriage and parenthood, to the longer time it takes to finish education, to the young adults' increased dependence on parents, and to the much more individualized and diverse pathways teenagers follow to become adults (Cohen 2010, Goldscheider 1997). These ideas about the profound changes in the transition to adulthood are so pervasive that they are even reflected in the everyday language structure. For instance, one of the *new words* added to the 2011 Merriam-Webster dictionary is that of "boomerang child." As Peter A. Sokolowski, the Dictionary' s editor explains, a boomerang child is a young adult who returns to live at his or her family home especially for financial reasons." Another web dictionary, which added the same word as well, defines it as "A young adult, especially a college graduate, who has returned to the parental home, especially from college due to unemployment."

In the 1950's it was assumed and most often true that people entered adulthood in their late teens or early twenties , and a "boomerang child" situation was almost inexistent. Today in contrast, this situation seems to have become so common that the dictionaries incorporated it as a new entry to keep up with social reality. As Bruckner and Mayer (2005) explain,

> […]one of the most commonly accepted perceptions of advanced societies is that lives have become less predictable, less collectively determined, less stable, less orderly, more flexible and more individualized. Private lives and family forms are

said to have become pluralized, and working lives unstable (Bruckner & Mayer 2005, p28).

However, despite the extended discussion and arguments about *de-standardization* of the life course and increased complexity of the transition to adulthood, only scattered research has tested these arguments and in limited settings (e.g., Elzinga and Liefbroer, 2007; Brukner and Mayer, 2005). Moreover, despite numerous "sweeping generalizations" (Brukner and Mayer, 2005) in this respect, a generally accepted methodology to assess their quantitative nature has not yet emerged, and these ideas are in crucial need of empirical testing with systematic data (Bruckner and Mayer 2005, p 34).

This paper is about the changing transition to adulthood. In an effort to fill the research gap eloquently expressed by Brukner and Mayer (2005), this paper quantitatively assesses the recent shift in young adulthood, using two U.S. nationally representative samples of youth (representing two different cohorts) and a statistical strategy which more thoroughly captures pathways to adulthood compared to traditional methods. This is our first draft in which we present preliminary results based on our latest work.

Transition to adulthood and life course

The transition to adulthood has been mostly the subject of life course theory and this is also the framework adopted in this paper. Considered the "pre-eminent theoretical orientation in the study of lives" (Elder, Kirkpatrick Johnson and Crosnoe 2006, p3), the life course perspective is one of the most recently emerged sub-fields of sociology, also crossing multiple disciplinary boundaries, fields and cultural borders. Its recent expansion originates in major social and demographic changes of the twentieth century which prompted new theoretical questions about human lives and development. As Elder et al (2006) explain, major changes of the last century such as the Great depression, two World Wars, the Cold

War, Vietnam War, Civil Rights Movement, Women's Movement and the changing demography of the U.S. including the increased immigrant diversity and the changing age structure of society led to increased research interest in the relationship between earlier phases of life and later phases, and in the power of larger social forces to shape the developmental pathways of individuals. This new research interest materialized in the launching of several major longitudinal studies in the 1960s such as National longitudinal surveys, Panel Study of income Dynamics, National longitudinal study of mature women, and the British national longitudinal studies. These studies further prompted technical and methodological advancements for the long term study of human lives, and ultimately led to the establishment of the life course perspective as it is today.

The contemporary life course perspective, as Mortimer and Shanahan (2006) explain in the preface of the *Handbook of the life course* "refers to the age-graded, socially-embedded sequences of roles that connect the phases of life" (p xi). This characterization implies both a concern with *multiple roles* characterizing individuals at various ages and the *changing of roles* as they unfold over time. Embedded here are also the two key theoretical concepts at the core of life course research: (1) that of a discrete "transition" between various roles over time, and (2) that of a life "trajectory" or "pathway" made up of all discrete transitions between various roles/states that individuals and cohorts experience over time.

While the life course conceptual focus has included both the *transition* and the *pathway/trajectory*, its empirical focus has been overwhelmingly directed toward the study of discrete single *transitions* through event history methods, which are "at the heart of life course research" (Elder at al, 2006). As Rohwer and Trappe (1997) explain, individual life courses are the result of "going sequentially through time," so it is only logical to study transitions when investigating the development of life courses. Nonetheless, the life course is more than "discrete transitions," and neglecting the "life pathway" in life course empirical

research has created a mismatch between its core conceptual apparatus and the way life course is practically studied. Moreover, modeling the probability of single transitions and durations might be insufficient or even inappropriate for at least two additional reasons. First, despite their importance in documenting major life course trends in various life domains, event history methods focusing on single transitions ignore the fact that most life course transitions are not independent, but rather highly inter-dependent (i.e., moving out of the parental household may not be independent of getting married or getting a full time job), and thus may lead to biased conclusions. Second, analyzing transitions as straightforward changes of status may be problematic because many life course trajectories (i.e., from school to work, from single to forming a family) were found to be non-linear and disorderly, involving U-turns, detours, reversible transitions, and moving in and out of statuses (Settersten and Ray 2010, Martin, Schoon and Ross 2007, te Riele 2004, European Group for Integrated Research 2001, Goldscheider et al 1999, Goldscheider and Goldscheider 1989).

Unlike most contemporary life course research that has been done within an event history framework, focusing on discrete *transitions,* rather than holistic *trajectories* or *pathways* (Aisenbrey and Fasang 2010), this study draws on recent methodological advances and uses a hierarchical latent class modeling strategy which probabilistically maps life pathways rather than single transitions. This approach takes into account the timing, duration and the sequencing of simultaneous states and transitions, "bringing the actual '*course*' back into life course research" (Aisenbrey and Fasang 2010). It is a group based modeling strategy classifying individuals into a limited number of classes (life pathways) on the basis of similarities between various roles or statuses they occupy at different ages and on how their simultaneous roles change over time.

This new approach offers several advantages compared to other methodologies. It allows us to identify rather than assume distinctive classes of individuals who experience similar patterns of duration, timing and sequencing of simultaneous roles / states (i.e., getting and staying married during the same life period/age interval, starting employment or moving out of the parental household at the same age, becoming parents or getting a divorce at similar ages). We can estimate the proportion of individuals who fall into each class/life pathway, and compare how the distribution among life pathways has changed between various cohorts. We can also compare the number of identified pathways between cohorts to document changes in the life course across birth cohorts. By relating the probability of class membership to individual and family circumstances, researchers can evaluate how different characteristics affect individuals' life pathways. Alternatively, life pathways identified with our methodology could be linked to later outcomes, such as health status at various ages, measures of achieved financial success, subjective well-being and even survival.

We use data from the National Longitudinal Surveys of Youth 1979 and 1997, to compare two cohorts, one born in the 1960s and one born in the 1980s, in terms of how they transition to adulthood. The critical period of late teens and early twenties has been a prominent focus in life course research both because of its potential to affect later life course outcomes, and also because of recent changes which have been argued to have altered the way young people transition to adulthood in the past few decades. This study addresses these changes, which can be grouped into two large categories: those related to the *destandardization of the life course* ideas and those regarding the *emerging adulthood* thesis.

As explained above, one of the most debated topics regarding the transition to adulthood concerns the destandardization of the life course. By observing changes that

occurred in the “latter years of the 1980s” and even earlier decades (Bruckner and Mayer, 2005 p 29), changes such as delayed marriage and childbirth, the rise of non-marital unions, increasing claims to autonomy and self-realization, labor market deregulation and structural unemployment resulting from globalization, and overall “disorderliness” in young adult lives, most scholars studying this topic accepted the idea that life courses have become “de-standardized.” However, most of what we currently know in this respect is based on “anecdotal and illustrative evidence” rather than on rigorous empirical tests with systematic data (Bruckner and Mayer 2005, p 34), and our study is an attempt to directly address this gap.

Related to but distinct from the *de-standardization of the life course*, the second set of changes affecting the transition to adulthood and addressed here are those encompassed by the “emerging adulthood” concept. This term refers to the idea that a new stage in the life course emerged in recent years, laying temporally between adolescence and adulthood, and distinct from both of these life stages. This new stage is a socially recognized period usually occurring between the ages of 20 and 30 years and is characterized by continued dependence on parents and often by continuing education coupled with some of the adult roles, such as being employed and/or in a romantic relationship (Furstenberg, Rumbaut and Settersten Jr 2005, Arnett 2000). Although studies of subjective feelings about adult identity (i.e, Arnett 2000) have confirmed the existence of the emerging adulthood stage, the results of objective indicators of adulthood have had mixed results relative to this new life course period (i.e., Sandefur, Eggerling-Boek, and Park 2005, Osgood et al 2005). The current study tests the emerging adulthood hypothesis by using objective indicators of a delayed transition to adulthood and an improved methodology compared to previous research studies.

Our results indicate strong support for the emerging adulthood hypothesis, as we see a lot more dependence on parents, prolonged schooling and delay of family formation in the later cohort compared to the earlier cohort. At the same time, we find no support for the destandardization thesis, as the young adults in the later cohort do not follow a larger number and more diverse pathways than their counterparts in the earlier cohort.

WHAT IS TRANSITION TO ADULTHOOD?

Conceptualizing the transition to adulthood

Among sociologists and social demographers, transition to adulthood is typically seen as a shift from the roles of youth to the roles of adults- student to graduate, economic dependence on parents to economic autonomy through work, from residence with parents to various types of independent residence, from single to marriage or cohabitation, and from childless to parenthood (Hogan 1981; Furstenberg Jr, Rumbaut and Settersten Jr., 2005). All these interdependent sub-transitions (leaving home, finishing school, starting work, getting married, and having children) have been called by those who study them the five "markers of adulthood." Traditionally, studying the transition to adulthood simply means examining the timing and sequencing of the traditional markers of adulthood. When people reached one or more of the markers of adulthood, they are said to have become adults. Nevertheless, as we will explain later in this paper, this conventional view of what it means to become an adult has been complicated in recent years by various social trends (such as the increase importance of higher education, or the reorganization of work and

technology), and now adulthood seems to have become more complicated to pinpoint and more diverse than in the past.

In this paper, the transition to adulthood is seen as a segment or a fragment of the life course, which reflects the intersection of social and historical factors with personal biography and development (Elder 1985; Hareven 1996). As a concept, a life course is defined as "a sequence of socially defined events and roles that the individual enacts over time" (Giele and Elder 1998, p. 22). Following Eliason's et al (2009) and Macmillan and Eliason's (2003) operationalization of Elder's (1974) life course theory, this paper offers a conceptualization of the life course as consisting of *social roles, role configurations* and *pathways* of role configurations through time, as well as a statistical methodology for studying them. The life course is seen as sets of age-graded roles embedded in age-graded role configurations, which, in turn, are embedded in life path structures that stretch across the age range. We elaborate on this conceptualization below.

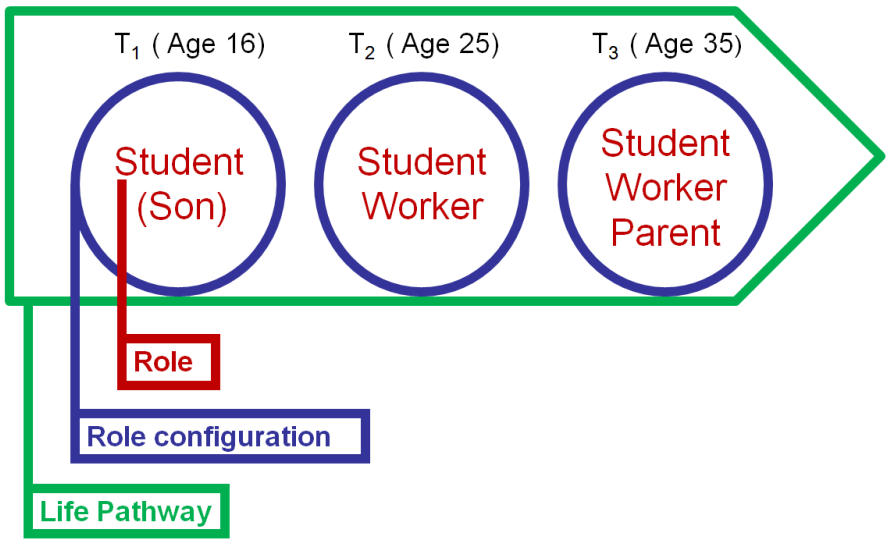

Figure 1. An Example of a life pathway

In Figure 1 we created a visual representation of Eliason's et al (2009) operationalization of the life course, which could facilitate an easier understanding of the concepts that make up this theory. As is customary in contemporary life course research,

this framework starts with the idea of "age graded roles," that is, at any given age each individual occupies a multitude of roles or "life states." For example, the person represented in figure 1 is a son and a student at age 16 (T1), and this combination of roles constitute his role configuration at that age. Then at age 25 (T2), this person changes its role configuration, that is now formed by the roles of student and worker. At age 35 (T3), the role configuration of this person consists of the observed roles of student, worker and parent. Thus, the combination of roles at any given age represents what Eliason 's et al (2009) called (age-graded) role configurations, and the combination of role configurations over time constitutes (across-age) life paths. The structure of these role configurations and life paths for all individuals of a given cohort combine to constitute the life course, with each having its own sets of rules and resources, which, in turn, give meaning and value to the individual roles embedded in them and to the individuals inhabiting those observed roles. This conceptualization and its corresponding statistical model (see methods section) are applied in this paper to the early life period when the transition from adolescence to adulthood happens, but they could be applied to any portion in the life course. They are also especially germane to a life course perspective as they allow the examination *of simultaneous states in a person's life* and *the sequencing over time of these simultaneous states*, rather than traditional event history methods which look at single transitions, thus ignoring the inter-relationship between *all* life course transitions.

What is a Successful Transition to Adulthood?

As Bruckner and Mayer (2005) describe in their review, the first part of the twentieth century was characterized by an "institutionalization' of the life course as part of the life discipline imposed by the industrial work. Lives have become more predictable because cycles of poverty which characterized manual workers' lives had gradually vanished

with rising standards of living and protection by the welfare state. The events marking up the transition to adulthood have become more universal, more temporally connected and showed less age variation. These changes were triggered by many processes, most important of which are (1) the expansion of secondary and tertiary education, which moved young adults into entry positions at different levels and launched them on employment trajectories, (2) the increased prevalence of work organizations such as trade unions and the provisions of the welfare states, which helped enhance the occupational stability over the life span and buffered the impact of income loss due to unemployment or illness, as well as supported early marriage, and a larger number of children.

However, as Bruckner and Mayer (2005) show, the latter years of the 1980s saw the accumulation of evidence which ran counter with the standardization thesis. New values and structural changes manifested themselves in new trends such as delayed marriage and childbirth, and the rise of non-marital unions, divorce and remarriage. The 1980s also saw the full consequences of the 1973 oil shock hitting the training and labor markets for young adults with the result of making the attainment of vocational and professional credentials, as well as the transition to gainful work being more prolonged and more complicated. Finally, the 1990s have seen the massive impacts of the forces of globalization, particularly increased international competition, labor market de-regulation, and structural unemployment (Mills and Blossfeld, 2003). Thus the transition to adulthood seems to have become more difficult and may have made it harder for young people to "get ahead" (Concoran and Matsudaira 2005). In essence, two aggregate patterns have emerged- one group followed the traditional transition patters with relatively low educational attainment, early employment, and early family formation, while a second group delayed the acquiring of adult roles, with increased ages for each of the transitions, and greater variation in the age of the transitions (Rindfuss 1991; Gauthier and Furstenberg 2005; Furstenberg, Rumbaut, and Settersten 2005).

While the social and economic institutions and structures in the first part of the twentieth century provided a straightforward definition of adulthood (e.g., reaching the five markers of adulthood), and the earlier individuals made the five transitions (the completion of school, the move out of the parental home, the acquisition of a job, marriage and parenthood) the more successful transition to adulthood they had, the recent changes described above complicate this picture and raise important questions about what constitutes a successful transition to adulthood. For instance, while having a job is important, any job today could hardly be considered by itself a marker of a successful transition to adulthood. After the downsizing and outsourcing of the 1990s, and the massive disappearance of manufacturing in the US, having a low status, unskilled job can barely allow someone to establish financial independence, or support a family. Actually, Elder's life course principle of timing "the developmental antecedents and consequences of life transitions, events, and behavioral patterns vary according to their timing in a person's life. The same events or experiences may affect individuals in different ways depending on when they occur in the life course" (Elder et al., 2003: 12) is even more applicable today. In fact, premature labor market entry is not only insufficient for success, but may even impede someone's ability to acquire enough education to produce long-run adult labor-market success.

In the context of more complex transitions and the assumption of adult roles at older ages, perceptions of what constitutes adulthood, have grown more sophisticated with greater attention to roles and less attention to chronological age. Young adults aged 25/26 in the Minnesota Youth Development Study were asked how adult-like they perceived themselves to be on each of several life dimensions (Shanahan, Porfeli, Mortimer, and Erickson 2005). Financial independence was most important to the feeling that they were adult, followed by residence independent of parents. In general, dependence on parents and interactions with parents were the situations in which respondents felt least adult-like.

Demographic transitions related to family formation were somewhat less important, but even the family transitions doubled the likelihood that respondents see themselves as adults. This is in contrast, interestingly, with attainment-related transitions (i.e., completion of education, or acquiring full time work) which do not make respondents to feel adult-like. By age 25/26, 60 percent of men and women report they generally see themselves as adults. Conventionally, even in these much more complex times, the study of youth-to-adult transitions ends when a young person reaches her 30th birthday or shortly thereafter, even though some persons are not yet occupying roles that signify adulthood (Rindfuss 1991; Furstenberg, Rumbaut, and Settersten 2005).

These findings reinforce the idea that full time work is not sufficient for a "successful" transition to adulthood (as seen by young people today), unless it is good enough to allow the establishment of independent residence and financial and economic security. And, with the deindustrialization of the 1980s and the downsizing and outsourcing of the 1990s (Leicht 1998, Smith 2001), the ability to land a good job and to establish an independent residence, as markers of a "successful" transition to adulthood, can no longer be taken for granted (Mouw 2005). In fact, reversals in the economic and marriage situations of young adults may lead them to return to residence with parents, a pattern that has become increasingly common (Settersten and Ray 2010, Goldscheider and Goldscheider 1989, Goldscheider et al 1999; see also the introduction).

The completion of college and the postponement of non-marital childbearing are essential in most lives to achieving financial independence from parents, which young people view as equivalent with early adult life success (Sandefur, Eggerling-Beck, and Park 2005). This has led to an emphasis on the initial years after high school, in terms of college enrollment, and in the years immediately following college graduation (Rindfuss, Kavee and Cooksey 1995; Sandefur, Eggerling-Beck, and Park 2005). The importance of the timing of

transitions for subsequent social and economic fortunes is clear, but the evidence is far more mixed as to how the sequences of transition stages affect adult life (Hogan 1981; Rindfuss, Swicegood and Rosenfeld 1987; Mouw 2005). An important consideration is recognition of the reversibility of some transitions, especially in regards to school enrollment (enrollment, drop-out, re-enrollment), and independent residence (live in parental home, leave parental home as part of assuming an independent self-reliant life, and return to the parental home in the face of financial loss or a painful disruption of a cohabiting relationship or a marriage).

The relative importance of "successful" transitions to adulthood is highlighted further by the consequences of "unsuccessful" transitions to adulthood. The opportunities and constraints adolescents confront have short and long-term consequences for adult lives. Some take advantage of educational opportunities that substantially enhance their human capital and increase their productivity later in life. Others make poor decisions or face unfortunate circumstances that can lead to attaining too little education. This may substantially endanger a "successful" transition to adulthood and increase the risk of dependence. For example, premature out-of-wedlock childbearing can be a devastating experience in the lives of young people, impeding their ability to pursue post-secondary education, and to work (with direct effects on their occupation and career) if they cannot find adequate and affordable childcare (Sandefur, Eggerling-Beck, and Park 2005).

In sum, we can distinguish between at least 3 meanings of a "successful transition to adulthood." First, there is a *normative* or conventional definition, which involves being financially well and independent from parents. We have discussed above that the timing of transitions has demonstrated consequences on subsequent social and economic fortunes. The way young people act, given their opportunities and constraints, may lead to either the accumulation of, or reversely may impede their ability to build human capital. In general,

attaining college education is the best known factor to substantially enhance human capital and increase productivity later in life, although not a guaranteed ticket to financial success. It is this *normative meaning of success* that we use when we refer to success in our subsequent analysis. Second, it is a *subjective meaning of success*, which could vary from one group to another and from one cohort to another. For the most part (or for most people), the subjective meaning of success overlaps in the U.S. with the normative definition explained above, in that most groups in most recent time periods include financial success and independence from parents in the definition of a successful adulthood (see Mollenkopf et al 2005). Nevertheless, *other* ingredients in the definition of a successful adulthood may vary from one group to another, and from one cohort to another. For instance, Mollenkopf et al (2005) have shown that among different racial/ethnic groups, only whites include "having a family" in their repertoire of success. Finally, there is a *traditional definition* of a "successful transition to adulthood" in the life course literature: to achieve one or more markers of adulthood early in life. We have discussed some of the issues associated with this definition, and how it can hardly apply today due to changes in the labor market structure, and how transitions too early in life may actually impede someone's ability to accumulate enough human capital to guarantee financial success later in life.

CHANGES IN PATHWAYS TO ADULTHOOD: THEORY, PREVIOUS STUDIES AND HYPOTHESES

As described in the introductory part of this paper, we evaluate two main theoretical perspectives (theses) that address changes in pathways to adulthood, the *emerging*

adulthood thesis and the *destandardization* thesis. The emerging adulthood or "early adulthood" thesis states that in recent years a new stage of life has emerged, that is distinct from both adolescence and adulthood/middle adulthood, and it is socially recognized as a period usually between 20 and 30 years of age (Furstenberg, Rumbaut and Settersten Jr 2005, Arnett 2000). As entry into adulthood has become more ambiguous, Furstenberg, Rumbaut and Settersten Jr (2005) explain, occurring "in a complex, gradual and less uniform fashion, it is not simply possible for most young people to achieve economic and psychological autonomy as early as it was half century ago" (p.5). The term "adolescence" is thus becoming insufficient to describe a wide range of states and experiences including both typical twelve year olds and college graduates in their twenties still living with their parents. These authors suggest a new name for the specific life stage occurring today between 20 and 30 years of age, that of "early adulthood." Others call it "emerging adulthood" (e.g., Arnett 2000) or "adultolescence" (Tyre et al, 2002). Based on the new dictionary entry mentioned in the introduction, we may call those in this new life stage "boomerang children." Regardless of the term used to describe it, this new life course stage seems to be a social reality. Arnett (2000) for instance, coined this concept, after finding in a study that young people between 18 and 25 do not consider themselves adults, but neither do they see themselves as teenagers, adolescents or children.

Although not many, several studies have tested the "emerging adulthood" arguments. The closest published study to the current analysis is by Sandefur, Eggerling-Boek, and Park (2005) who have compared a cohort born in the early 1960s (HSB Sophomore Cohort) just like the present paper does (C1957-64 cohort) with an adjacent cohort born in the early 1970s (NELS88), thus 10 years older than the second cohort (C1980-84 cohort) examined here. They used latent class analysis methodology, but they did not take into account *over time* pathways that will be examined in the current paper, but rather they only examined "patterns" of attained role configurations at a fixed point in time, when

the respondents were in their mid-20s. They found that most members of both cohorts were living independently and working by their mid-20s. The percentage of NELS88 women who were working was noticeably higher than the percentage of HSB women who were working, reflecting the growing labor force participation of women across cohorts during this period. Nevertheless, the finding that most young adults achieved residential independence from parents directly contradicts "emerging adulthood" claims, but also other studies. For instance, Osgood et al (2005) found in a study using latent class analysis to examine transition to adulthood on *a* cohort born at about the same time with NELS88 cohort (MSALT) that a much lower percent has achieved financial independence by age 27. In their study, 38 percent of young adults were still living with their parents, and of those who were not, only 18 percent were independent and financially stable (owning their homes), while the remaining 44 percent were living in temporary arrangements (e.g., military housing, with friends) or were renting.

Sandefur and colleagues used latent class analysis to further explore the patterns of life events at a fixed point in time for the two cohorts at age 28 for HSB and at age 26 for NELS. They found similar patterns among men and women at age 26/28, with some gender differences. Among men, four major patterns fit the data well. The first pattern, little post-secondary education and the initiation of family life, characterized over one third of HSB men by only one fourth of the NELS88 men. The second pattern, little post-secondary education without the initiation of family life characterized about 24 percent of the HSB men, and a higher 29 percent of the NELS88 men. The third pattern, a four-year degree and no initiation of family life makes up 22 percent of HSB men and it is the most prevalent pattern among NELS88 men (30 percent). Finally the fourth pattern, a four-year degree and the initiation of family life has the lowest prevalence in both cohorts, but it is slightly higher among HSB than among NELS88 men (18% versus 16% respectively). Among the women of the two cohorts they found similar patterns with men, except the second pattern is replaced

among women with a unique pattern, little post-secondary education and parenthood without marriage. This unique women's pattern is more prevalent among the later cohort than among HSB (22% versus 14% respectively). These findings generally support the "emerging adulthood" theory, as a higher percent of the later cohort have obtained a college degree (were still in school in their early twenties), and were less likely to initiate family formation, with the exception of the younger women who were more likely to have had an out-of –wedlock child compared to the HSB women. Other studies confirm these findings. For instance, the most common pathway (37%) among Osgood et al's (2005) MSALT sample was that of "educated singles" with 61 percent holding BA degrees, over half living with their parents or other relatives, and almost none having children or being married/cohabiting. Furthermore, the next most common pathway (19%) was that of "educated partners" who were very similar with "educated singles," except they were living with a partner. Fussell and Furstenberg (2005), using census data, have also found similar trends of slightly increased proportion between 1980s and 2000 of those who were single and childless, attending school and living with parents between 16 and 30 years of age. They have also found between 1980s and 2000 a decreased proportion of those who are ever-married household heads, increased proportion of those living in non-family arrangements and increased proportion of those never-married with their own children. Nonetheless, although useful in their findings (partially supporting the emerging adulthood thesis), these studies do not give us enough detail about the changes that happen over time in the life course of recent adolescents, both within and across cohorts, a task that will be thoroughly examined in this paper. As mentioned above, Sandefur et al's (2005) study only examine snapshot-patterns at fixed ages in mid-twenties, a method which lacks the ability to determine the timing, ordering, and sequences of events. We cannot tell whether work started before finishing school, or residential independence happened before or after marriage. Osgood et al's (2005) study examined a cohort born in the 1970s but it did not

compare it with any other group, in addition to the fact that their sample was restricted to school districts in Michigan state, and it is not a national sample. As opportunities for achieving a good education vary greatly among different geographic areas of U.S., these authors' study misses important variation in conditions that directly influence adolescents' life course. Fussell and Furstenberg's (2005) study lacks longitudinal data which is the only direct way to examine within cohort patterns over time, in addition to the fact that it used relatively simple methods to explore predetermined (by the authors) combination of a restricted number of statuses, instead of "allowing" the data to identify what are the most common patterns among young adults in various cohorts. Predetermining the combination of statuses people could hold might not correspond with the most common statuses combinations existent in real life. In sum, none of these studies is both nationally representative and examines states and status changes over time, which is the task of this paper.

Although most research on the transition to adulthood has not examined cohorts as recent as the C1980-84, that is examined in this paper, the changes in trends up to the late 1990s show several distinctive patterns as follows: (1) a tendency towards increased educational attainment for both genders and all racial and ethnic groups, although inequalities between these groups still remain (see Fussell and Furstenberg Jr 2005); (2) prolonged dependence on parents and delay in establishing an independent residence; (3) increased employment, and especially increased participation of women into the labor force; and (4) postponement of marriage (with an equivalent increase in cohabitation and singleness during young adulthood) and childbearing, with the exception of a small but increasing share of women who bear children outside of marriage. The results of this paper on the most recent cohort reveal

whether these patterns continued at same/ decreased/accentuated level, stagnated or reversed direction.

The second thesis we examine in this paper speaking to the changes in the transition to adulthood is the *destandardization thesis*. To date, many arguments have been made about the de-standardization of the life course. As Bruckner and Mayer (2005) explain, "the *standardization* of the life course refers to processes by which specific states or events and the sequences in which they occur become more universal for given populations or that their timing becomes more uniform." Earlier in the paper we have mentioned the expansion of secondary and tertiary education, and the increased prevalence of work organizations such as trade unions and the provisions of the welfare states, which resulted in the events marking up the transition to adulthood to have become more universal, more temporally connected and to show less age variation. "Conversely, *de-standardization* would mean that life states, events and their sequences can become experiences which either characterize an increasingly smaller part of a population or occur at more dispersed ages" (Bruckner and Mayer 2005, p.32). Arguments have been made that the 1990s have seen the massive impacts of the forces of globalization, particularly increased international competition, labor market de-regulation, and structural unemployment which resulted in a more prolonged and more complicated transition to gainful work, and/or family formation and in the diversification of life pathways in general (see Bruckner and Mayer 2005).

Despite these strong and logical claims about the recent changes in the life course, the empirical evidence comparing various cohorts to assess these claims is quite scarce, and as Bruckner and Mayer (2005) state, we cannot relay anymore on "anecdotal and illustrative evidence," but rather we crucially need "the patient and painstaking measurement of empirical developments" that took place in the life course, a goal that this paper takes on. Controversies remain particularly in regard to the destandardization of family formation. While some view recent changes in the family as simply reflecting new and more diverse

family forms (Demo, Allen, and Fine 2000; Stacey 1991) or as the fundamental decline of the family institution (Popenoe 1993, Whitehead 1993), others (Wu and Li 2005) have found that family diversity has not increased over time. Wu and Li (2005) have found that family diversity has deep historical roots, and the main change that happened in recent years was a compositional shift with a higher proportion of people following non-traditional family forms (that have existed for a long time) than in the past. This picture is also complicated by the fact that most of these trends were examined up to the late 1990s, and some have plateau at about that time. For instance, the proportion of births to unmarried women has plateau in 1995 (Ventura and Bachrach 2000, Wu Bumpass and Musick 2001). Also, other related changes took place such as a shift of out-of –wedlock births from teenage mothers to older women, and from single women to cohabiting women (Wu Bumpass and Musick 2001). The timing of these findings and the combination of these changes in trends do not allow us to make straightforward predictions and complicates our expectations about changes between the C1980-84 cohort and the C1957-64 cohort.

Despite the apparently compelling nature of the findings on the transition to adulthood, what we know is basically descriptive and expansive. The complexities of the transition to adulthood, especially among recent cohorts, frustrate any simple account of this critical period of the life course. Most previous studies either examine single transitions ignoring how transitions in each life domain affect one another, or they do not examine sequencing and ordering of events over time, and/or only use small or local samples lacking national representativeness, all of which the current paper seeks to overcome.

Hypotheses

Given the de-standardization and “emerging adulthood” arguments and research findings mentioned above, we expect that life is becoming more destandardized and young

people are increasing their dependence on parents between the earlier and the later cohorts examined in this paper. We thus expect several major inter-cohort changes. Our first general hypothesis testing the destandardization thesis is the "increased heterogeneity" hypothesis: "*any given pathway is less likely to dominate the life course of the later cohort (C1980-84) compared to the earlier cohort (C1957-64).*" We especially expect to see a decrease in proportion of those who have made all the transitions early in life, at the expense of the increase in all the other pathways. The second hypothesis, also testing the destandardization thesis, is the "increased diversity" hypothesis: "*We expect a larger number of pathways in the later cohort compared to the earlier cohort*." To sum these first two hypotheses, we expect a higher proportion of respondents concentrated into (or following) few/er pathways in the earlier cohort compared to the later cohort, with any single pathway less likely to dominate the cohort in the later cohort compared to the earlier cohort.

On the other hand, the "emerging adulthood" claims, and recent family demography statistics, lead us to three additional hypotheses testing this thesis. Our third general hypothesis is "decreased early family formation" hypothesis: "*A smaller proportion of the later cohort (C1980-84) is likely to follow the pathways involving early family transitions (marriage and parenthood), compared to the earlier cohort (C1957-64)*." We expect to see more prolonged singleness in the later cohort compared to the earlier cohort.

Also based on the "emerging adulthood" claims, and the globalization trends discussed in the previous chapter (and their consequences), our fourth general hypothesis "increased dependence " is that we expect "*an increased prevalence in the later cohort (C1980-84) compared to the earlier cohort (C1957-64) of pathways involving longer dependence on parents."* Finally, our fifth hypothesis "increased schooling" is that we expect "*an increased prevalence in the later cohort (C1980-84) compared to the earlier cohort (C1957-64) of pathways involving more prolonged school enrollment*."

METHODS

Samples and Variable Description

To study the C1957-64 and C1980-84 cohorts we use two National Longitudinal Study of Youth samples, the NLSY 1979 (NLSY79) and the NLSY 1997 (NLSY97). These two nationally representative surveys followed their respondents over time, and recorded similar life information, and thus provide a unique opportunity for cross-cohort comparison. NLSY97 is a sample of 8,984 young men and women born in the years 1980-84. The respondents, who were ages 12-18 when first interviewed in 1997, were followed annually until present. Retrospective questions going back to 1994 are asked (in 1997) of many variables such as birth history and the start of employment. Yearly questionnaires included a large battery of items tapping early experiences in work, school performance, family formation and living arrangements. Similar questions were asked of the NLSY79 respondents, representing a nationally representative sample of 12,686 14-22 year olds (born in 1957 through 1964) who were interviewed annually, starting in 1979, then biennially since 1994 until present. The final sample of NLSY79 was reduced to 9,964 individuals in 1991 after two supplemental samples (one of military population and one of "poor whites") were dropped from the study. The NLSY79 sample will only be examined up the age 25 to make it comparable with NLSY97, as age 25 is the oldest age for NLSY97 data is available. We do not include the dropped supplemental samples of "poor whites" and "military" in NLSY79 to have as comparable a sample as possible with that of NLSY97.

For each of the NLSY samples a person-months file was created providing monthly records of educational attendance, living arrangements, labor force participation, entering partnerships, and becoming parents. These monthly statuses were the indicators to be examined simultaneously in the latent class analysis of the transition to adulthood. Thus respondents were coded with dummy variables in each month as employed/unemployed, enrolled in school/out of school, living with parents/living independently, being single/cohabiting or married, and being parents/not being parents. Because of the nature of these transitions, that is, they are not happening often (i.e., individuals finish high school only once, or have their first child only once), the person-months format of the file introduced a lot of redundancy in the latent class analysis program. Thus, we transformed the person-months files into person-years files, assigning the yearly status on any given indicator based on the status that occurred in the mid-year month of May.

A respondent was coded as "employed" in both files if she/he was working for pay for an employer (including those who owned their own business), on a regular basis, part-time or full-time. Those working in temporary and/or ad-hoc jobs, such as mowing someone's lawn occasionally or removing the snow from a neighbor's property were not considered "employed." We also coded as "employed" those who were in the military. The respondents in both files were coded as "single" if they were never married, divorced, separated or widowed, and were coded as "married" if they were married or were cohabiting. The enrollment status variable was created by assigning "enrolled" status to those who were enrolled in high school or college, or were on vacation, and "not enrolled" status to those who were not enrolled in school because they graduated, dropped out of school or were expelled.

Respondents were coded as living independently from parents if they have moved out of the parental household to live on their own (either owning their own houses or

renting, and either living alone or with friends). We created this variable based on the variable asking the date when the respondent moved out of the parental household to live on his/her own for more than 3 months, and/or using the relationships in the household rooster. All months in which the respondent lived on his/her own, he/she was assigned "living independently" status. If the respondent has moved back with his/her parents, we assigned the "not living independently" status for the months when the respondent is back in the parental household. In the person-years file the yearly status is assigned based on month 5 of each year, so if a responded returned back to the parental household for a few months only between the months of recording yearly status, this return is missed in the person-years file. The respondents living in college dormitories or other temporary arrangements (prisons, hospitals etc.) are *not* coded as "living independently" because they are not likely to be financially independent, nor they are considered independent by the official NLSY definition. The parental status variable was created by assigning "parent status" in both files to those who gave birth to a live child, those who adopted a child, or those whose partners gave birth to a child. Both males and females that had a child were coded as "parent," starting with the month of birth of the child.

Model

This paper's conceptualization of life course and its corresponding statistical model have two main advantages especially germane to a life course perspective compared to most previous studies: they allow both the examination *of simultaneous states in a person's life* and *the sequencing over time of these simultaneous states.* Most previous studies of the transition to adulthood have used event history methods, which are technically rigorous and tested over many years of use. An example of such analysis would examine the predictors and consequences of transitioning into marriage (i.e., early versus late). Despite their

importance in documenting life course trends in various life domains, the analyses based on event history methods have one major flaw overcome by the methodology used in this paper: they do not take into account how various transitions affect one another (e.g., when one gets her first job or gets married may not be independent of when one finishes school OR moving out of the parental home may not independent of when one finishes school or is getting married), and thus may lead to biased conclusions.

A step-up from event history methods examining single transitions are those which examined two outcomes at the same time, such as seemingly unrelated regressions or bivariate probit regressions. One example of such analysis is provided by Nielsen, Smith and Celikaksoy (2007) who examined jointly the transition into marriage and the completion/drop-out of education among immigrants. These types of analyses have the advantage of taking into account the relationship between two different inter-related outcomes or transitions, but they suffer from the same flaw as traditional event history methods: they ignore the fact that not only two but multiple life course transitions are inter-related.

Synthetic cohort methods have also been often used to study changes in the life course. They use cross-sectional data such as decennial censuses to find for instance the median age at transitions for various cohorts or the age difference between the time 25 percent and 75 percent of a cohort have achieved a particular transition. These methods are useful to document trends between cohorts, but they are also quite limited because they lack longitudinal data; and only longitudinal data can really indicate aspects such as the sequence of steps through which individuals become adults, the relationships between the timing of transitions or reveal reversible transitions.

More recently, sequence analysis with Optimal Matching (OM), and other complex clustering methods such as Monothetic Divisive Algorithm or various similarity indexes have

emerged as tools for analyzing life-course trajectories (e.g., Abbott and Tsay 2000). There are several versions of sequence analysis with OM methods but most include two steps: (1) determine all possible sequences of events in a cohort (i.e., S3C1M3D5M3- single for 3 years, cohabiting for 1 year, married for 3 years etc.), and (2) aggregate (reduce) these sequences into a manageable number using cluster analysis (i.e., by taking the least prevalent sequence and aggregating it up to the sequence most similar to it, until a finite number of the most common sequences remain). This method is superior to other methods as it takes into account both the timing and sequencing of events/transitions. However, it has been criticized that the rules it uses to calculate the similarity or difference between pairs of sequences and to cluster them together are arbitrary and not transparent to the reader (Elzinga et al, 2007), rather than probability model-based like our methodology. This problem could significantly affect the results, as it has been shown that even slightly different rules could result in substantially different clusters (Elzinga et al, 2007).

Another method used to study life course is called monothetic divisive algorithm. This is a top down method that divides life histories one variable at a time in such a way as to minimize the heterogeneity in life histories within the group and maximize it across groups (it uses Gini heterogeneity index). The division stops when the Gini index incremental increase drops below 0.02. One drawback of this method is that not all transitions are taken into account, which makes it hard to be used to compare groups. More recently, various indexes measuring similarity between pairs of sequences have been developed and used to study changes in the life course. For instance, Elzinga et al (2007) developed the similarity index, a measure between 0 (extremely disimilar sequences) and 1 (very similar sequences) which could be used to determine the level of heterogeneity in life course sequences between cohorts or countries. Such analysis yields results such as “the U.S. has a similarity index of 0.204 while Spain has 0.49” (hypothetical example). Although good for comparison between various countries or cohorts, this measure is complicated to understand and not

intuitive reducing the whole meaning of life pathways or trajectories to a number. A number such as 0.204 for U.S. tells us nothing about the likelihood to marry or cohabit, the tendency toward increased dependence on parents, etc. although these tendencies may be embedded nonetheless into the calculation of this number. Moreover, two cohorts or countries may have the same index, although they are vastly different in the life course domains salient for the determined level of heterogeneity.

In sum, these statistical strategies are either examining single transitions which ignore the inter-relationship between multiple life course transitions, or use arbitrary, non-transparent methods of clustering, and/or are non-intuitive and hard to interpret/graph in social sciences. In contrast, the model used in this paper to study life courses yields results that are intuitive and easy to understand and simultaneously estimates combination of statuses /transitions as well as their sequencing over time in a probability model. This model is a single-stage second-order hierarchical latent class model set forth by Eliason et al (2009). Adopting these authors' notation, we describe the model below.

Let R_{ijt} be defined as the *j*'th observed role for individual *i* at age *t*. For the C1957-64 and C1980-84 cohorts, the R_{ijt} are defined as the schooling, work, marital, parental roles, and living independently of one's parents. Thus, for our analysis there are $J = 5$ observed role indicators over $T = 10$ time points (one for each age from 15 to 25 years of age). We use age 15 as the starting point as it the year before the legal age for formal employment thus allowing us to capture the start of employment trajectory. Each observed role indicator may have any number of categories, but here they are all dichotomies (being enrolled in school/ not being enrolled, being employed/ not being employed, being a parent/ not being a parent, being married (or cohabiting)/ not being married , and living with one's parents/ living independently).

The latent class model used in this analysis is a second-order hierarchical latent class model with a set of latent variables capturing the within-age role configurations and a latent variable capturing the across-age life paths. More specifically, the latent life path model partitions the within and across age association among the full set of R_{ijt} observed role indicators into (1) a set of T age-specific latent role configurations that capture the within-age association among the observed role indicators and (2) a latent life path variable capturing the across-age association among the observed role indicators.

Let X_{it} be the set of t = 1, … , T unobserved role configurations, and Y_i be the unobserved life paths. The latent life path model can then be written as:

$$\Pr\{R_{i11},\ldots,R_{iJ1},X_{i1},\ldots,R_{i1T},\ldots,R_{iJT},X_{iT},Y_i\} = \left[\Pr\{R_{i11}\mid X_{i1}\}\cdots\Pr\{R_{iJ1}\mid X_{i1}\}\right]\cdots\left[\Pr\{R_{i1T}\mid X_{iT}\}\cdots\Pr\{R_{iJT}\mid X_{iT}\}\right]\left[\Pr\{X_{i1}\mid Y\}\cdots\Pr\{X_{iT}\mid Y\}\right]\Pr\{Y\} \quad (1)$$

where the probability on the left-hand-side of the equal sign is the joint probability over the set of observed and latent variables and where the conditional probabilities on the right-hand-side consist of (1) the product of the set of conditional probabilities for the observed roles R_{ijt} given the latent role configurations X_{it} at times t = 1,…,T (given in the first two sets of brackets), (2) the product of the conditional probabilities of the latent role configurations X_{it} given the latent life paths Y (given in the third set of brackets), and (3) the unconditional probability of the latent life path variable Y (given outside the last set of brackets).

Estimates of the conditional probabilities $\Pr\{R_{ijt} \mid X_{it}\}$ give the degree to which the j'th observed role at age t, R_{ijt}, is embedded in, or constituent of, the age-graded latent role configurations X_{it}. Similarly, estimates of the conditional probabilities $\Pr\{X_{it} \mid Y\}$ give the degree to which latent role configurations X_{it} are embedded in latent life paths Y_i.

Finally, estimates of the probabilities Pr $\{Y\}$ give the degree to which life paths Y_i are embedded in, or constituent of, the institution of the life course itself, for the societies from which the sampled cohorts came. By exploiting the person-period nature of the data, the model is estimated in a single stage using a nonparametric multilevel full information maximum likelihood (FIML) estimator implemented in the current version of Latent Gold 4.5 (Vermunt and Magidson 2005). This estimator is obtained by taking advantage of the person-period (person-years) structure of the file and the repeated response vector of observed roles over time nested within person. Thus, instead of having the typical multilevel structure with persons nested within larger units such as schools, countries etc., we have a multilevel model with time periods nested within persons. The person ID is specified as the grouping variable in Latent Gold, with repeated measures across the age range on the observed roles nested within person. This single stage estimator is superior to a two-stage estimation (i.e., the single-stage estimator is consistent and asymptotically unbiased unconditionally over the entire parameter space, and allows for a large number of time points/ages– see Vermunt and Magidson 2005 for a detailed explanation).

RESULTS

Descriptive Statistics

Table 1. Descriptive Statistics of the NLSY97 and NLSY79 Samples (Unweighted Means of Person-Years)

Variable	*NLSY79 up to Age 25*	*NLSY97 up to Age 25*
Female	0.51	0.49
Race/Ethnicity		
Black	0.30	0.27
Hispanic	0.19	0.21
White / Other*	0.51	0.52
Parents' Education		
Less Than High School	0.33	0.11
High School	0.49	0.52
College Degree or Higher*	0.18	0.24
Family Structure		
Single Parent	0.18	0.38
Step-Parent	0.08	0.05
Other	0.05	0.06
Two-Parent*	0.68	0.39
Age	20.94	18.69
Role Indicators		
Enrolled in School	0.31	0.62
Living Independently	0.46	0.19
Employed	0.62	0.52
Married	0.23	0.14
Parent	0.22	0.13

* Indicates the reference category
Only role indicators vary over time; the other variables are constant at the base year 1979/1997, unless otherwise noted
Numbers do not add up to 100% because of missing cases

Table 1 presents un-weighted descriptive statistics of NLSY79 and NLSY97 samples for ages 15-25. For a check on the comparability of the two samples, we included some background variables in addition to the observed role indicators used in the analysis. The

unit of analysis is person-years. Since all the variables are held constant at base years, except the role indicators, and there is no severe attrition, the description of background variables in "person-years" should be roughly the same as a description in "persons." We thus use words like "respondents" or "persons" in the description below for easiness of communication, although the technically correct word is "person-years."In both NLSY79 and NLSY97, about half of the respondents are female, a little over half are white, about 30 percent are black and 20 percent are Hispanic. The two samples are quite different in terms of the parental education level, reflecting the increased educational attendance over time in the U.S. While a third of the NLSY79 respondents had parents who did not finish high school, only 11 percent of the NLSY97 respondents did so. While about 50 percent in both samples had parents with a high school degree, a higher percent (24%) of the NLSY97 respondents had parents with a college degree than NLSY79 respondents (18%). While the majority of the NLSY79 respondents came from two-parent families (68%), only 39 percent of the NLSY97 respondents did so, reflecting the over time increase in the prevalence of non-traditional family forms. In fact, almost an equal percent of the NLSY97 respondents (38%) came from single-parent and two-parent families. Interestingly, there is a slightly smaller proportion of step-parent families in NLSY97 than in NLSY79. Those in NLSY79 were slightly older than their NLSY97 counterparts, reflecting in part the older ages at the start of the interview of the NLSY79 respondents (14-22 versus 12-18 respectively). Moreover, while all the NLSY79 respondents reached age 25, not all NLSY97 respondents did so by the year of last interview, affecting the age of "person-years" in the two samples.

If we compare the role indicators of the two NLSY samples up to age 25 (the only variables presented in table 1 that vary over time), we notice that the NLSY97 respondents were a lot more likely to be in school with 62 percent of person –years up to age 25 being in school versus only 31 percent in the NLSY79 sample. On the other hand, the NLSY79 respondents were a lot more likely to be independent in early adulthood (46 % of person-

years) compared to their NLSY97 counterparts (19%). The NLSY79 respondents were also more likely to be employed, married and assume parental roles compared to the NLSY97 respondents, confirming at the basic descriptive level the "emerging adulthood thesis", that is, the lower likelihood of today's people in their twenties to be "independent adults" compared to their counterparts born in the 1960s.

The number of role configurations and life pathways characterizing each cohort

The first set of results shows that the transition to adulthood could be best-represented by seven role configurations and eight life paths for the C1957-64 cohort and by six role configurations and six life paths for the C1980-84 cohort respectively.

Given that traditional goodness-of-fit statistics – such as the likelihood ratio and Pearson chi-square statistics – are not applicable, we used the BIC statistic, as well as substantives reasoning for model selection. The BIC statistic reaches a minimum for the models with eight latent life paths, and seven and eight latent role configurations for the C1957-64 cohort. Given that the BIC statistic for the model with eight latent role configurations is nearly 100% of that for the model with seven latent role configurations, and the model with eight latent role configurations involves an additional 13 parameters, we use the more parsimonious model with seven latent role configurations to describe the structure of the life course up to age 25 for the C1957-64 cohort.

For the C1980-84 cohort BIC statistic reached a minimum for the models with six role configurations and six pathways, this model becoming the chosen model to describe the structure of the life course for this cohort (see appendix). Before a more in-depth

comparison analysis, these basic model fit results seem to suggest a change between the two cohorts that run counter with the destandardization thesis. That is, there are fewer rather than more (as the destandardization thesis would predict) pathways characterizing the later cohort than pathways representing the earlier cohort.

Describing Role Configurations

Tables A and B show the conditional probabilities of each observed role given the role configurations for the C1957-64 and C1980-84 cohorts, that is, they show what observed roles are part of each of the seven or six respectively role configurations describing the two cohorts. These tables present the role configurations over the entire age-range, with the conditional probabilities summing up to one (thus, they could be interpreted as would any other probability distribution). These tables also show (in the first row) the prevalence of each role configuration in a given cohort, from the most prevalent (left) to the least prevalent (right).

(Insert Table A around here)

(Insert Table B around here)

The most prevalent role configuration between 15 and 25 years of age in both cohorts is that of a "student," although its prevalence is very different in the two cohorts. While in the later cohort over half (55%) of the person-years between the ages of 15 and 25 are spent in this role configuration, only 26% are spent in this role configuration in the earlier cohort. Thus over the twenty years period between these two cohorts this role configuration substantially increased in significance among the young Americans. This role configuration is characterized by maximum probability of being in school (0.98/1.00),

moderate-low probability of being employed (0.39/0.40) and extremely low probabilities of being independent (0.07/0.00), married (0.00/0.01), and a parent (0.00/0.00).

The second most prevalent role configuration, that of a "dependent worker" is also common between the two cohorts. In contrast with the "student" configuration, this role configuration decreased in prevalence between the two cohorts, from 20 percent to 17 percent, respectively. The "dependent worker" configuration is characterized by extremely low probability of being in school (0.00/0.00), relatively high probability of being employed (0.67/0.66), low probabilities of being independent (0.18/0.03), and extremely low probabilities of being married (0.01/0.05), and a parent (0.00/0.01).

The third most prevalent role configuration in both cohorts is that of a "independent worker" with a prevalence of 18 percent in the earlier cohort and of only 8 percent in the later cohort. This role configuration is characterized by very high probability of employment (0.91/0.79) and high probability of living independently (0.64/0.59) coupled with extremely low probabilities of being married (0.00/0.06) and being a parent (0.00/0.00). A stark difference exists between the two cohorts in terms of probability of being a student: while in this role configuration the earlier cohort had a low probability of being in school (0.22), half if the "independent workers" in the later cohort are enrolled in school.

Also common among the two cohorts, the forth most prevalent role configuration is that of a "single parent." About 12 percent of the person-years in the earlier cohort and only 6 percent in the later cohort was spent in this configuration. The lower prevalence of single-parents in the later cohort most likely reflects the trend of increasing ages of single-mothers between the two cohorts coupled with the slightly younger ages of the later cohort. It is characterized by high probability of being a parent (0.77/1.00), coupled with low probability of being married/partnered (0.02/0.05), moderate probability of working (0.46/0.50), and low probabilities of being in school (0.06/0.25). There is a large difference between the two

cohorts in terms of the probability of living independently in this role configuration. While the single parents in the earlier cohort tended to live independently (0.55 probability), those in the later cohort were living with their parents (only 0.25 probability of living separately from parents).

The fifth most prevalent role configuration, the "adult," is also common among the two cohorts. It is characterized by high probabilities of having made all the transitions (with one exception noted below): (1) out of school (0.97/0.88), (2) living independently (0.94/0.35), (3) working (1.00/0.60), (4) being married (0.90/0.97), and (5) having children (0.79/0.87). Not only that this role configuration is less prevalent in the later cohort (0.06 vs. 0.10 in the earlier cohort), but the members of the later cohort are also much less likely to live independently (0.35) compared to their earlier counterparts (0.94). This latter finding coupled with the increased probability of prolonged school enrollment in the later cohort strongly supports the "emerging adulthood" thesis.

The sitxth most prevalent role configuration in both cohorts is that of a "married worker." The characteristics of this configuration are being married (1.00/0.85) with no children (0.06/0.07), low probability of being in school (0.10/0.22) and high probability of working (0.90/0.81). A large contrast between the two cohorts regarding this role configuration is that the members of the earlier cohort had a very high probability of living independently (0.96) while those of the later cohort were much less likely to be independent (0.45).

The last role configuration in the C1957-64 cohort (7 percent prevalence), that of a "homemaker," does not exists in the later cohort. In other words, although there are certainly some homemakers among today's young adults under the age of 25, this role configuration is so rare that it did not reach enough statistical significance to be part of the most prevalent configurations in this later cohort. As expected, the homemaker role

configuration is characterized by high probabilities of being married (0.94) with children (0.66), living independently from parents (0.92), and low probabilities of being in school (0.05) or working (0.02).

These results reflecting the changes in role configurations between the two cohorts do not support the de-standardization thesis in several respects. First, we do not see increased diversity in terms of roles configurations, that is, there were more role configurations characterizing the C1957-64 cohort (7) than the C1980-84 cohort (6). Second, we see an increased concentration of respondents within one role configuration (the "student" with 55% respondents) in the later cohort compared to the more even distribution of respondents in the earlier cohort.

On the other hand, these results of the changes in role configurations between the two cohorts represent strong evidence supporting the "emerging adulthood" thesis. While more than half (5 out of 7 possible) role configurations in the earlier cohort are configurations of independence (from parents), only one (1) out of five (5) are so in the later cohort, showing a clear trend of increased dependence on parents among young people today compared to their earlier counterparts. Moreover, in the later cohort the "independence" role configurations are less prevalent in the earlier cohort compared to the later cohort. Members of the later cohort are also more likely to be in school and less likely to have role configurations involving marriage and children, supporting again the "emerging adulthood" thesis.

Role Configurations by Age

While tables A and B show which roles composed each of the role configurations for all ages combined in the two cohorts, figure A shows the probability of each latent role configuration by age in the two cohorts.

In both cohorts, the “student” role configuration dominates the landscape for this cohort in the early ages. In the earlier cohort, this roles configuration is dominant until before age 19, whereas in the later cohort it is the most prevalent until about age 20, reflecting increased school enrollment in the later cohort. The student role configuration is then replaced in dominance in both cohorts by the “dependent worker” configuration, which for the later cohort remains dominant until the end of the observation period. For the C1957-64 cohort, the “dependent worker” configuration dominates until about age 22, when it is replaced by the “independent worker” configuration. At around age 23-24 the “adult” role configuration also surpasses in prevalence “the dependent worker.” While for the later cohort the most prevalent role configuration at age 25 is that of a dependent worker (someone living with parents), for the earlier cohort both the adult and the independent worker configurations (both configurations of independence from parents) had higher prevalence at age 25 than the “dependent worker.” In fact for the earlier cohort 4 role configurations had higher prevalence than “the dependent worker.” In contrast, for the later cohort this latter role configuration is the only dominant configuration, with a visible gap separating it from the other role configurations.

(Insert Figure A around here)

Two Cohorts and Their Life Pathways

Figures B and C show the most prevalent latent life pathways in the C1957-64 cohort and C1980-84 cohort respectively. As with role configurations, neither the diversity of pathways, nor the de-concentration of respondents within each given pathway have increased in the C1980-84 cohort compared to the C1957-64 cohort, running counter to the de-standardization thesis prediction. Table 2 below shows the proportion of respondents in each of the most prevalent pathways characterizing each cohort. In fact, the latest cohort is

more concentrated within a smaller number of pathways (6) compared to the earlier cohort (8). If we look at the degree of heterogeneity by calculating the geometric mean for each cohort, the results also indicate less heterogeneity/ diversity in the later cohort compared to the earlier cohort. The geometric mean for the C1957-64 cohort is 97.6 percent of the maximum possible, while it is only 91.78 percent of the maximum possible for the C1980-84 cohort (calculations not shown).

Table 2. The proportion of respondents in the most prevalent pathways characterizing the C1957-64 and C1980-84 cohorts

	C1957-64	C1957-64
Lifepath 1	0.208	0.263
Lifepath 2	0.200	0.196
Lifepath 3	0.160	0.184
Lifepath 4	0.109	0.143
Lifepath 5	0.100	0.107
Lifepath 6	0.089	0.106
Lifepath 7	0.083	
Lifepath 8	0.055	

Moving to the substantive meaning of the life pathways (shown in figures B and C) characterizing each cohort, and the changes that took place between the two cohorts, we find strong supportive evidence for the "emerging adulthood" thesis. As we show below, a comparison between the life pathways of the two cohorts show more dependence on parents, more prolonged school enrollment and more delay in family transitions in the later cohort than in the earlier cohort. Figures B and C separate the role configurations shown in figure A into the life paths in each cohort in which they are embedded.

Life Pathways of C1957-64 Cohort

The C1957-64 cohort is best characterized up to age 25 by eight (8) life pathways graphed in figure B. We titled the life path with the highest propensity in this cohort, life path 1 the "student to early dependent worker" pathway. This pathway is dominated by the student role configuration up to about age 18, when the role configuration of a "dependent worker" becomes most prevalent until the end of the observation period (age 25). Those following this pathway finish high school only, and then find a job that is *not* good enough to allow them to move out of the parental household, and by the time they are 25, they have stayed about 7 years post-graduation in their parents' house and have not formed families on their own.

(Insert Figure B around here)

The second pathway characterizing the earlier cohort is the "single parenthood" pathway. This pathway is dominated by the student role configuration until about age 18, which then is replaced by the single parent role configuration until the end of the observation. A minority of young people in this pathway hold jobs while living with parents and not having children, before they become single parents.

The third most prevalent pathway in the C1957-64 cohort is the "student to late independent worker." In this pathway the student role configuration is dominant until around age 22, most likely indicating college graduation, which is the replaced by that of a "independent worker" (someone who is employed and lives independently from parents).

The fourth most prevalent pathway in the earlier cohort is quite similar with the previous pathway in that it characterizes students who become independent workers. The main difference is that those following this latter path are also getting married concomitantly with transitioning to independence from parents and employment. They also

do it slightly earlier than their peers following the third pathway, indicating that some may not finish their college degree.

The fifth pathway characterizing the C1957-64 cohort is the "early transition to adulthood" pathway. This pathway is dominated by the student role configuration until about age 18, when the role configuration of a dependent worker becomes most prevalent up to about age 20. Finally, at age 20 the independent "adult" role configuration starts to dominate the landscape of this pathway and remains dominant until the end of the observation period. Those following this pathway attain a high school education (and some attend college), then soon after that acquire a job good enough to permit the establishment of independent residence from parents, and finally form their own families.

The next pathway typical of the C1957-64 cohort is the transition from "student to early independent worker." This pathway most likely characterizes those who get good manufacturing jobs early in life, not requiring much education but rewarding hard-work with high enough incomes to allow the establishment of independent residence from parents.

The seventh most prevalent pathway in the earlier cohort is that of early homemakers. Those following this pathway leave the parental home early to get married and have children, and have very little attachment with the labor market (only 0.02 probability).

The last pathway characterizing the C1957-64 cohort, "Early independence and relationship formation" is similar with the previous pathway in that those following it leave the parental home early through marriage. However, in contrast with the seventh pathway, they also work and delay having children until around age 23.

Life Pathways of C1980-84 Cohort

In the C1957-64 cohort all pathways to adulthood lead to independence from parents by age 25 except the first pathway (7 out of 8 pathways lead to independence by age 25). In contrast, only 2 out of 6 pathways to adulthood characterizing C1980-84 cohort (figure C) lead to role configurations of 'independence" by mid 20s, strongly supporting the "emerging adulthood" thesis.

(Insert Figure C around here)

The life path with the highest propensity in C1980-84 cohort, life path 1 is remarkably similar with life path 1 in the earlier cohort. It involves the transition from the student role to that of a dependent worker, which remains the dominant role configuration until age 25. This indicates the attainment of a high school education only (no college), and then the acquiring of a job post-graduation not good enough to permit the establishment of independent residence from parents. This pathway has a higher prevalence in the later cohort compared to the earlier cohort and it is the most prevalent pathway of all among the later cohort members.

The second most prevalent life path in C1980-84 cohort is similar with the sixth pathway in the earlier cohort involving the transition from being a dependent student to an independent worker. In contrast to their counterparts in the first pathway, those following this pathway are able to obtain employment after high-school that is good enough to allow them to become independent from parents. The third most prevalent pathway in the C1980-84 cohort does not have a direct equivalent in the earlier cohort and it best exemplifies the emerging adulthood. Those following it acquire postsecondary education (college and even advanced degrees) but by age 25 they are still dependent on parents and have not yet formed families on their own.

The fourth pathway characterizing C1980-84 cohort, like the previous pathway, does not have a direct equivalent in the earlier cohort. It is characterized by early marriage (around age 19), but not necessarily coupled with independence from parents (0.45 probability) and relatively low probability of post high-school education (0.22). The fifth pathway, titled "early transition to adulthood" is characterized by early (soon after high school graduation) family formation involving marriage/cohabitation and children and early employment. Nonetheless, compared to those who transitioned early to adulthood in the C1957-64 cohort, their counterparts in the later cohort have a much lower likelihood (p=0.35) of becoming independent from parents at the same time as they are becoming employed and forming families. Finally, the sixth pathway characterizing the C1980-84 cohort is the single parenthood pathway. Those following it have a child outside of marriage early in life, most often before finishing high school and this is the most salient feature of their "transition to adulthood." Some work (p=0.50) but most still live with and are dependent on their parents (p=83) post-partum.

While the destandardization thesis is not supported by the results comparing the two cohorts (as the pathways of the later cohort members are less diverse than those of the earlier cohort members), the emerging adulthood thesis is strongly supported in several respects by the same results. First, a new pathway representing college grads who are still dependent on parents post-graduation (pathway # 3) characterizes the later cohort, and did not exist in the earlier cohort, perfectly exemplifying the emerging adulthood. Second, five out of six pathways in the later cohort involve dependence on parents by age 25, in contrast with only one out of eight pathways in the earlier cohort. Third, even pathways that look almost identical in the two cohorts hide differences that support the emerging adulthood thesis. For instance, while the majority of the single parents in the earlier cohort lived

independently from their own parents (p=0.55), most of the single parents in the later cohort lived in the parental household (p=0.83). Finally, several pathways characterizing the earlier cohort that do not exist in later cohort were pathways involving early family formation and independence from parents, such as the homemaker pathway and the "early independence and relationship formation" pathway.

CONCLUSION

The main goal of this paper was to assess whether the transition to adulthood or the life pathways have changed today compared to 20 years ago, by comparing a cohort born in the 1960s (and coming of age in the 1980s) with a cohort born in the 1980s (and coming of age in the 2000s). We hypothesized that the transition to adulthood has changed in two specific ways: (1) by becoming more destandardized (i.e., people have more diverse and unpredictable pathways, being less concentrated into a few life pathways that the majority followed), and (2) by going through an intermediate life phase, that of "emerging adulthood", when moving from adolescence to adulthood (i.e, young people are increasingly dependent on their parents, and delay the establishment of their own families and residences until after their mid-twenties).

While our results strongly support the "emerging adulthood" thesis, they do not support the destandardization thesis. On the contrary, it seems that lives have become more standardized for the young people coming of age today (born in the 1980s) than for their counterparts born in the 1960s and coming of age in the 1980s. One strong indicator against the destandardization thesis is the increased concentration of C1980-84 cohort members up to age 25 into fewer role configurations and pathways compared to the earlier cohort. Over half of the C1980-84 cohort members up to age 25 are concentrated into the role configuration of a dependent "student." Thus, while the earlier cohort members were characterized by 7 diverse role configurations up to age 25 and were quite evenly distributed

among them, more than half of the later cohort members were concentrated into one single role configuration, reflecting the exact opposite of what the destandardization thesis would predict.

Moreover, if we look at the *content* of the role configurations characterizing the early life of the two cohorts examined here, we find strong evidence supporting the "emerging adulthood" thesis. While more than half (5 out of 7 possible) role configurations in the earlier cohort are configurations of independence (from parents), only one (1) out of six (6) are so in the later cohort, showing a clear trend of increased dependence on parents among young people today compared to their earlier counterparts. The members of the later cohort are also more likely to be in school and less likely to have role configurations involving marriage and children.

As with role configurations, neither the diversity of pathways, nor the de-concentration of respondents within each given pathway have increased in the C1980-84 cohort compared to the C1957-64 cohort, running counter again to the de-standardization thesis' prediction. In fact, the later cohort is more concentrated within a smaller number of pathways (6) compared to the earlier cohort (8).

Also mirroring the role configurations results, the substantive meaning of the life pathways strongly support the "emerging adulthood" thesis. A comparison between the life pathways of the two cohorts show more dependence on parents, more prolonged school enrollment and more delay in family transitions in the later cohort than in the earlier cohort. In the C1957-64 cohort all but one pathway to adulthood lead to independence from parents by age 25 (7 out of 8 pathways lead to independence by age 25). In contrast, only 2 out of 6 pathways to adulthood characterizing C1980-84 cohort lead to role configurations of 'independence" by mid 20s. Furthermore, the pathways occurring in the earlier cohort

that did not exist in the later cohort involve family transitions and independence from parents.

LIMITATIONS

In this paper we tested more systematically than previous work the destandardization and the emerging adulthood theses, by using a method which allowed the simultaneous examination of the combination of statuses as well as their sequencing over time. Nevertheless, my study is not without limitations. First, we rely on rather crude measures of indicators of adulthood (i.e, employment, marriage) which allowed us to examine the most abrupt changes in the transition to adulthood between the earlier and the later cohort. However, more refined measures may allow a more sophisticated test the two theses examined in this dissertation. A measure of employment which takes into account income levels, for instance, might differentiate between pathways not revealed in this analysis. New pathways hidden in the current analysis might also be uncovered by measuring cohabitation separately from marriage. Second, we made the assumption that males and females and all racial groups follow the same pathways with various propensities. However, it may be the case that various groups have completely different pathways that are not common with other groups, and repeating the analysis separately by various groups (gender, ethnics/racial) might nullify or highlight some of our general results.

Third, despite being the gold standard of longitudinal surveys in regard to keeping respondents in the study, attrition is still a problem which might have an impact on the tests performed here. Sensitivity analyses under various assumptions about the behavior of attriters might advance our understanding on how the “drop-outs” might skew the results of this study.

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Table A. Estimated prevalence of each role configuration and conditional probabilities of each observed role given the seven role configurations describing the C1957-64 cohort up to age 25 (NLSY79 Data)

	1 Student	2 Dependent Worker	3 Independent Worker	4 Single Parent	5 Adult	6 Married Independent Worker	7 Homemaker
Prevalence	**0.26**	**0.20**	**0.18**	**0.12**	**0.10**	**0.08**	**0.07**
Observed Roles							
Schooling							
Not Enrolled	0.02	1.00	0.78	0.94	0.97	0.90	0.95
Enrolled	0.98	0.00	0.22	0.06	0.03	0.10	0.05
Living Independently							
No	0.93	0.82	0.36	0.45	0.06	0.04	0.08
Yes	0.07	0.18	0.64	0.55	0.94	0.96	0.92
Work							
Not Employed	0.61	0.33	0.09	0.54	0.00	0.10	0.98
Employed	0.39	0.67	0.91	0.46	1.00	0.90	0.02
Marital Status							
Single/Other	1.00	0.99	1.00	0.98	0.10	0.00	0.06
Married/Cohabiting	0.00	0.01	0.00	0.02	0.90	1.00	0.94
Parent							
No	1.00	1.00	1.00	0.23	0.21	0.94	0.34
Yes	0.00	0.00	0.00	0.77	0.79	0.06	0.66

Table B. Estimated prevalence of each role configuration and conditional probabilities of each observed role given the seven role configurations describing the C1980-84 cohort up to age 25 (NLSY97 Data)

	1 Working Student	2 Dependent Worker	3 Traditional Student	4 Single Parent	5 Adult	6 Independent Worker
Prevalence	**0.49**	**0.16**	**0.13**	**0.09**	**0.07**	**0.06**
Observed Roles						
Schooling						
Not Enrolled	0.00	0.98	0.35	0.79	0.85	0.53
Enrolled	1.00	0.02	0.65	0.21	0.15	0.47
Living Independently						
No	1.00	0.97	0.98	0.80	0.54	0.00
Yes	0.00	0.03	0.02	0.20	0.46	1.00
Work						
Not Employed	0.52	0.12	1.00	0.51	0.23	0.21
Employed	0.48	0.88	0.00	0.49	0.77	0.79
Marital Status						
Single/Other	0.99	0.93	0.97	0.64	0.05	0.87
Married/Cohabiting	0.01	0.07	0.03	0.36	0.95	0.13
Parent						
No	1.00	0.99	1.00	0.02	0.63	0.99
Yes	0.00	0.01	0.00	0.98	0.37	0.01

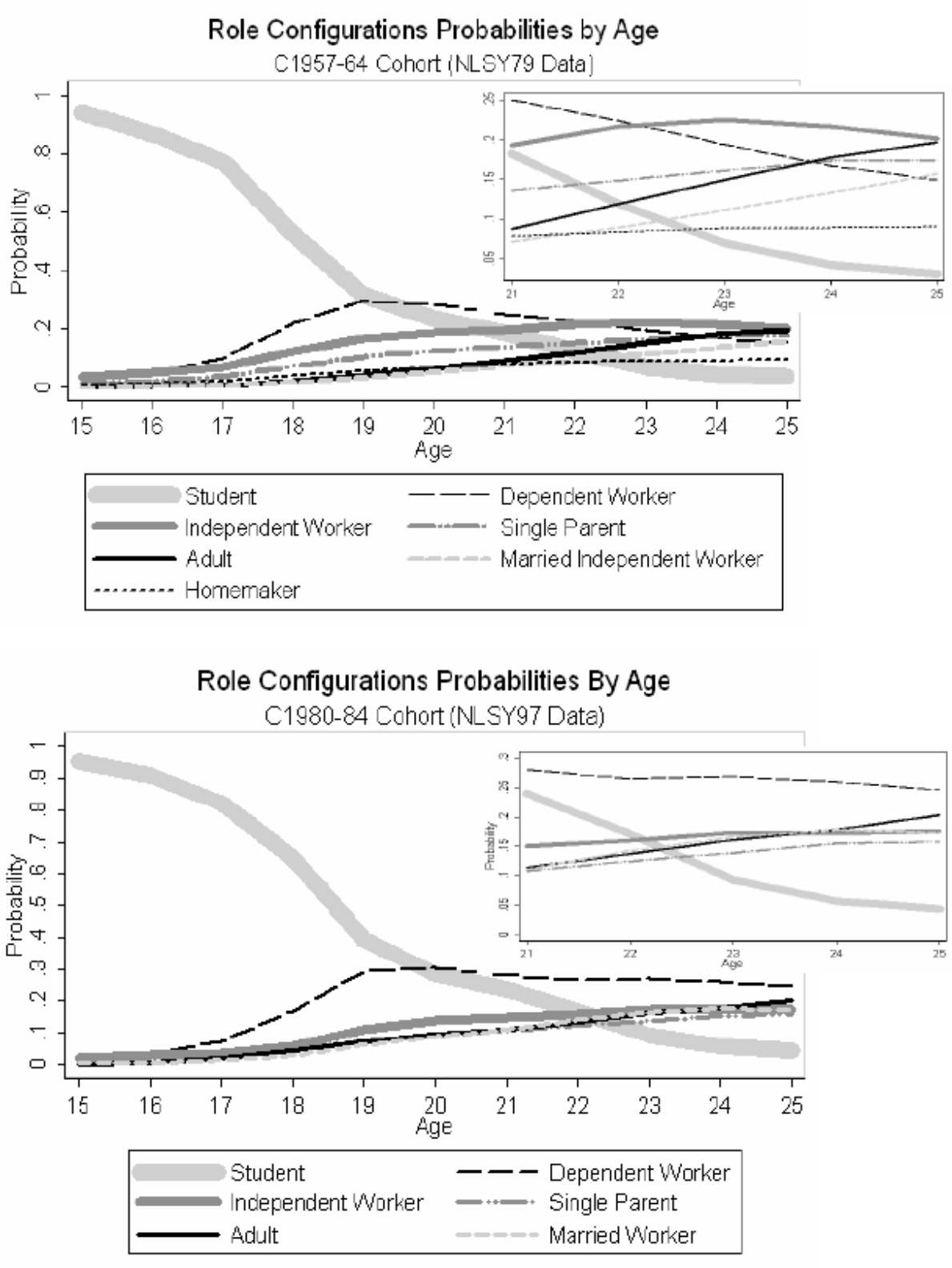

Figure A. Role Configuration Probability by Age in C1957-64 and C1980-84 cohorts

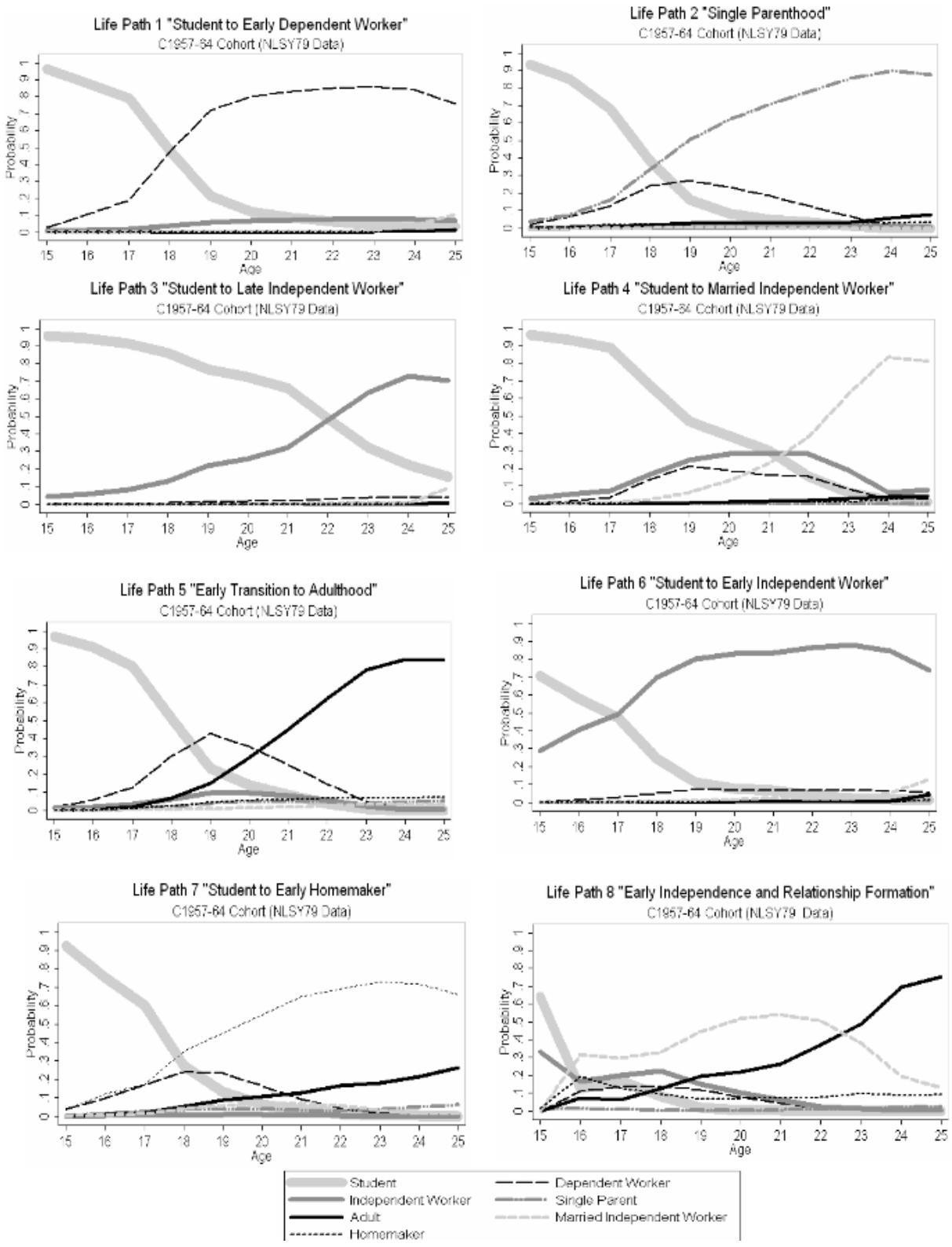

Figure B. Life Pathways for C1957-64 cohort

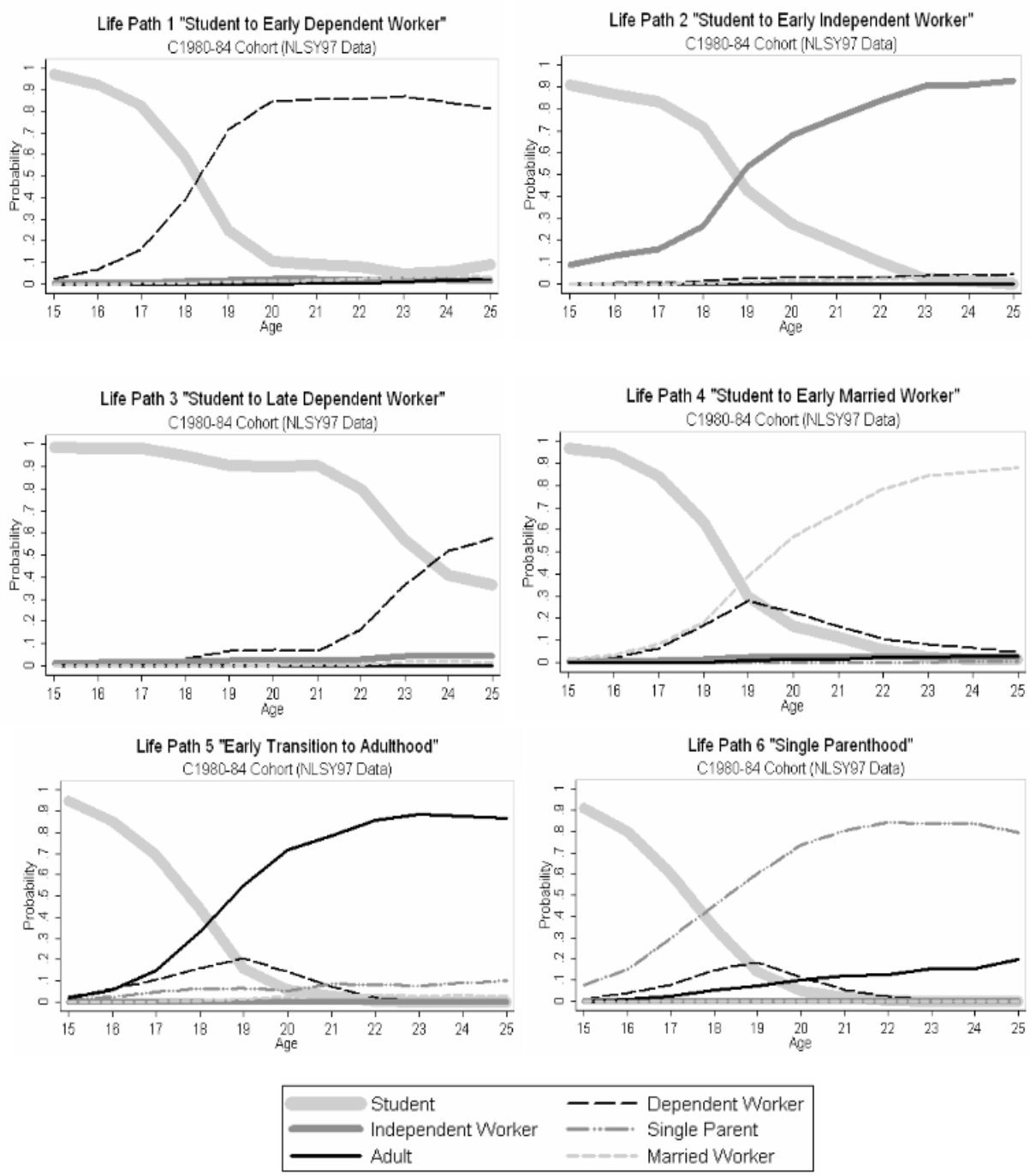

Figure C. Life Pathways for C1980-84 cohort