

**THE SURVEY OF INCOME AND
PROGRAM PARTICIPATION**

**Entry into Marriage and the Transition
to Adulthood Among Recent Birth
Cohorts of Young Adults in the United
States and the Federal Republic of
Germany**

No. 128

James Witte
Harvard University

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1.0 Introduction

Beginning with Weber, sociologists have identified marital patterns as representative of much of social life: where "... structural constraints and individual choice are not mutually exclusive but interlocking aspects of the mate-selection process" (Haller 1981). Marriages are no longer explicitly arranged to reflect the concerns of larger social units, yet discernible patterns of choice persist--in marital timing, as well as partner selection.

From a life course perspective, these structural constraints organize the processes of educational, employment and marital transition, thereby promoting a particular pattern and pace of transition to adulthood. For those coming of age in the United States in the first half of this century, completing one's education, followed by establishing economic independence through labor force participation and only then entering marriage was a pattern with a certain normative force. This pattern was not simply the result of individuals choosing to experience these events in a particular order. The social and institutional context of early adulthood also encouraged a particular pattern.¹

However, there is some question as to whether this pattern has the same force for the birth cohorts of the baby boom generation. Modell, Furstenberg and Hershberg (1976) note a tendency toward more complex patterns of transition, in particular, that family and non-family aspects of the process are entwined. Hogan (1978) found that for males in recent cohorts the failure to order one's life course in a normative fashion (completing schooling, beginning a first job, then marrying) was associated, in particular, with college attendance and nonvoluntary military service. Likewise, in a study of American males born between 1944 and 1962, Mare, Winship and Kubitschek (1984) emphasize the "overlapping, interrupted, irregular and varied character of roles and role transitions in a population that is not yet fully integrated into adulthood".

This paper examines life course events experienced by persons born between 1952 and 1967 both in the United States and the Federal Republic of Germany. The

¹ Mayer (1986) offers a useful typology of structural constraints on the life course. He distinguishes between: 1) institutional careers, 2) state intervention and regulation, 3) cumulative contingencies, 4) collective cohort conditions.

emphasis lies on the relationship between labor force integration, the process of completing one's education and moving into the work force, and entry into marriage. A comparative approach is particularly appropriate, as the mode of labor force integration in each country is quite different (formal training tied to specific occupations and well-defined career paths in West Germany vs. on-the-job training with considerable mobility between career paths in the United States).

2.0 The Years of Early Adulthood: An Overview

The particular significance of this stage in the life course is related to two important transitions: from the family of origin to the family of procreation and from the educational system into the labor force.

2.1. The Transition from Family of Origin to Family of Procreation

One of the stronger behavioral trends to emerge among the population of young adults in the US has been the tendency to leave the parental home earlier (Goldscheider and Goldscheider 1987; Goldscheider and Waite 1986; Goldscheider and DaVanzo 1985; Modell, Furstenberg and Hershberg 1976). At first, the tendency to leave the parental household went hand-in-hand with a decline in age at first marriage -- culminating in the marriage boom of the fifties. More recently, however, a new phenomena has emerged: young adults have been leaving the parental home earlier and marrying later, resulting in an increased period of independent living (Waite, Goldscheider and Witsberger 1986). The recent increase in the average age at first marriage has been significant enough to counteract the decline in the average age at first marriage in the preceding decades. As a result, the age distribution and level of marriage among young persons have returned to patterns characteristic of the early decades of this century (Rodgers and Thornton 1985).²

² Explanation for later marriage fall into two groups: 1) "Marriage-squeeze" interpretations claim that differences in the size of birth year cohorts combine with the traditional male-female disparity in average age at first marriage to produce bottlenecks on the marriage market (Hernes 1972, Diekmann 1987). These arguments are logically appealing, until one works out the implicit assumptions and *ceteris paribus* restrictions, i.e. marriage market tensions do not lead to short term or local modifications of the acceptable age differential and variations in cohort size restrict or expand each male's (or female's) circle of potential marriage partners in the same, proportional manner. Moreover, it remains to

Looking at postwar Germany it is surprising to note striking similarities to the US in changes and trends with regard to patterns of family transitions during the years of early adulthood.

To begin with one finds a similar tendency to leave the parental household at an increasingly younger age (Pischner and Witte 1988; Gaiser and Mueller 1987). Ott (1986), based on data concerning persons born between 1929 and 1951, noted the importance of marriage for leaving the parental household. Mayer and Wagner (1986) used the same data and found no evidence of a weakening of the link between marriage and leaving the parental household. However, Gaiser and Mueller argue that the pattern of a "seamless" transition from family of origin to family of procreation has become considerably less important for subsequent birth cohorts.

Leaving the parental household was closely related to entering the labor force regardless of whether or not there was a close temporal connection between marriage and moving out. The relationship between entering employment and leaving the parental household has weakened among the younger cohorts. Mayer and Wagner (1986), thus, conclude that the timing of leaving the parental household within the life course has become less dependent on the temporal structure of one's career.

Recent shifts in West German marriage rates correspond closely to those in the US. The postwar decline in the marriage rate continued during the 70's, remained relatively stagnant during the first half of the 80's and then increased in 1986 and 1987. The recent slight increase, in part, may be linked to the larger birth cohorts born during the middle of the 60's; it is not clear if changes in individual behavior are also involved (Hoehn and Schultz 1987). The recent increases in median age at first marriage (27.2 for men and 24.6 for women) remain approximately a year younger than in 1950 (Diekmann 1987). Nonetheless, the median age at first

be shown which combination of squeezes has yielded the observed simultaneous rise in the average age at first marriage among men and women since 1970 (Oppenheimer 1988).

2) Interpretations that emphasize changing labor market conditions during the 1970's. Easterlin (1978) points to the difficulties experienced by young men in securing regular employment at a salary adequate to support a family. Goldscheider and Waite (1986) argue similarly but emphasize the ". . . reduced willingness of women to marry and their increased ability to support themselves outside marriage."

marriage for both males and females remained greater than in the US (26.3 for males and 24.1 for females) for the year 1980 (Schoen et al. 1985). The average male-female age difference has remained relatively constant (2.7 years) throughout the postwar era. This is somewhat larger than in the US, where the average age difference has steadily declined throughout the century from 4.0 years in 1900 to 2.0 years in 1980 (Vera, Berardo and Berardo 1985; Atkinson and Glass 1985).

2.2. The Integration of Young People into the Labor Force

Koenig and Mueller (1986) emphasize that educational institutions vary in their capacity to allocate individuals to jobs. They find that the German educational system exhibits a great degree of allocative power, particularly with regard to vocational education. Apprenticeships under the control of employers are completed by over half of the total labor force and the social origins of apprentices are more varied than in other countries. Training for manual work, such as one finds in this apprenticeship system, is unheard of in the US, where on-the-job training is the rule. (Haller et al. 1985)

Blossfeld and Meyer (1987) argue that this system has great significance not only for entry into the employment system but also for the remainder of one's occupational life. They conclude: "the size of firms and the related internal and external recruiting forms are less responsible for labor market barriers (than for example in the US). Instead labor market segments are much more the result of qualification barriers, primarily between the primary and secondary sectors". The difference also extends to the credentials received upon completion of one's education. In all but the most specialized occupations, US employers generally can not rely on educational degrees or certification as screening devices for specific skills or training. The value of a German apprenticeship certificate is not limited to the firm where it is obtained, but is widely accepted by other employers (Koenig and Mueller 1986).

In the US, in the absence of a comprehensive vocational educational system, placement and positioning within the occupational structure tend to occur after a young person enters the labor force. The most dramatic changes, simultaneous changes of occupation and industry, tend to be characteristic of those who have just entered the labor force and are least encumbered by sizable investments in career-line skills and pension programs" (Spilerman 1977).

However, there is evidence that the "allocative efficiency" characteristic of the educational and occupational training system in the FRG has decreased in recent years. Research on those who have entered the labor force most recently indicates that university and vocational education have gradually divorced themselves from the needs of the labor market and the path to subsequent employment has become far less direct.

Beginning in 1977, young people began to experience difficulties obtaining an apprenticeship, even when they were willing to change their occupational goals (Roppelt 1981; Schober and Kling (1984). Stegmann and Kraft (1983b) claim that those entering the apprenticeship system between the years 1977 through 1986 will experience the most difficulties obtaining employment upon completion of their training due to relatively large birth cohorts. Koenig and Mueller (1986) view evidence that persons with higher and higher levels of formal education have begun to pursue apprenticeships as indicative of the importance of vocational education in the FRG. Stegmann and Kraft (1983a), however, interpret the same evidence in a very different way. Growth in university training has led to considerable uncertainty for those aspiring to positions requiring academic training. Persons entitled to a university education increasingly pursue vocational education as well, as a means to hedge their bets.

Furthermore, Stegmann (1985) found that one-third of all employed persons who had completed an apprenticeship reported that the skills they needed at the current job were obtained through continuing education or on-the-job-training, rather than during their apprenticeships. He attributes this situation to structural discrepancies between the vocational education system and the labor market. Between 1976 and 1984 the annual number of new apprentices increased from 496,000 to 706,000, however many of these new apprenticeships were in fields where the future employment chances are particularly poor and the skills acquired are so specialized that they are difficult to apply to other occupations.

Schober (1985) argues that short term solutions to shortages of apprenticeships in the late 70's delayed entry into the system and that those currently exiting are significantly older than in the recent past. In 1982 unemployment upon completion of an apprenticeship stood at 8%, by 1984 this figure had risen to 14%. Stegmann

and Kraft (1988) document the consequences of unemployment upon completion of an apprenticeship. A number of other studies reach similar disconcerting conclusions as to the current state of vocational education (including: Schober 1978; Cramer 1981; Hofbauer 1983; and Habich 1985).

Those who opted for a university education in the FRG in recent years also face a far less optimistic picture than in the first 15 years after the war. Between 1960 and 1986 the absolute number of university students grew to nearly 5 times its previous level from 269,000 to 1,289,000. This growth is due not only to the aging of larger birth cohorts and an increase in the proportion of each cohort who pursue university education, but also to an increase in the average length of study (de la Chevallierie and Jeschek 1988). Combined with delays in the vocational educational system, the increase in the length of study has increased the proportion of 20 to 25 year olds who have not yet completed their education from 6.6% (1960) to 25.1% (1986). By 1986 11% of all persons 25 to 30 years of age had not yet completed their education (Jeschek 1988).

A vast increase in education, both in the amount of time individuals spend in school and in the proportion of persons attending postsecondary institutions, is common to both countries (Jeschek 1988; Walters 1984). This development can be interpreted in a number of ways. On the one hand, there are reaffirmations of the "human capital" argument: through education individuals acquire credentials, knowledge and training to enhance future employment chances. At the other end of the spectrum, some view the growth in education as a means to "warehouse" youth for the good of the labor market. The intent here is not to choose between competing explanations, but to consider the effects of educational expansion and subsequent changes in labor force participation on marital behavior.

3.0 Data

The analysis of recent marital patterns presented in this paper looks at persons born between 1952 and 1967 and is based on data from the Survey of Income and Program Participation (SIPP) and the German Socio-Economic Panel(SOEP).³

³ To simplify the analysis and restrict the confounding influence of variation in marital patterns due to race, ethnicity and national culture, the analysis excludes nonwhite SIPP and non-German SOEP respondents.

The SIPP data come from the "1984 SIPP Full Panel Longitudinal Research File" prepared by the Bureau of the Census. The file covers a 32 month period and includes a record for each person who was a member of an interviewed household at any time during the panel. From this group only persons who were present in the first month and had a positive interview status for all succeeding months are included in the analysis. Retrospective education, employment and marital histories for these persons, collected as part of the third and eighth topical modules, were merged with the core information found in the 32 month research file.

The SOEP data file was created from cross-sectional raw data files for each of the first three yearly panel waves (beginning in the spring of 1984). These waves include topical modules with questions to collect retrospective educational, employment and marital histories. Only persons interviewed in all three waves are included in the analysis. For both SIPP and SOEP, the weights provided with the data set were used to compensate for sample design and panel mortality.

The retrospective components of the panels assure that life history information is collected for all respondents, even if the event occurred decades ago, as is likely among older respondents. The primary constraint on intercohort comparisons is found in the right-censoring of events among the younger birth cohorts.

For example, a German panel respondent born in 1952 is 31 at the start of the panel in 1984. Combined with subsequent interviews in 1985 and 1986 the data include relatively complete information on all of the 31st and 32nd years of his or her life, as well as the latter part of the 30th and the first part of the 33rd years. This data is further supplemented by retrospective information extending back to the 15th year of the respondent's life, so that the overall observation period extends 18 years. However, the overall observation period for a respondent born in 1967 is only 3 years, even though the period of panel observation is the same for all respondents.

Given the longitudinal nature of the data, the operationalization of key variables such as marital, employment or educational status depends on two issues: 1) the precision with which events such as marriage, entry into labor force, or withdrawal

from school are measured; 2) the extent to which the information available constitutes a continuous record of employment, education or marital status.

Since the analyses presented below combine retrospective and panel data within a comparative framework, a least common denominator strategy is required: the emphasis is on yearly data, while monthly data is generally ignored as most of the SOEP retrospective data lack this degree of precision.

If one were to restrict the analysis simply to the period of direct observation (the 32 reference months covered in SIPP and the calendar years 1983 through 1985 in SIPP), then continuous records of education, employment and marital histories are available.⁴ But the use of the retrospective data leads to limitations in the extent to which the data constitute continuous records. For SOEP a fairly straightforward solution to this problem follows from the manner in which retrospective data was collected. Respondents were asked to indicate for the 15th and each following year of their life whether they were involved in a number of activities.⁵ A similar format is then used for the years 1983 through 1985 to record participation in the same activities on a monthly basis. Aggregation of the monthly data then provides a continuous record of yearly participation of school enrollment, employment and so on from each respondent's 15th year through 1985. Changes in marital status for the first three marriages are recorded in the SOEP data on a yearly basis.

The same holds true for the SIPP marital histories: generally there is no problem determining an individual's marital status in a given year, even for the time period prior to the start of the panel. The SIPP also includes a continuous yearly

⁴ In the SIPP, schooling is dated less precisely, as respondents are asked about enrollment for the entire four-month reference period rather than a month-by-month basis. The regularity of school calendars, however, practically limits this difficulty to cases of withdrawal during a school year.

⁵ The activities include: full-time employment, part-time or irregular employment, school, vocational education, unemployment, retirement, military service and homemaking. Multiple responses are permissible, so that if a person completed school in June and then began working in August both activities would be indicated for that year. However, since dating is done on a yearly and not monthly basis, such a case could not be distinguished from a person involved in each activity for a month or from a person who was involved in both activities simultaneously for the entire year.

employment record, albeit the operationalization is complicated and somewhat different than that used with the SOEP data.⁶ As a result, shorter spells of unemployment are not a part of a SIPP respondent's employment history, while all reported interruptions in labor force participation are part of a SOEP respondent's employment history and their duration is known.

However, determining a respondent's educational status with the SIPP data is somewhat difficult. To begin with, if high school graduation occurred prior to the start of the panel the date of graduation is not asked and must be imputed. In addition, respondents who pursued higher education are to provide the year college was first attended, when any degrees were obtained and the final calendar year in which he or she was a student. Respondents are not queried as to whether or not enrollment was continuous. This limitation must be kept in mind during the interpretation of the findings regarding education. To simply assume continuous enrollment during the time span between first and last enrollment would overestimate the time individuals spend as students.⁷ The implications of particular definitions of enrollment is discussed in detail below in Section 4.2.

4.1 A Cross-sectional View of the Transition to Adulthood

Longitudinal data sets offer a wealth of previously unavailable information regarding life course processes and the timing and sequencing of events. The drawback, however, is that there are few external benchmarks to appraise the accuracy and representativity of findings. Tables 1 and 2 present a cross-sectional view of young

⁶ As part of the Wave 3 topical module respondents over the age of 21 were asked to indicate the first time they worked for 6 straight months at a job or business. This same group was then asked to provide the beginning and end dates for any subsequent interruptions of 6 months or more in their labor force participation and the reasons for the interruption, as well as the total number of years during which they worked 6 months or more and whether or not their employment has been generally full or part-time.

⁷ In many cases it is safe to assume continuous enrollment, though in others such as assumption may be highly misleading. For example, a respondent first enrolled in a junior college in 1975, indicates he last attended classes in 1982, and has not obtained a degree beyond high school. It seems unlikely that an individual continuously attended classes for seven years without earning an associate's degree.

adults and their education, employment and marital statuses in the spring of 1984. The advantage of results presented in this manner is that they facilitate comparison with traditional cross-sectional data. This provides a rough means to confirm that any later novelty found from a longitudinal perspective reflects a gain in information, rather than distortion resulting from idiosyncrasies of the particular data sets.

Throughout the analysis, the population of young adults is divided into four groups, each composed of four birth year cohorts. Along with the different periods of observation for different birth cohorts, the difference in the relative sizes of these four groups--the postwar baby boom peaked later in the FRG than in the US--is a further reason for breaking the population into groups according to age. The aggregation of birth cohorts into four groups is dictated by the SOEP sample size.

Looking first at educational status, the different roles played by vocational education in the two countries are clearly apparent. In Tables 1 and 2, educational status is presented such that the first four rows indicate the percentages of persons who have completed a given level of education, while the following two rows indicate those who are currently enrolled in school or vocational education. In the youngest age group, the proportion of Americans still enrolled in school (50.3 %) exceeds that found in West Germany (36.2 %). An even higher proportion of West Germans are enrolled in vocational training (42.0%), while the proportion of Americans engaged in vocational training is relatively trivial (2.9%). Taking these two categories together, a considerably larger proportion of West Germans of this age were enrolled either in school or vocational training (78.2 %) than their American peers (53.2 %).

Comparing the oldest birth year cohort groups in the two countries, it is apparent that, although West Germans are more likely to acquire vocational training, they are less likely to attend college. In West Germany 79.8% of those born between 1952-1959 completed their education at the high school level or below, but well over three-quarters of these persons have participated in formal vocational training programs. In this age group in the United States about 50 % of all persons participated in any educational activities beyond the high school level, but only one-quarter of those who did were in a vocational training program.

Important contrasts are also apparent when one looks at employment status, as presented in Tables 1 and 2. In all four age groups, a greater proportion of West German young adults is not in the labor force. This difference is greatest among those in the youngest birth year cohort group and then shrinks considerably among older young people. In both countries, reported youth unemployment plays a relatively minor role--though it should be remembered that minority groups (including blacks in the US and resident aliens in the FRG) have been excluded from the analysis.⁸ If one looks at the other extreme, full-time employment, in all birth year cohort groups a smaller percentage of persons are employed full-time--though again only in the youngest group is this difference appreciable (21.9% in the US and 14.5% in the FRG).

However, in the categories part-time or irregular work and vocational training, the profiles clearly diverge, particularly among the younger age groups. Concentrating on those born between 1964 and 1967 in the US, slightly over one-third of all young people reported that they either held part-time jobs or were irregularly employed. Only 3% said they were enrolled in formal vocational training programs. In the FRG these proportions are reversed for those in these birth cohorts--one-third are engaged in vocational education programs, while the number of those involved in part-time or irregular employment is insignificant. The number of West German young people in the next age group drops to less than one-third (10.3 %) of its previous level, but remains more than double than that found in the United States.

However, one may argue that many young Americans acquire much of their vocational education on the job--specific job skills and experience, but also their fundamental attitudes about work and their position as employees. As noted in the previous section, a significant proportion of young Americans begin regular employment before completing their education. Later, the educational system may steer some into a more or less clearly defined vocational track, but many will have

⁸ Furthermore, in the FRG as in the US, reported unemployment underestimates the number of young people experiencing difficulty in finding employment. In both countries the designation "unemployed" is reserved for those who have lost a job after they have been employed for a certain period of time. In both countries, young people who seek employment but have not yet worked for the designated duration are considered to be out of work force rather than unemployed.

acquired specific job skills and begun the process of socialization into the roles of employee and wage earner well beforehand through regular afterschool and weekend employment.

Finally, turning to marital status, if one compares the right-most column in Tables 1 and 2, those born between 1964-1967, (ages 20 or younger in 1984), West German youth enter marriage later than their American peers--marriages before age 20 are the exception in both countries, nonetheless the proportional size of this group is three-times as great in the US as in the FRG. In the three older age groups the proportion of those married and living together is larger in the US than in the FRG; but so, too, are the groups of those who have divorced or are living apart from their spouses. As a result, the percentage of those born between 1952 and 1956 who have never married is half again as large in the FRG (22.2%) as in the US (14.2%). The later average age at first marriage found in vital statistics for the FRG as compared to the US is clearly evident in the marital histories collected by the two panels.

The following sections make use of the longitudinal character of the two panel studies to consider each of the principle components of the transition to adulthood--education, employment and marriage. Section 4.5 then looks at the temporal ordering or sequencing of these three elements in the transition to adulthood.

4.2 Completing Education and the Effects of Alternative Measures

In most cases, finishing school represents an important first step in the process of labor force integration and a threshold to be crossed prior to entry into marriage. No doubt, the national average age at first marriage is related to the average age at which individuals complete their schooling in a given country. The problem with this line of argumentation lies in finding a measure of completed education that is appropriate cross-nationally, as well as for the different types of education in a single country. The available panel data on the age of completion of schooling in West Germany and the United States may be used to illustrate this point.

The upper panel of Table 3 shows the percentage of men and women in the four West German birth cohort groups completing their education at various ages. Here, this age is defined as the final year in which an individual was enrolled in a school

or university, or participated in vocational education or training. Looking at the two older birth cohort groups, a clear gender difference is apparent for those for whom the most information is available. The proportion of women in the birth cohorts 1952 through 1959 who left school at the earliest possible point and received no further preparation for the work force is four times greater than the comparable number of men. On the other hand, the number of men in these birth cohorts who completed their education in their late twenties (or were still enrolled in a school or vocational training program in 1985 at the end of the observation period) is disproportionately large. It is too early to conclude whether or not the gender-based disparity persists in younger birth cohorts.

In the bottom panel of Table 3 only school-based education is used to determine the age at which an individual is considered to have completed his or her education. Given the importance of the West German vocational education and occupational training system, disregarding this element of the education system drastically changes the measured age at which an individual completes his or her education. Operationalized in this manner, the majority of young men and women born between 1952 and 1955 exited the classroom at the age of 15 or 16. These individuals, however, have not completed their education, but (as is apparent from the upper panel of Table 3) enter a two or three year vocational training program and then complete their education between the ages of 17 and 20.

The relatively small number of individuals of the youngest birth cohort group who have chosen to terminate their school-based education at age 15 or 16 seems to reflect two recent changes in the German educational system. On the one hand, though young people in West Germany continue to be tracked at a relatively young age into particular types of high schools (Hauptschule, Realschule or Gymnasium), a smaller proportion of each cohort is currently being tracked into the school with the shortest enrollment span (Hauptschule). On the other hand, in response to recent shortages in occupational training and vocational education slots, special school-based programs have been introduced, which prolong the normal period of education for up to a year until a slot opens up.

Though the lower panel of Table 3 fails to capture the significance of the West German vocational educational system, it does provide a useful baseline for

comparison with the United States, where the formal educational system is primarily school-based. The upper panel of Table 4 provides a similar view of the educational participation of recent birth cohorts of Americans: an individual's education is considered complete once he or she is no longer enrolled in a school, college or university. On the whole, in the upper panel of Table 4, we find that young Americans actually leave school at slightly older ages than their West German peers.

The gender based difference in the age at which school-based education is completed in the US appears much smaller (even in the older birth cohort groups) than that indicated for the FRG in the lower panel of Table 3. For example, taking the oldest birth cohort group, if we look at the total proportion of persons leaving school at age 20 or younger, we find that men (58.3 %) are actually more likely to leave school early than women (54.0 %). In West Germany, still looking at the lower panel of Table 3, we find that the percentage of men leaving school at age 20 or younger (73.5%) is considerably smaller than that of women (87.4%).

However, if we compare the results from the upper panel of Table 4 to the upper panel of Table 3, which also takes the West German vocational educational system into account, a slightly different picture emerges: only 55.5% of the West German males in the oldest birth cohort group left school at age 20 or younger. Based on this comparison, American males complete their education earlier, though the difference is by no means dramatic. Among women, however, even after including vocational education, the percentage of young West German women who leave the educational system at age 20 or younger (76.9 %) remains considerably larger than that of American women (54.%).

Though they do not have access to the same sort of formal vocational education and occupational training as West German young adults, young adults entering the labor force in the US do not directly enter the labor force upon completion of their school-based education. The lower panel of Table 4 indicates the uniquely American aspect of the process of labor force integration--a large number of American young people begin working before they have completed their formal education.

As Table 4 indicates, for many young people this is more than casual or sporadic labor force participation. In the lower panel of Table 4, an individual is defined as

outside the educational system for a given year, if he or she also reports having worked full-time for at least six continuous months in the same year. With the exception of the youngest group of women, well over one-third of each birth cohort group's men and women met this test before the age of 17. Over three-quarters of those birth cohorts old enough to be observed through age 20 were no longer enrolled or have already worked six or more continuous months--both men and women. Seen in this way, the proportion of American males (77.6%) as well as the proportion of American females (80.0%) considered to have completed their education at age 20 or younger is relatively larger than that found using either operationalization for West German young adults.

In the US, in the absence of a comprehensive vocational educational system, placement and positioning within the occupational structure tends to occur after a young person enters the labor force. Training for manual work, such as one finds in the German apprenticeship system, is unheard of in the US. Moreover, it can be argued that the strong liberal arts tradition in American higher education often provides few concrete, demonstrable job skills, while the diversity and decentralization found among American colleges and universities provides little indication as to the specific skills an employer can expect an individual to have acquired while obtaining a degree. In all but the most specialized occupations, US employers generally can not rely on educational degrees or certification as screening devices for specific skills or training.

4.3 Entry into the Labor Force

This section takes a closer descriptive look at entry into the labor force among Americans and West Germans of the three youngest birth cohort groups, persons born between 1952 and 1963.⁹ On the one hand, longer periods of formal vocational education in West Germany may lead to later entry into the work force and may be an explanation for later marriage. On the other hand, it is important to consider whether cohort differences in the age at which regular employment begins can account for the increasing average age in first marriage within each country.

⁹ In the German panel, due to its smaller sample size combined with later entry into employment, the number of persons born after 1963 who had already entered employment by 1986 was too small to warrant comparisons for the youngest birth cohort group.

For most SIPP respondents, particularly those in the older birth cohorts, this information was collected retrospectively and is based on the starting year of the first spell of six or more months of continuous employment, without considering the number of hours worked and whether a spell is involved that spans more than one job. Entry into the labor force for SOEP respondents is based on the first year of full-time employment reported in the retrospective life histories collected during the first panel wave. If a person had not yet entered employment by the time of the first interview, the monthly activity calendars from the following two waves were used to determine if regular employment began in 1984 or 1985.

Survival functions¹⁰ describing entry into regular employment for men and women in the three oldest birth cohort groups in the US and the FRG are presented in Figures 1 through 4. Each cohort group of men and women is further broken down according to education level (in the US into persons without a high school diploma, persons with a high school diploma and persons who have attended one or more years of college; in the FRG into persons without formal vocational training, persons with vocational training and persons who have spent one or more years at a college or university).

Among *American males*, there is very little intercohort change for those with a high school diploma or some college (see Figure 1). Approximately 40% of those with a high school diploma enter regular employment by age 18 or younger, that is, before most have finished their schooling. In the following three years the rate of entry into regular employment increases sharply such that 90% have experienced a spell of 6 or more months of continuous employment by the age of 21.

Similarly, among males with one or more years of college, there is little variation in rates of entry into regular employment between the birth cohort groups. Fewer males of this group are likely to have entered regular employment by age 18, about

¹⁰ The survival functions represent the cumulative proportion of men and women in each birth cohort group who have not yet entered regular employment between the ages of 16 and 30. These functions were estimated using the life table method implemented in SPSSX.

30%, than those who did not continue their education beyond high school. Moreover, as one would expect, their rate of entry into regular employment does not drastically increase after 18. Rather, it is well described by a straight line between the ages of 17 and 25, at which point about 90% have experienced a spell of 6 or more months of continuous employment.

However, at the lowest educational level, males without a high school degree, a noticeable difference between the three birth cohort groups can be seen in Figure 1. In the older two groups, males who never received a high school diploma enter regular employment at about the same rate--between the ages of 16 and 18--as those who eventually do receive a degree. But after age 18, one does not find the same increase in the rate of entry into regular employment exhibited by those with a high school degree. It is only when this group is in their late 20's does the proportion of those who have entered regular employment reach the 90% mark.

The rate of entry into regular employment decreases somewhat between the first and second cohort groups of males without a high school diploma, but it is considerably lower for males in the next youngest birth cohort group, those born between 1960 and 1963. These men chose to terminate their education at a low level at a particularly inopportune moment--during the economic recession of the mid to late 1970's. Presumably this period effect combined with their lack of educational credentials to slowdown their entry into regular employment. By their mid twenties, however, the proportion of this group who had entered regular employment equals that of older males without a high school degree.

Among *American women*, as Figure 2 indicates, entry into regular employment in these three birth cohort groups, follows a more general pattern. At all levels of education, women enter regular employment at a noticeably faster rate in the younger two birth cohort groups.

Among women with a high school diploma or one or more years of college, those in the two youngest birth cohort groups enter employment somewhat more quickly than those born between 1952 and 1955. At both of these educational levels, the curves describing female patterns of entry into regular employment for the two youngest birth cohort groups also come closer to those for men. In fact, at the highest educational level, those with one or more years of college, the curves are essentially

identical. Among women with a high school diploma, however, the rate of entry into regular employment slows down after age 19, flattens considerably over the next two years, and then levels off along with the curve for women in the oldest birth cohort group.

However, with women, as with men, the most striking intercohort difference is found among those with the least education. Beginning at age 17, women in the youngest birth cohort group without a high school diploma are more likely to have entered regular employment and thereafter continue to enter at a faster rate than slightly older women without a high school diploma. This difference is all the more striking given the findings for males at the same educational level in this birth cohort group. At this educational level the combination of male and female inter-cohort differences--moving in opposite directions according to sex--produces patterns of entry into regular employment that are basically indistinguishable.

On the whole, among *West German men* there is a greater degree of change in the average age of entry into regular employment between the birth cohort groups (see Figure 3) than in the US. Intercohort stability is highest among those with formal vocational training--about two-thirds of the males in each birth group fall into this category. Of these men, only slightly more than 5% of each birth cohort group has begun regular employment by age 18, immediately thereafter those in the two younger birth cohort groups enter regular employment somewhat more slowly than their older brothers. Only 48% of males with vocational training in the oldest birth cohort group had not yet entered regular employment by age 20, as compared to 57% of those born between 1960 and 1963.

Similarly, Figure 3 shows that among males who attended the university the proportion of those in the youngest birth cohort group who enter regular employment lags about 10% behind those in the oldest birth cohort group. However, here the difference only becomes apparent after age 20. Regular employment while attending the university is relatively rare among all birth cohorts; the percentage of men who have entered regular employment only climbs above 20% at about age 25, after significant numbers of students begin to graduate. Increasingly later entry into regular employment for those with university training is most likely the result of two factors, both tied to the expansion of higher education: a relative oversupply of

persons with university training and longer periods of schooling due to university overcrowding.

Finally, among males without formal vocational training there also appears to be a tendency toward later entry into employment in the youngest birth cohort group. As in the US, slower entry into the labor force is quite plausible for unskilled members of this birth cohort group given the prevailing economic conditions. Here, however, considerable caution should be exercised. To begin with, the number of cases is relatively small, as the proportion of West Germans without vocational or university education is small. More importantly it is quite likely that selection processes alter the composition of the group of persons with the least education over time.¹¹ Until members of the youngest birth cohort group reach the age where further vocational education is unlikely, it is impossible to isolate the period effects from this potential source of selection bias.

Among *West German women* who did not attend the university, patterns of entry into regular employment in the FRG (see Figure 4) are surprisingly similar to those of men. With or without formal vocational training, women born after 1963 entered regular employment at a slower rate than their older sisters--though in the later group the aforementioned potential for selection bias bears repeating.

In each birth cohort group, women without vocational training enter regular employment more quickly than their male counterparts, who generally serve their mandatory military (15 months) or civilian (18 months) service at this time. However, among persons with formal vocational training, the survival functions depicting male and female entry into regular employment are quite similar within the birth cohort groups. Apparently men are able to schedule their service so that in the transitions from school to vocational training and then to regular employment they are able to keep pace with women of the same age.

¹¹ There are no institutional barriers preventing these persons from obtaining vocational training in their middle or late twenties. Possibly, in the older birth cohort group, those unable to find regular employment have gone on to get training (leaving only relatively successful persons in this group), while persons in the younger birth cohorts have not yet reached this level of frustration.

West German women with at least a year of university attendance represent the principle exception to the pattern of later entry into the labor force. Throughout their early and middle twenties, women born after 1963 are more likely to have entered regular employment than their older sisters. Moreover, a far greater proportion have begun regular employment than their male counterparts who entered regular employment at a slower rate than university educated males of previous birth cohorts. Closer inspection, however, reveals that these results, too, may be artifacts of processes of selection.¹²

Looking cross-nationally at persons with low, medium and high levels of education confirm two obvious facts: 1) Americans enter regular employment sooner than West Germans; 2) in both countries higher levels of education lead to later entry into the work force. Moreover, both of these relationships are consistent with the greater average age at first marriage in West Germany and with recent increases in this age (and in the amount of education) in both countries.

But the results presented in Figures 1 through 4, indicate that this interpretation may be too simple.¹³ The intercohort differences in entry into regular employment vary in degree and in direction for men and women at the various educational levels in the two countries. If the relationship between entry into employment and entry into marriage is simple and straightforward, then these differences should be directly reflected in changes in entry into marriage of men and women with different levels of education in the US and the FRG. However, as the following section shows, there is a consistent increase in average age at first marriage in both countries regardless of sex or level of education. The implication is that the explanation is neither simple nor straightforward.

¹² There is some indication that many of these women are entering employment after interrupting their university studies before graduation. In this case, the increased rate of entry of highly educated women is a measure of their failure to complete their studies rather than an indication of greater success of university educated women on the labor market

¹³ Also, questions of measurement comparability are grounds for suspecting this simple yet appealing interpretation. As mentioned above, the available panel data require different indicators of entry into regular employment in each country. Nor is there any guarantee that defining three educational levels in each country leads to equally comparable measures of low, middle and high educational attainment and its consequences.

4.4 Entry into Marriage

The retrospective marital histories collected from SIPP and SOEP respondents allow one to go beyond a cross-sectional view of marital status and consider the marital status of individuals in each group of birth cohorts over a period of time. The proportion of persons remaining single at each age can best be represented by a survival function--the survivors are those persons remaining single as a cohort ages.

The most general features of marital behavior patterns of men and women born between 1952 and 1963 in the two countries are well known from other studies, including vital statistics for the two countries. These patterns are clearly discernible in the panel respondents' marital histories as well: throughout the years of early adulthood, the greatest proportion of persons remaining single is found among West German males, followed by US males, West German females and US females. During these years, in each country, more females are married than males and, for males as well as females, more Americans are married than West Germans. These patterns are present in each of the three groups of birth cohorts used in this paper. In the later birth cohorts the proportion of persons remaining single longer increases. However, this occurs uniformly for men and women in both countries, so that West German males remain the slowest to enter marriage while American females marry most quickly.

Survival functions describing patterns of entry into marriage for birth cohort groups of West German males, West German females, US males, and US females are presented in Figures 5 through 8. As in the discussion of entry into employment in the previous section, these figures consider entry into marriage disaggregated by educational attainment. Also, as in the previous section, the youngest birth cohort group (1964-1967) is not included since the level of educational attainment often remains open.

The three birth cohort groups (1952-1955, 1956-1959, 1960-1963) of West German men and women are divided into three classes based on each individual's highest level of education (without formal vocational education, with formal vocational education, attended university.) Figure 5, which contains the nine survival functions for *West German males*, clearly shows that at all educational levels teenage marriage

is rare but thereafter the rate of entry into marriage is inversely related to the level of education. Moreover, the trend toward later marriage among more recent birth cohorts is not confined to those with the most education but is found in all three educational categories.

Figure 6 confirms that *West German women* tend to marry earlier than West German men. Moreover, this tendency persists across all three educational categories. As is the case in Figure 5, relatively early marriage is most likely among those without vocational education and least likely among women who attended the university. The trend toward later marriage among more recent birth cohorts can also be seen for women at all three educational levels.

Figures 7 and 8 contain similar sets of survival functions describing patterns of entry into marriage for *American men and women*. Here the same three birth cohort groups are used and each is then subdivided into three classes based on level of education (without a high school diploma, with a high school diploma, attended college.) As was the case in West Germany, these figures show that among American men and women the tendency to marry later cuts across educational levels. Among American women in each birth cohort group, it is also clearly the case that entry into marriage slows as the level of education increases. Among American men, however, it is those with the least education who tend to marry latest. Moreover, it is only in the most recent birth cohort group that college educated males enter marriage significantly more slowly than those with a high school diploma.

Figures 5 through 8 are important because they show that it is not only those with high levels of education who postpone marriage. Thus, the popular notion that increases in average age at first marriage may be attributed to people remaining in school longer is by itself insufficient. However, the survival function approach employed here is essentially univariate and thus quite limited. Statistical control is only possible by defining functions for more narrowly defined subpopulations -- an endeavor that soon flounders on the constraints of sample size.

Yet even if one had enough cases to extend the survival function analysis to a large number of clearly defined, relatively homogenous subpopulations, it would still only reveal what proportions of a given subgroup were married at particular ages. But

chronological age is only a rough indicator of how far individuals have come with regard to other aspects of the transition to adulthood. The SIPP and SOEP data may be used to directly measure individuals' progress in their educational and occupational careers and consider its influence on the decision to marry and its timing. A variety of techniques are available for multivariate analysis of relationships between entry into marriage and time varying covariates. Here, however, a relatively simple technique is used to describe the main patterns of the relationship between entry into marriage and other aspects of the transition to adulthood.

4.5 Temporal Ordering of the Transition to Adulthood

Combining information regarding completion of education, entry into the labor force and entry into marriage allows one to look at the temporal order in which individuals experience the key events that mark the transition to adulthood. An approach similar to that used by Hogan (1978) will be employed to look at the transition to adulthood among members of the birth year cohort groups 1952-1955 and 1956-1959, both men and women, in the US and the FRG. In his work Hogan only considers males who had completed the transition to adulthood (those who had finished school, begun employment and married). Here, the discussion treats women as well as men and also considers incomplete transitions.¹⁴

Two issues are emphasized in the cross-national comparisons of the temporal ordering of the transition to adulthood presented below. To begin with, these results highlight the tendency for Americans to enter employment before completing their education. The American educational system may only have a very weak vocational orientation. But due to their relatively early entry into the labor force, American young people may be picking up on the job that which is lacking in the classroom. A second important question is whether marriage generally remains the final event

¹⁴ Changing patterns of education and labor force participation among women provide obvious reasons for including women in the analysis, particularly with an eye to understanding entry into marriage. Incomplete transitions should not be ignored for two reasons: first, they provide additional information--if two of the events have occurred and it is assumed that the third will eventually follow, then the sequence can be viewed as a trajectory leading to a particular transition pattern. Second, if those who take longer to make the transition to adulthood are more or less likely to follow the traditional pattern, then ignoring these cases would lead to biased results.

in the transition to adulthood in both countries, despite increased higher education enrollment in terms of the proportion attending college and university and the length of time enrolled.

Individuals are considered to have completed their education in the year that they report their last enrollment in any school, college, university or vocational education program (regardless of whether a degree was received in that year); entry into regular employment and first marriage are dated on a yearly basis as described above.¹⁵

Tables 5 and 6 present the relative frequencies of various sequences for men and women of the two oldest birth cohort groups (1952-1955 and 1956-1959) in the US and FRG. For men and women in both countries the traditional pattern (represented as E,W,M) is indeed the most common. In the US it is the pattern found among slightly under a third of those in the older group and just under a quarter of those in the next youngest group. This pattern was even more prevalent in the FRG--nearly 60% of all West German women and 45% of all West German men born between 1952 and 1955 experienced the transition to adulthood in this fashion.

In the US, the next most common pattern (W,E,M), found among roughly one-fifth of the men and women of both birth cohort groups, also places marriage as the last of all three events; however, in these cases individuals only completed their schooling after entering the work force. In the FRG, on the other hand, this pattern is far less common. Only among males in the older birth cohort group is the percentage of persons following this path even half as great (9.1%) as among comparable Americans.

¹⁵ Since all events are dated on a yearly basis the number of ties may be relatively great making it impossible to distinguish which event came first. In these cases, the assumption is made that the events followed the normative sequence (the same strategy used by Hogan). The validity of this assumption can be checked with SIPP data sets by looking more closely at those ties that occurred during the period of direct panel observation, when events are dated on a monthly basis. For example, looking at those persons who report marriage and entry into the work force in the same year the percent reporting both in the same year. . specifically in 1984 and 1985, were monthly data is also available, we find that in all 15 cases of this type of reported month of marriage is later than that of entry into the labor force.

In fact, the only other relatively common pattern (E,W) found among West German men and women are those who are on a path, or trajectory, toward a traditional transition to adulthood. Assuming that many of these persons eventually do marry, two-thirds or more of the West German men and women will conform to the traditional sequence. Also in the US a significant proportion of men and women in these two birth cohort groups had not yet completed the transition to adulthood as defined here (about 25% of those born between 1952 and 1955 and well over one-third of those born between 1956 and 1959). As in the FRG, most of these persons, especially the males, had completed their schooling and entered the work force but had not yet married.

However, unlike their West German peers, many of the young Americans who had not yet completed the transition to adulthood have departed from the traditional temporal trajectory (E,W). As discussed above, Americans are more likely to begin employment before concluding their education (W,E). Assuming that many of these persons eventually do marry, they will then have completed the transition to adulthood following one of the two most common sequences (E,W,M or W,E,M), both of which conclude with marriage.

In addition, Americans are far more likely than Germans to marry after entering the work force but before completing their education. Complete transitions of the type (W,M,E) as well as the trajectory (W,M) that are likely to culminate in this pattern are two to three more times more common among American men and women than among West Germans. Entering marriage after completing school, but before entering regular employment, is a considerably more common pattern of transition among women than men in both countries. In fact, the percentages of men and women completing the transition in this fashion (E,M,W) or headed in this direction (E,M) are surprisingly similar in the two countries.¹⁶

¹⁶ This fact suggests that the "traditional sequence" is in fact the "traditional male sequence" with labor force participation as its central organizing principle. The nontraditional women may, in fact, be following traditional female patterns of transition: a pattern that either failed to include regular employment at all or only after marriage (E,M or E,M,W) or one that includes further education after marriage with (W,M,E) or without (M,E,W) prior work experience.

It should be emphasized that the processes of transition represented in Tables 5 and 6 are by no means complete. The degree of right censoring and, in particular, the different degrees of right censoring between the birth cohort groups limits the extent to which intercohort comparisons may be made. The data do not permit intercohort comparisons for the younger birth cohorts beyond consideration of the likely patterns of transition implied by the trajectories of incomplete transitions. It is impossible to know how the younger cohorts will order their future life courses and complete the transition to adulthood. However, the data may be used to determine where members of the older cohorts stood in the transition to adulthood at specific ages. It is possible, then, to look at the younger cohorts and compare them with older cohorts when they were the same age.

Tables 7 and 8 compare West German and American men and women from three birth cohort groups (1952-1955, 1956-1959 and 1960-1962) and examine how far they were in the transition to adulthood at the age of 22. Looking at the temporal ordering of events, a distinction between nontraditional and traditional patterns of transition and trajectory may be made, based on whether marriage precedes entry into the labor force and/or completion of one's education.

To begin with, in both countries there is a noticeable decline in the percentage of men and women in the younger birth cohorts who had experienced a traditional transition to adulthood by age 22. Simply given the increases in average age at first marriage for men and women in both countries, this should come as no surprise. Non-traditional transitions, though far less common, are not less common in the younger birth cohort groups. Among American and West German men there is a slight drop in the proportion of persons in the younger cohorts who have experienced all three events in a nontraditional fashion. However, among women in both countries the proportion completing the transition to adulthood in a nontraditional fashion remains relatively constant (at about 8% in the US and about 5% in the FRG) across all three birth cohort groups.

However, the decreasing proportion of persons in both countries who follow the traditional sequence in the transition to adulthood hardly indicates widespread rejection of this pattern. In fact, in the younger birth cohort groups in both countries, at age 22 increasing proportions of men and women are found in the

categories that may be seen as traditional trajectories--individuals who have begun regular employment and are no longer enrolled in school. The traditional sequence still appears to be the norm for American and West German young men and women. It simply takes longer for the more recent birth cohorts to complete the transition.

Based on the experiences of those in the birth cohort group 1952 to 1955, combining those in the traditional trajectory with those in the completed traditional transition categories at age 22 provides a reasonably accurate, though slightly underestimated, forecast of the proportion of individuals who will have completed traditional transitions by their late twenties. This suggests that the level of traditional transitions will remain relatively stable for women and may even increase slightly among men in both the US and the FRG.

The enduring character of the traditional pattern also means that members of the more recent birth cohorts are found in decreasing proportions in the categories directly leading to nontraditional patterns of transition. Though losing in importance, the nontraditional trajectories remain relatively more common in the US than in the FRG and, in both countries, are more frequently followed by women than men.

On the other hand, in the US there is a striking increase in the proportion of persons in the youngest birth cohort group who have entered the work force, but remain single and in school--as of age 22 it is not yet clear whether they will follow the traditional pattern. These individuals--25% of the men and 19% of the women in this birth cohort group--stand at a crossroad; the direction they follow will determine for the birth cohort group as a whole whether the traditional pattern of transition has been abandoned or simply postponed.

The proportion of young West Germans who were in school, working and single at age 22 has not grown in a comparable fashion in the youngest birth cohort group. Among women it has only increased slightly to 6.5%, while among men the proportion of males in this situation at age 22 has actually fallen from 13.3% to 8.5%. The proportion of West Germans who had experienced none of the elements of the transition to adulthood by age 22--that is, they were still in school, single and had not yet entered regular employment--did grow to over 15% among women in the youngest birth cohort group, while falling slightly among West German men to just under 20%.

Thus in West Germany, as in the United States, there is a sizeable pool of persons at the crossroad, who remain uncommitted as to the manner in which they will make the transition to adulthood. In both countries the large proportions of men and women already following the path of a traditional transition to adulthood suggests that the traditional sequencing remains the norm. Of course this assumes that those identified as being on a traditional trajectory are simply postponing marriage rather than opting out of it all together.

5.0 Summary and Conclusions

Few periods in the individual life course are as crucial as the years of early adulthood. In a relatively short period of time, individuals are expected to move from their families of birth to those they will create, from the classroom to the workplace and from economic dependency to self-sufficiency. Existentially, it is a time of success and failure, of stress and satisfaction. Sociologically, this time is significant as a moment of metamorphosis, when each individual turns from that which society has made to that which the individual will become. In this instant the constraints and limits of social structure weigh most heavily and yet it is also a time when individual volition and personal ambition are most easily heard.

This results present above describe the transition to adulthood for men and women in recent birth cohorts in the United States and West Germany. The longitudinal data provided by the German Socio-Economic Panel and the U.S. Census Bureau's Survey of Income and Program Participation provided the longitudinal data necessary to examine the central life course processes that make up this transition (completing one's education, entering the labor force and first marriage) in the two countries.

After Section 4.1 provides a cross-sectional snapshot of the enrollment, employment and marital statuses of young adults in the US and the FRG, each area is then examined in turn. Section 4.2 calls attention to distinctive characteristics of the educational system of each country. Two issues are particularly relevant for the discussion here: the importance of formal vocational education in West Germany as compared to the school-based educational system in the US; the relatively early age at which Americans enter the labor force, in particular through part-time or irregular employment, which may, in fact, provide young people in the US with a significant measure of informal vocational education.

Section 4.2 also emphasizes that different operationalizations of age at completion of education may affect the outcome of cross national comparisons. Simply comparing the age at which school-based education is completed leads to the conclusion that West German young people leave school earlier than their American counterparts. However, paying proper attention to the importance of the West German vocational and occupational education system, which is located outside the classroom, changes the picture, at least among males. In this case, American young men complete their education at a slightly faster rate than West German young men. Finally, if one disregards the enrollment of American young people in years when they also report full-time employment for 6 or more continuous months, American young people of both sexes appear to complete their education at a far faster rate than West German young people.

Sections 4.3 and 4.4 present survival functions describing entry into the labor force and first marriages among recent birth cohort groups in the US and the FRG. Taken together they indicate that the relationship between these two elements of the transition to adulthood may be more complex than one might assume. In recent birth cohorts entry into marriage has slowed, for men and women regardless of educational level, both in the FRG as well as the US.

But, the same measure of consistency is not found when one looks at the rate of entry into regular employment among those born between 1952 and 1963. Regardless of educational level, recent cohorts of American women entered the labor force more quickly, while West German men entered more slowly. There was, on the other hand, no change in the rate of entry for American men, except for those without a high school diploma who entered employment somewhat more slowly than their older brothers. West German women also tended to enter employment more slowly than their older sisters, except for those with at least a year at the university who entered employment more quickly.

These findings suggest that link between labor force integration and marriage is not uniform but varies according to gender, nationality and level of education. Differences in the manner in which young people are integrated into the labor force in the two countries may provide a means to reconcile the seeming contradiction and indicate a direction for future research. In this context, there are two important

dimensions of marital choice to consider. On the one hand, there is a well-recognized *financial aspect*--finding one's place in the labor force is the means to establish the financial and residential independence that are commonly seen as prerequisites to marriage. On the other hand, there is an *identity aspect*: labor force integration helps to define and fix an individual's preferences. It puts one in the position to assess the utility of marriage in general and to a certain partner in particular. Likewise, labor force integration serves to define one's identity and suitability in the eyes of potential partners.

In the FRG the decreasing rate of entry into marriage found among the younger birth year cohort groups may well reflect the weakening of the vocational education system, which no longer fits the institutional demands of the labor market. From a life course perspective these institutional inconsistencies may well be the mechanisms that serve to push both the identity and financial aspects of marital choice further into the future for those individuals affected.

In the absence of an organized vocational education system the financial aspect is likely to have figured more heavily in the marital choices of young Americans. In the United States, where occupational identity is far more likely to be developed "on-the-job," relatively early entry into the labor force may mean that the financial aspect figures more heavily in the marital choices of young adults. In this case, the decreasing rate of marriage should be linked to later and less secure employment among young adults.

Entry into employment, as reported in Section 4.3, has only slowed for American males who failed to complete high school. For those with further educational qualifications, one must look elsewhere to explain recent increases in average age at first marriage. It may be that American males with further educational qualifications are less secure on the job and this has led them to enter marriage more slowly than slightly older birth cohorts even though they are entering employment at the same rate.

However, the behavior of recent birth cohorts of American women regardless of education stands in direct contradiction to the hypothesized link between labor force integration and entry into marriage. Recent cohorts of American women at all levels

of education are entering marriage more slowly, despite the fact that they are all also entering regular employment more quickly. These findings are consistent with those arguments that claim that the advances American women have made in the labor market have placed the costs and benefits of marriage in a whole new light.

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Table 1: Univariate Distributions of Background Characteristics of West German Young Adults (Spring 1984) — percentages.

	Birth Year			
	1952–1955	1956–1959	1960–1963	1964–1967
Sex				
Male	48.4	50.7	48.8	50.1
Female	51.6	49.3	51.2	49.9
Employment				
Full-time	60.6	59.8	51.3	14.5
Part-time/irregular	13.1	8.4	5.8	1.2
Training	—	1.5	10.3	33.3
Unemployed	3.8	5.3	7.2	3.5
Not in labor force	21.9	25.0	25.2	47.5
Educational Status				
HS or <, no voc ed	13.4	11.9	16.1	6.2
HS or <, voc ed	66.4	63.6	51.8	15.5
College, no voc ed	9.8	5.0	—	—
College, voc ed	2.0	0.1	—	—
Enrolled school	3.7	9.9	20.3	36.2
Enrolled voc ed	4.8	8.9	11.2	42.0
Marital Status				
Single	22.2	43.3	73.8	97.8
Married live together	70.7	52.9	24.5	1.9
Married live apart	2.1	1.2	1.0	0.3
Divorced	4.8	2.5	0.7	—
Widowed	—	—	—	—
% all young adults	22.5	25.4	24.3	27.9
N of cases	663	749	717	823

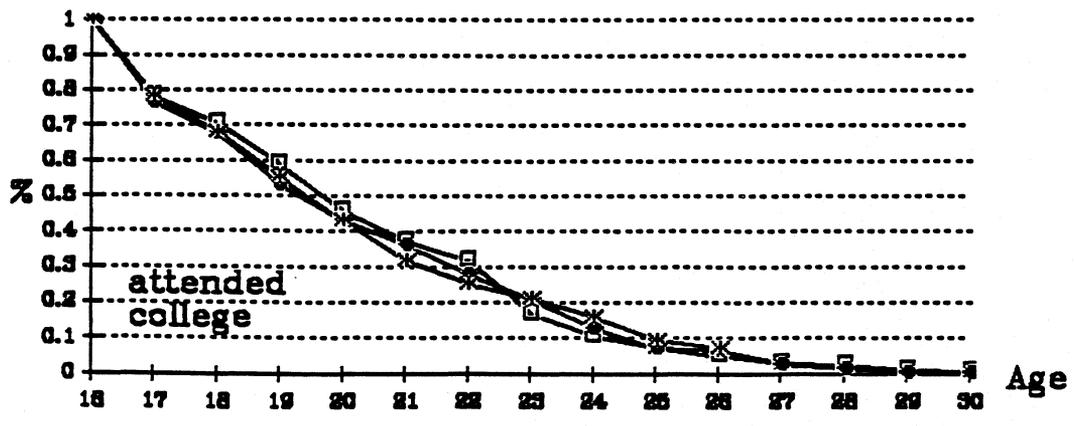
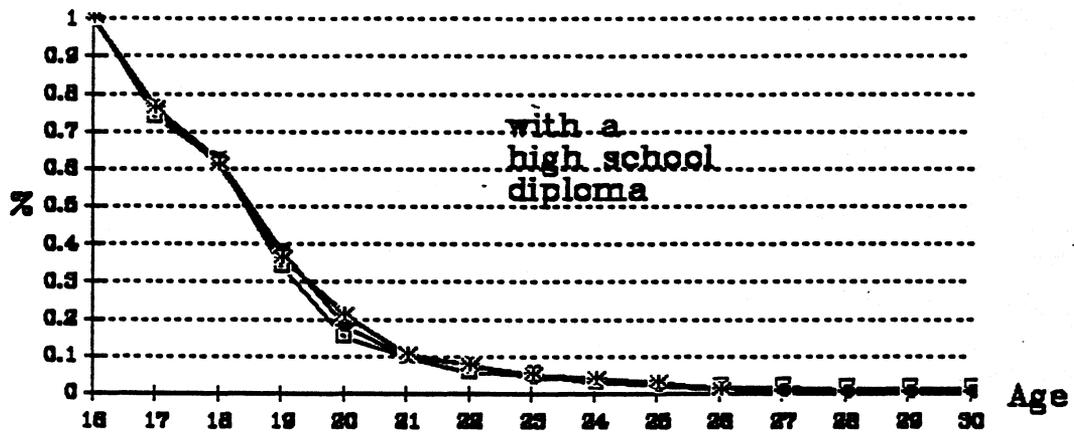
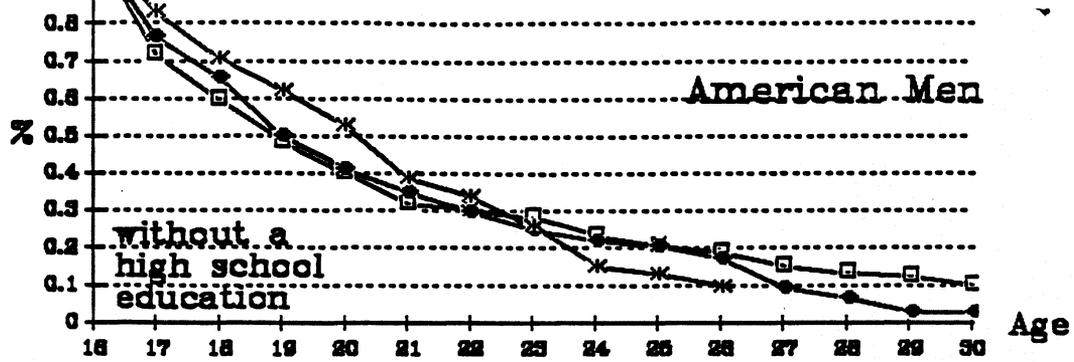
Source: The German Socio-Economic Panel – Wave 1.

Table 2: Univariate Distributions of Background Characteristics of American Young Adults (Spring 1984)

	Birth Year			
	1952-1955	1956-1959	1960-1963	1964-1967
Sex				
Male	50.2	49.1	49.4	51.1
Female	49.8	50.9	50.6	48.9
Employment Status				
Full-time	63.6	64.3	52.6	21.9
Part-time/irregular	11.7	12.5	19.9	35.8
Training	3.0	2.6	3.7	3.1
Unemployed	3.0	5.1	6.1	7.6
Not in labor force	18.0	14.0	15.9	30.4
Educational Status				
Hs or <, no voc ed	37.2	42.4	39.6	34.4
HS or <, voc ed	12.5	10.3	10.5	7.6
College, no voc ed	32.5	27.2	17.1	4.5
College, voc ed	8.3	7.7	4.9	0.3
Enrolled school	7.7	10.6	25.4	50.3
Enrolled voc ed	1.8	1.7	2.5	2.9
Marital Status				
Single	14.2	30.6	60.5	92.9
Married live together	74.3	58.8	32.9	5.3
Married live apart	3.4	3.1	1.4	0.4
Divorced	8.3	5.6	2.6	0.2
Widowed	0.2	0.3	0.1	—
% all young adults				
	1810	1828	1699	1650
N of cases				
	24.9	29.6	25.5	23.1

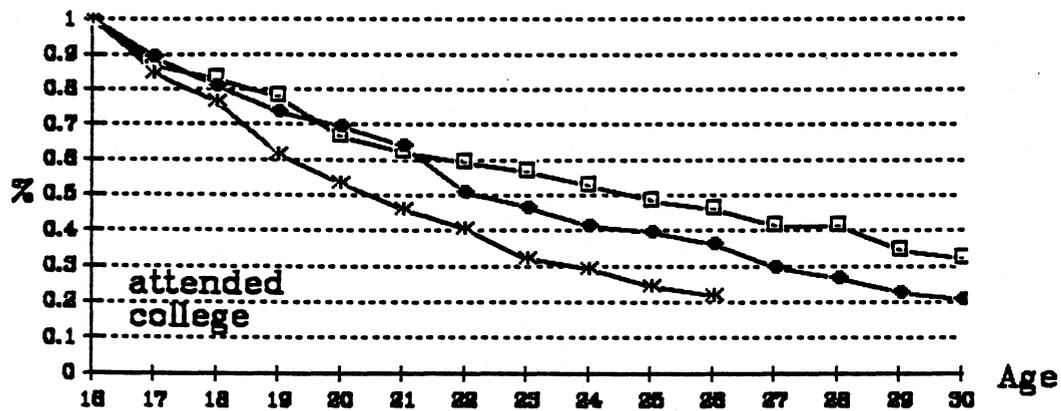
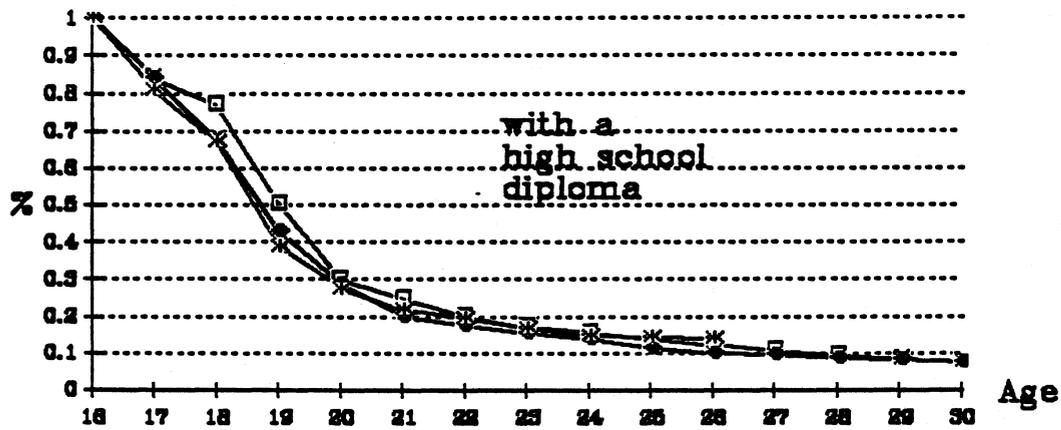
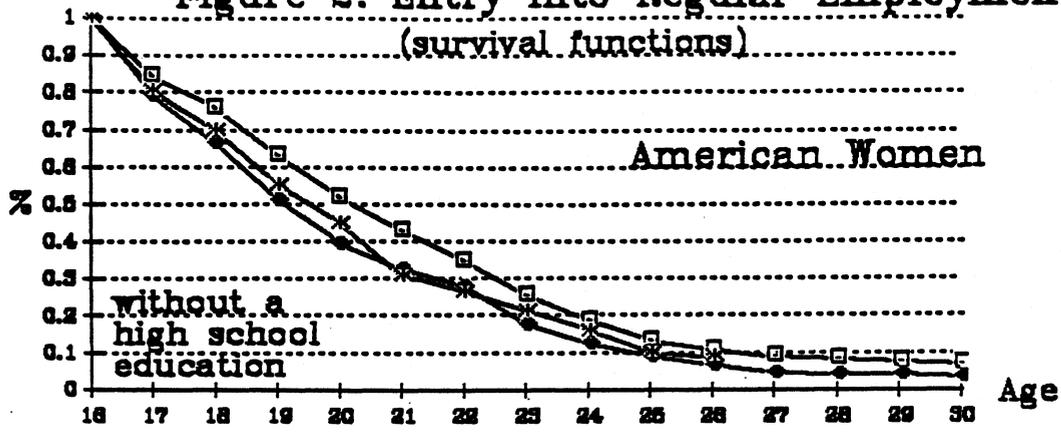
Source: The Survey of Income and Program Participation - Wave

Figure 1: Entry into Regular Employment
(survival functions)



Birth Cohort Group □ 1962 - 1966 ◆ 1966 - 1969 * 1970 - 1973

Figure 2: Entry into Regular Employment
(survival functions)



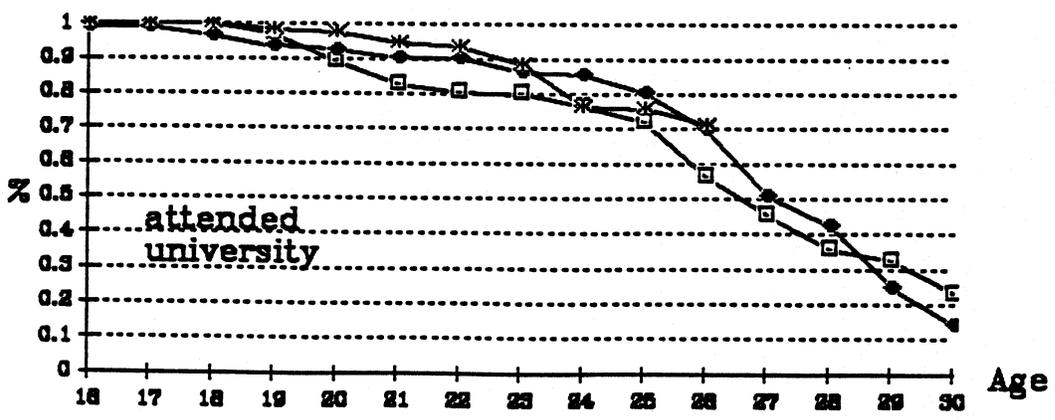
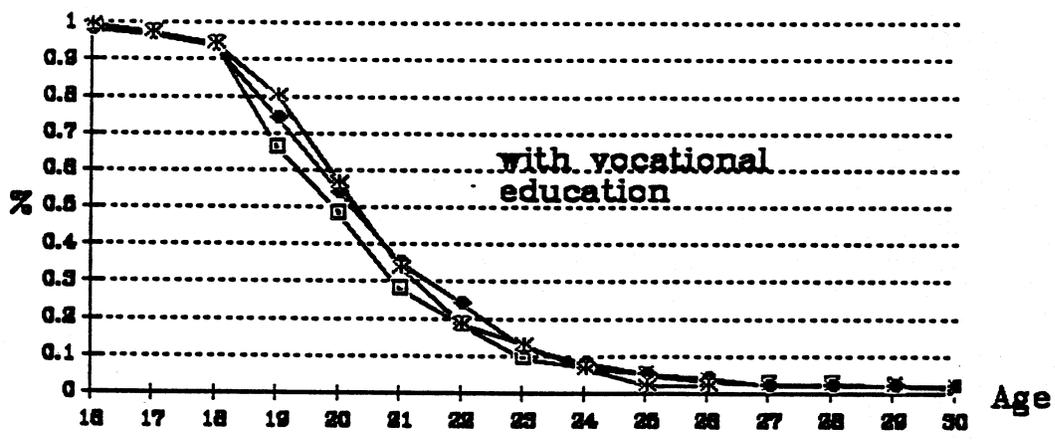
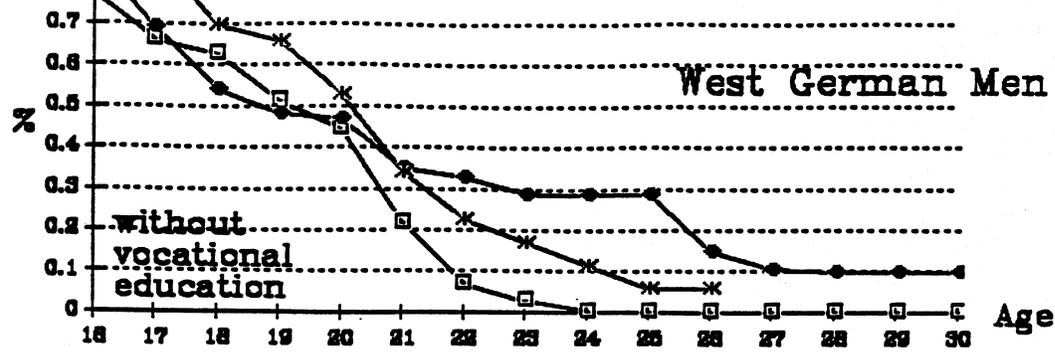
Birth Cohort Group

□ 1952 - 1955

◆ 1956 - 1959

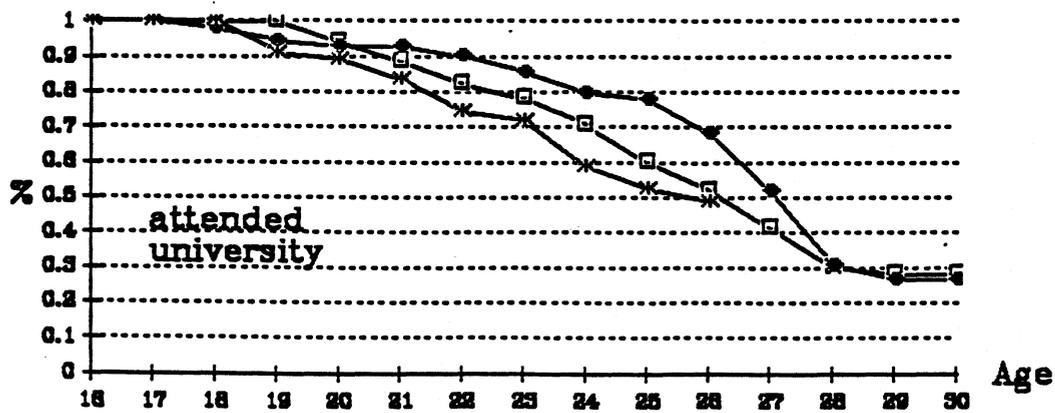
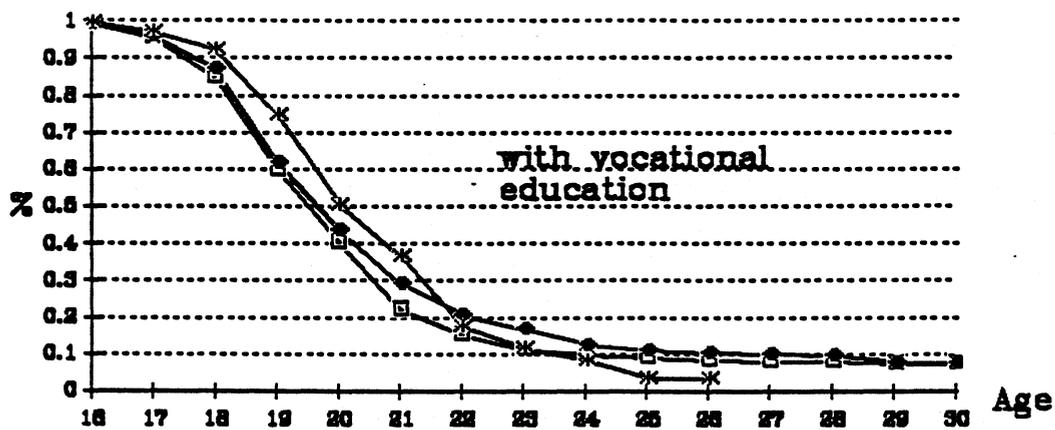
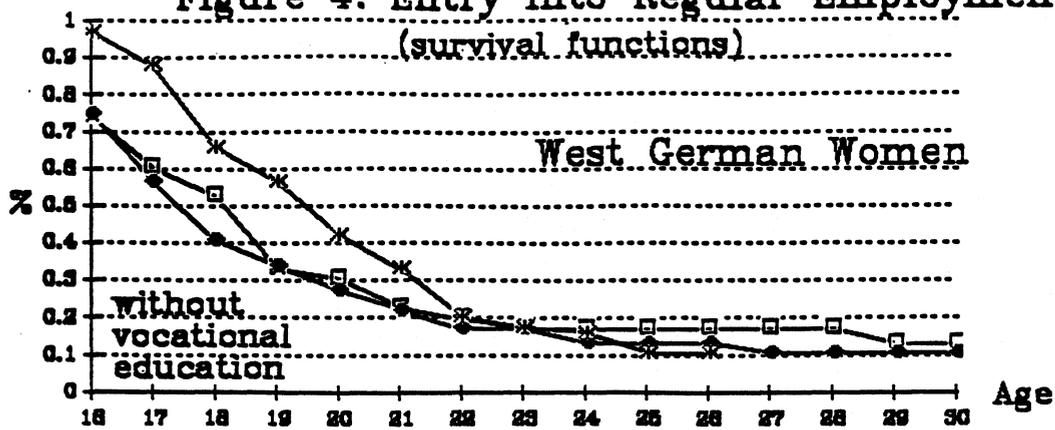
* 1960 - 1963

Figure 3: Entry into Regular Employment
(survival functions)



Birth Cohort Group □ 1952 - 1955 ● 1955 - 1959 * 1960 - 1965

Figure 4: Entry into Regular Employment
(survival functions)



Birth Cohort Group

□ 1952 - 1955

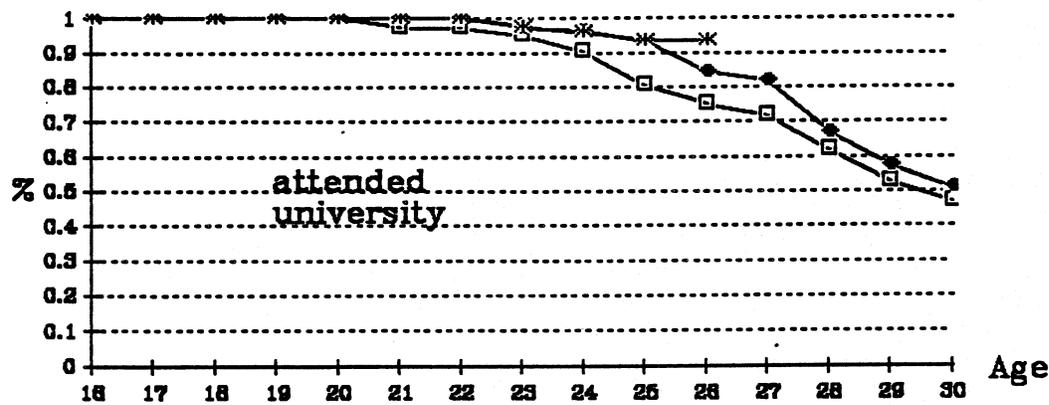
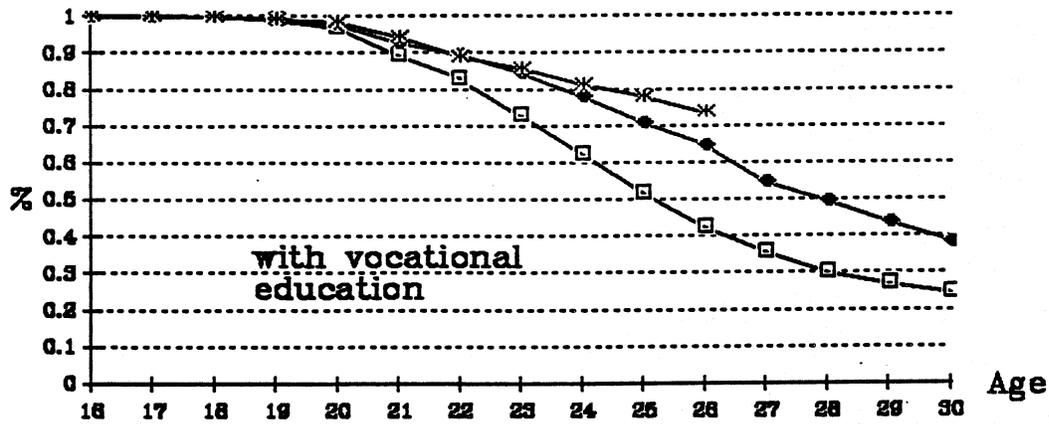
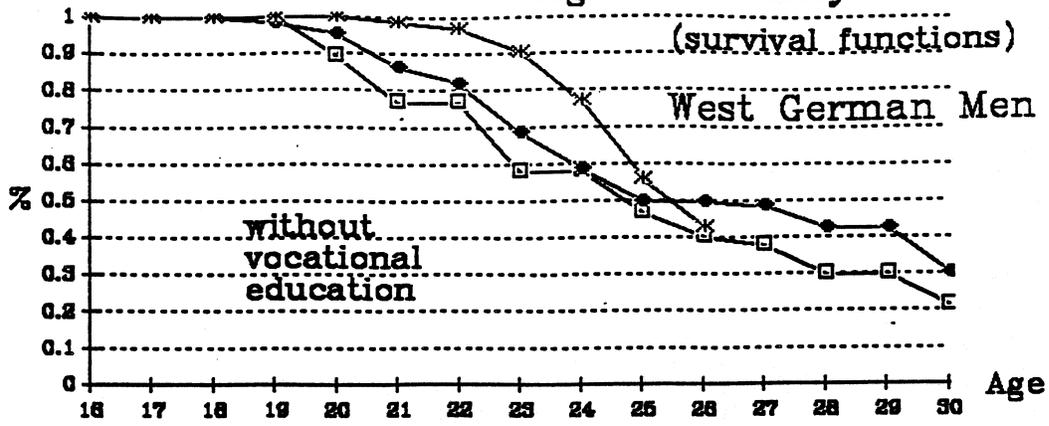
◆ 1955 - 1959

* 1960 - 1963

Figure 5: Entry into Marriage

(survival functions)

West German Men



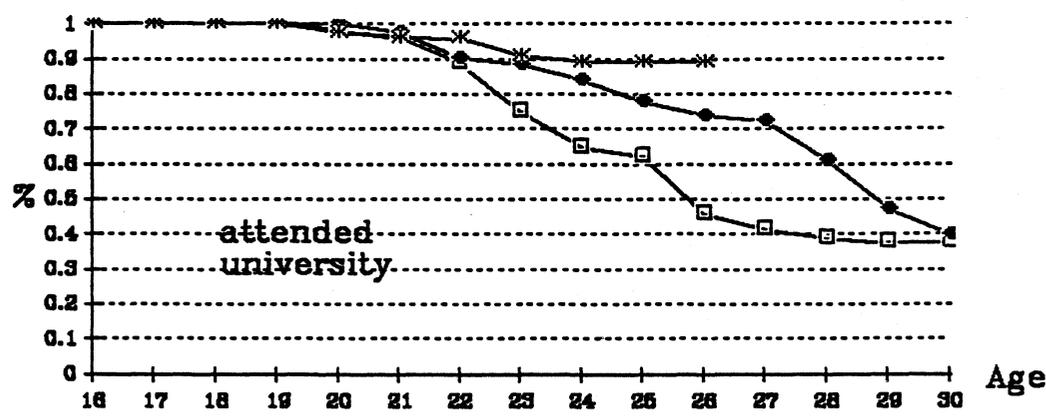
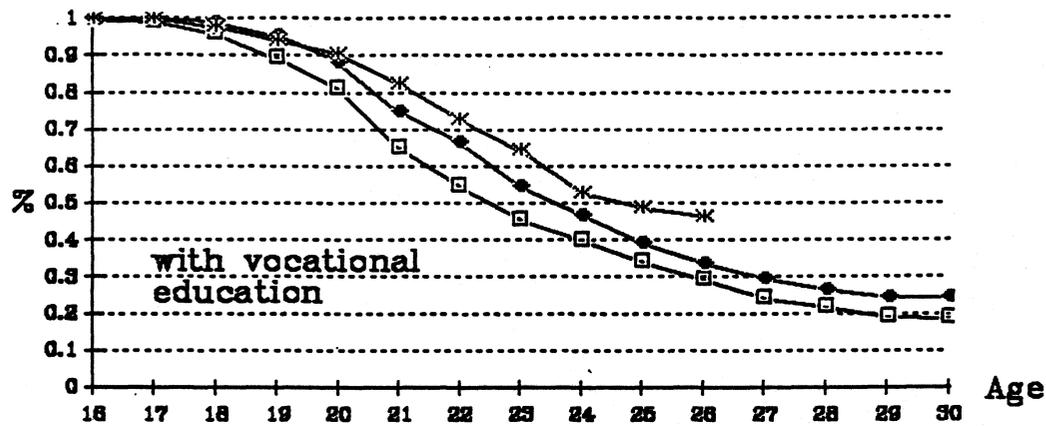
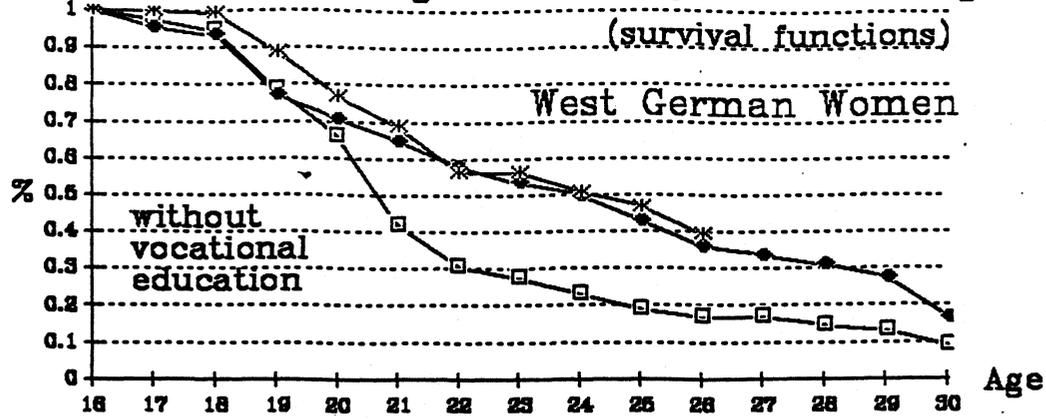
Birth Cohort Group

□ 1952 - 1955

◆ 1955 - 1959

* 1960 - 1965

Figure 6: Entry into Marriage



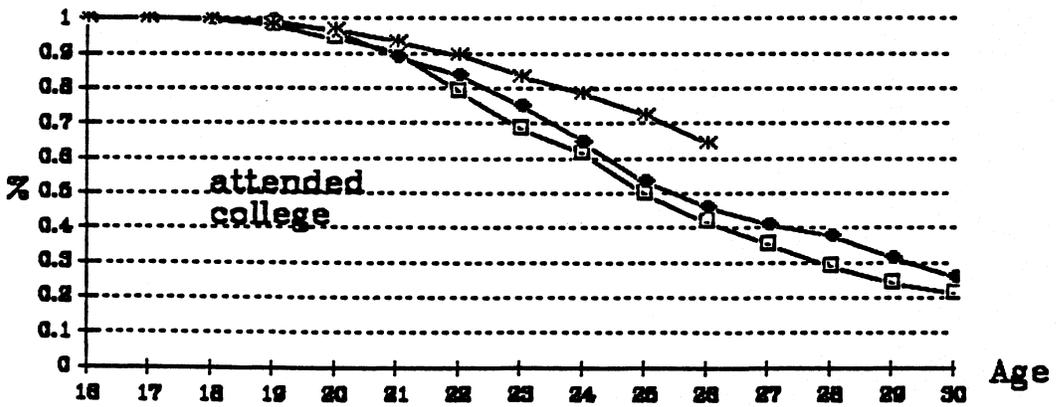
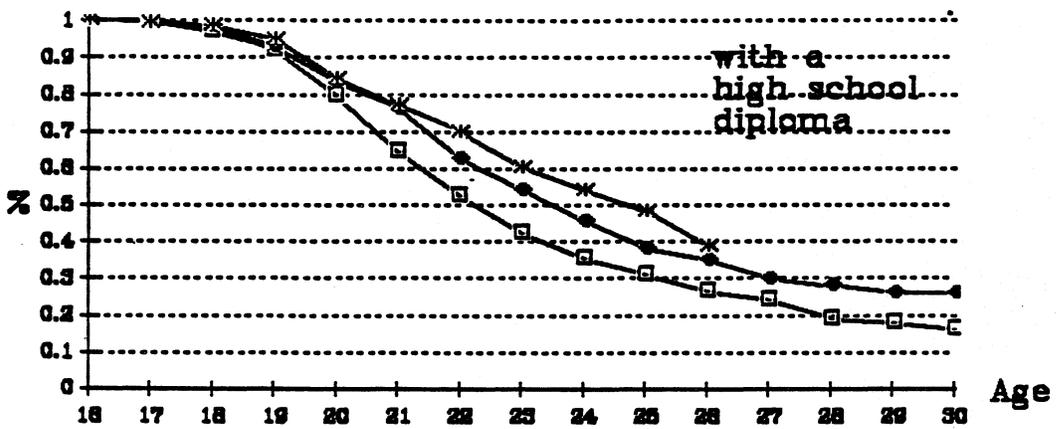
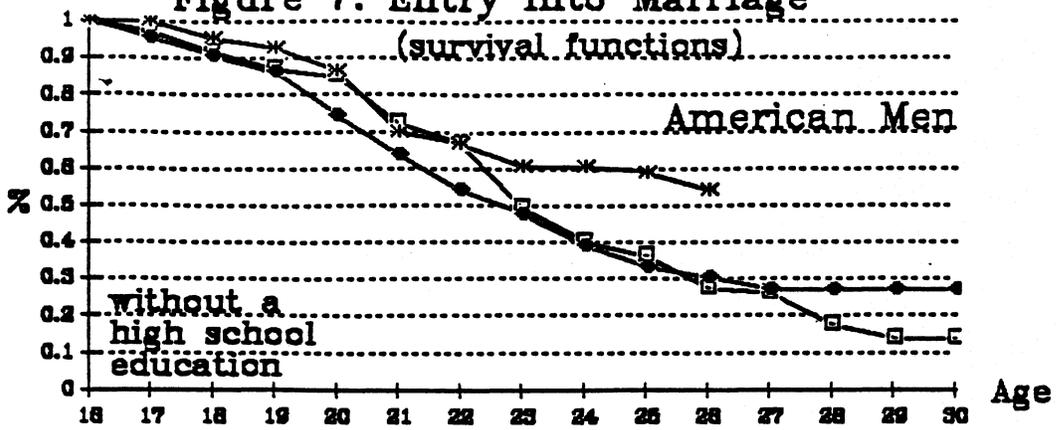
Birth Cohort Group

□ 1952 - 1955

◆ 1955 - 1959

* 1960 - 1965

Figure 7: Entry into Marriage
(survival functions)



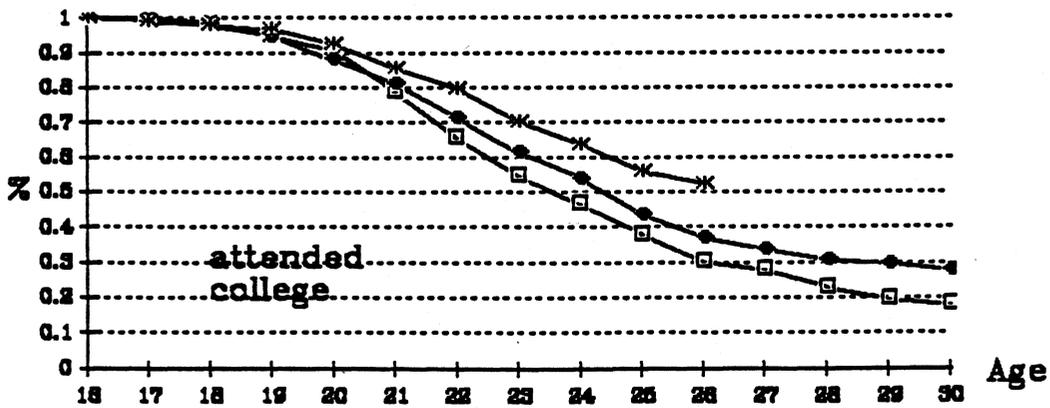
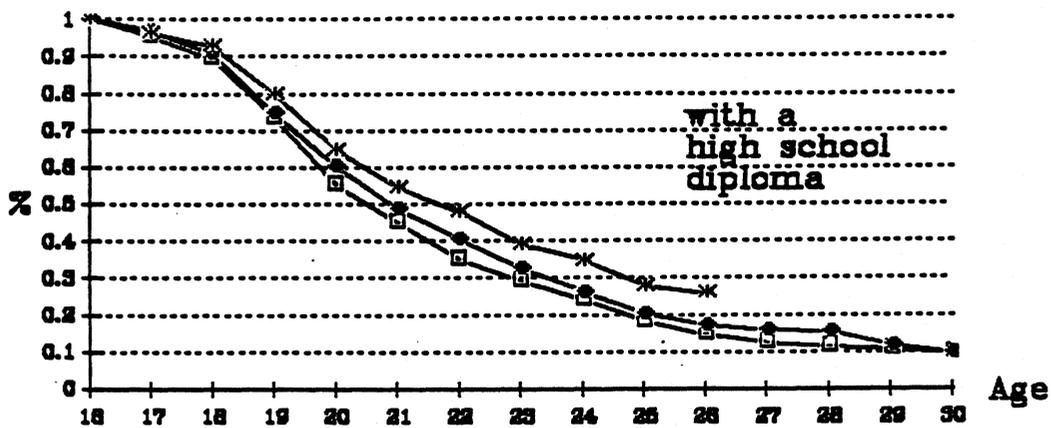
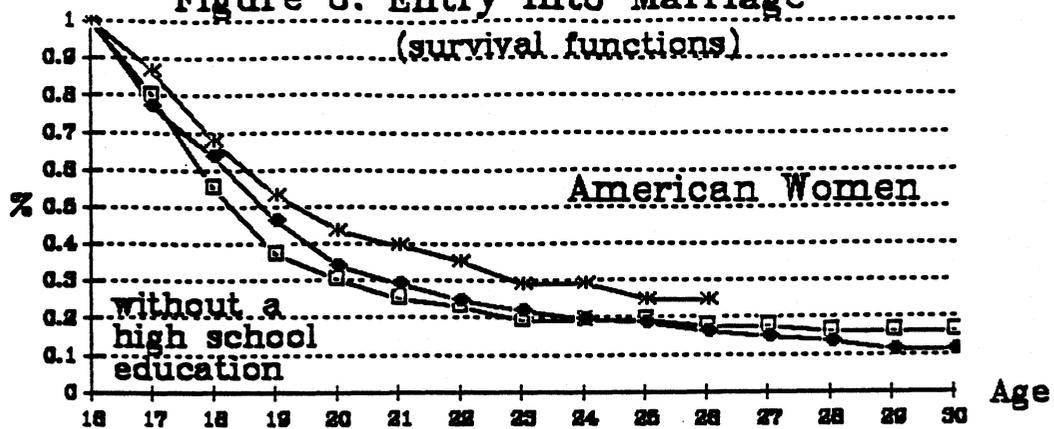
Birth Cohort Group

□ 1962 - 1965

◆ 1966 - 1969

* 1970 - 1973

Figure 8: Entry into Marriage
(survival functions)



Birth Cohort Group

□ 1952 - 1955

◆ 1955 - 1959

✱ 1960 - 1965

Table 3: Age at Which West German Young Adults Last Attended School, College or University Comparison of Any Reported Enrollment (including vocational training and apprenticeships) and a Restricted Definition of Enrollment (excluding vocational training and apprenticeships). (Percentages According to Sex and Birth Cohorts).

	Birth Year							
	1952-1955		1956-1959		1960-1963		1964-1967	
	Male	Female	Male	Female	Male	Female	Male	Female
Any Enrollment								
16 or younger	4.9	20.8	6.5	19.0	6.5	13.1	5.8	8.0
17 - 20	50.6	56.1	52.4	50.9	48.8	55.4	34.3	37.9
21 - 24	13.7	11.1	13.4	15.5	15.5	15.5		
25 - 28	14.6	5.9	16.0	8.4				
29 - 31	9.6	4.1						
Still in school	6.5	2.0	11.6	6.2	29.1	16.1	60.0	54.0
Restricted Definition of Enrollment*								
16 or younger	56.7	67.8	53.2	61.3	47.4	48.0	38.4	35.7
17 - 20	16.8	19.6	20.3	21.9	22.0	32.4	26.6	33.6
21 - 24	6.2	6.1	5.2	6.8	6.4	7.1		
25 - 28	12.5	3.9	11.4	5.4				
29 - 31	3.7	1.5						
Still in school	4.0	1.2	10.0	4.6	24.0	12.5	35.0	30.7
N of Cases	663		749		717		823	

* Restricted Definition of Enrollment - only attendance at a regular school or university is defined as enrollment (excluding vocational training and apprenticeships).

Source: Retrospective data collected in Wave 1 of the SEP Panel updated with information on enrollment from subsequent waves of the Panel.

Table 4: Age at Which US Young Adults Attended School, College or University Enrollment Percentages According to Sex and Birth Cohorts.

	Birth Year							
	1952-1955		1956-1959		1960-1963		1964-1967	
	Male	Female	Male	Female	Male	Female	Male	Female
Any Enrollment								
16 or younger	9.5	8.9	13.5	9.4	10.2	7.7	19.7	14.4
17 - 20	48.8	55.1	49.2	54.5	52.4	56.3	35.1	29.5
21 - 24	22.4	21.2	24.6	26.2	13.3	13.3		
25 - 28	10.8	9.0	5.2	5.4				
29 - 31	4.8	3.4						
Still in school	3.7	2.3	7.4	4.3	24.0	22.8	45.2	56.1
Restricted Definition of Enrollment*								
16 or younger	36.9	30.8	40.4	40.7	37.6	39.3	36.5	28.0
17 - 20	40.7	49.2	40.6	42.9	38.5	39.8	26.3	24.8
21 - 24	15.5	12.4	12.0	12.7	5.1	5.1		
25 - 28	4.4	4.6	2.0	1.2				
29 - 31	0.3	1.2						
Still in school	2.2	1.6	4.9	2.4	18.9	15.8	37.2	47.1
N of cases	1818		1828		1699		1650	

* Restricted Definition of Enrollment - defined as the final year enrolled in which the individual did not also work full-time for 6 or more continuous months.

Source: Retrospective data collected in Wave 3 (topical module) of the SIPP 1984 Panel updated with information on enrollment from subsequent waves of the Panel.

Table 5: Employment Status at Time of Marriage West German and American Young Adults -- percentages employed.

Cohort	FRG		US	
	Male	Female	Male	Female
1952 - 1955	78.9	71.3	86.9	64.5
1956 - 1959	82.2	67.2	84.3	65.4
1960 - 1963	72.3	59.5	80.8	56.3
1964 - 1967*	71.4	61.3	41.9	33.1

Based on 1,178 SEP respondents and 2,980 SIPP respondents who had married by the end of the panels and the year of the event can be identified. An additional 10% (117) of the SEP respondents were known to be married but the date could not be determined. All SIPP respondents in rotation group 4 (1910 randomly selected cases) are excluded from this analysis because they were not asked to provide marital histories.

* 36 cases SEP.

Source: The Socio-Economic Panel - Waves 1-3 and the Longitudinal Research File (8 waves) for the SIPP 1984 Panel.

Table 6: Comparison of Different Definitions of Educational Status at Time of Marriage of West German and American Young Adults
 -- percentages enrolled --

American Young Adults

	Birth Year			
	1952-1955	1956-1959	1960-1963	1964-1967
Any enrollment				
Males	27.4	22.6	20.9	13.0
Females	35.1	34.6	34.1	31.8
Restricted Definition*				
Males	6.2	4.5	5.9	1.6
Females	15.6	14.4	17.1	22.7

West German Young Adults

Enrolled in School (including university)

Males	10.6	10.5	12.3	--
Females	5.4	7.3	5.1	6.5

Enrolled in School and/or Vocational Training

Males	16.5	14.7	18.5	14.3**
Females	15.7	16.6	20.9	22.6

* Restricted Definition of Enrollment - defined as the final year enrolled in which the individual did not also work full-time for 6 or more continuous months.

Based on 1,178 SEP respondents and 2,980 SIPP respondents who had married by the end of the panels and the year of the event can be identified. An additional 10% (117) of the SEP respondents were known to be married but the date could not be determined. All SIPP respondents in rotation group 4 (1910 randomly selected cases) are excluded from this analysis because they were not asked to provide marital histories.

** 36 cases SEP.

Source: The Socio-Economic Panel - Waves 1-3 and the Longitudinal Research File (8 waves) for the SIPP 1984 Panel.

Table 7: American Young Adults and The Transition to Adulthood. The Temporal Ordering of Life Course Events Using Different Definitions of Enrollment. (percentages exhibiting different patterns of ordering the relationship of ages at completion of schooling, beginning full-time employment and first marriage.)

Temporal Sequence of Elements of the Transition	Birth Year			
	1952-1955		1956-1959	
	Male	Female	Male	Female
Any enrollment				
E or M or W	2.2	4.7	4.8	4.9
E, M	.2	4.0	.2	4.8
E, W	18.6	18.7	26.2	18.4
W, E	17.2	11.8	18.2	19.2
E, M, W	3.6	8.2	3.3	6.3
E, W, M	26.3	23.1	20.3	18.6
M, E, W	1.5	3.4	1.3	2.5
W, E, M	18.6	16.3	18.3	16.5
W, M, E	9.0	6.6	4.4	5.4
other	2.8	3.2	3.0	3.4
Restricted definition				
E or M or W	2.4	4.4	4.9	5.1
E, M	.2	3.9	.2	4.6
E, W	32.7	27.9	42.0	36.4
W, E	2.9	2.8	2.4	1.5
E, M, W	4.5	9.3	3.6	7.0
E, W, M	53.4	42.4	43.8	38.9
M, E, W	1.0	3.4	.9	2.5
W, E, M	1.6	1.8	1.2	1.3
W, M, E	.6	2.3	.4	1.8
other	.7	1.8	.6	.9

E = Education completed; W = began full-time Work; M = Marriage
Thus the pattern E, W, M represents the "normal" transition to adulthood (completing one's education, then finding employment and then marriage). Patterns with fewer than 3 elements indicate a transition that is not yet "complete".

Source: Longitudinal Research File (8 waves) for the SIPP 1984 Panel merged with topical module data waves 3 and 8.

Table 8: West German Young Adults and The Transition to Adulthood. The Temporal Ordering of Life Course Events Using Different Definitions of Enrollment. (percentages exhibiting different patterns of ordering the relationship of ages at completion of schooling, beginning full-time employment and first marriage.)

Temporal Sequence of Elements of the Transition	Birth Year			
	1952-1955		1956-1959	
	Male	Female	Male	Female
Any enrollment (school-based and vocational education)				
E or M or W	2.5	3.0	8.7	5.4
E, M	--	4.1	.8	5.4
E, W	25.2	19.0	32.6	22.5
W, E	4.0	1.8	5.0	4.1
E, M, W	4.0	6.1	1.3	3.0
E, W, M	40.8	54.4	36.3	47.7
M, E, W	2.8	2.9	1.6	1.1
W, E, M	7.5	3.2	4.2	3.3
W, M, E	8.1	3.2	4.2	3.3
other	5.1	2.3	5.3	4.2
School-based enrollment				
E or M or W	1.8	2.4	7.9	4.4
E, M	--	4.7	.8	6.5
E, W	27.7	21.1	36.6	26.0
W, E	2.2	.9	1.8	1.6
E, M, W	5.3	8.5	1.6	3.8
E, W, M	50.8	59.1	41.8	51.8
M, E, W	1.9	.9	1.3	.5
W, E, M	3.7	.6	2.4	.5
W, M, E	3.7	1.2	.8	.5
other	2.9	.6	5.0	4.4

E - Education completed; W - began full-time Work; M - Marriage
 Thus the pattern E, W, M represents the "normal" transition to adulthood (completing one's education, then finding employment and then marriage). Patterns with fewer than 3 elements indicate a transition that is not yet "complete".

Source: The German Socio-Economic Panel - Waves 1-3