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YOUNG WOMEN**

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Office of Population Research
Working Paper No. 2000-5

August 2000

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Acknowledgements:

Paper presented at the 2000 annual meetings of the American Sociological Association, Washington, D.C. This research was supported by grants from the National Science Foundation (SBR-9601995), the W.T. Grant Foundation (96-1766-96), and the Office of Population Research Center (5P30HD32030) to the Office of Population Research, Princeton University. We gratefully acknowledge the Office of Population Research and the Department of Sociology for generous institutional support. We thank Zahid Hafeez for assistance in data preparation. Please direct all correspondence to Sigal Alon, Office of Population Research, Wallace Hall, Princeton University, Princeton, NJ, 08544, or email salon@princeton.edu.

Occupational Careers of Young Women

Sigal Alon and Marta Tienda

Abstract

Occupational exchanges are a pervasive feature of the U.S. labor market as millions of persons change their occupation in any given year; the majority do so voluntarily, seeking better pay, job advancement, or improved working conditions. Yet it is unclear what share of these changes are chaotic and which represent leading to a systematic sequence of upward mobility. Using the National Longitudinal Survey of Youth (WorkHistory file) we examine the occupational careers of young women and find striking differences in the timing and frequency of occupational changes according to levels of education, particularly between college graduates and those with less than high school education. “Career trees” for most frequent occupational paths reveal that systematic occupational trajectories do exist, although with varying degrees of orderliness. We discover four modal career types based on the amount of schooling acquired. We conclude that the complex nature of women’s occupational careers is simplified by our focus on their educational attainment.

Introduction

Occupational changes are crucial events in career building as shown by an extensive sociological literature on occupational mobility. Nevertheless, it is surprising how little we know about occupational careers, especially by comparison to knowledge about labor force participation and earnings determination. Several factors are responsible for the lack of research on occupational careers. First, data for intragenerational occupational change are difficult to obtain. Most panel data only report occupational position at discrete points in time, usually the date of the interview. Retrospective life-history data is also subject to incomplete information, mainly because of recall errors (Sorensen, 1975). The second problem that discourages researchers from pursuing research on occupational careers is the difficulty of tracking and portraying occupational changes over long durations because the number of occupational changes over a complete work history can be analytically overwhelming. Third, the Bureau of Census modifies its occupational classification system each decade in order to adequately portray shifts in the structure of occupations over time, but these changes alter both the number and the nature of occupational categories (Szafran, 1992). This poses challenges for depicting occupational careers over periods exceeding 10 or more years. Consequently, the sociological literature on occupational change is dominated by case studies of one or very few specific occupations (Shaw, 1987; Spilerman, 1977) or broad categories that can be scrutinized more efficiently, to the relative neglect of occupational careers.

Treiman (1985, p. 229) aptly summarizes this research gap:¹

...by far the greatest need. ... is to begin to identify job trajectories – that is, systematic sequences of successive jobs – of the kind proposed by Spilerman. This is a difficult task, made even more difficult by the paucity of appropriate data. ... With the exception of few professions, we cannot even be sure at this point that there is such a thing as career trajectory. It may be that for the great majority of workers, job sequences are quite idiosyncratic. ... If we know so little about the situation of men, we know even less about women...

Women's work histories are more complicated than those of men partly due to higher labor force instability stemming from intermittency. However it is precisely the complexity of women's employment behavior that makes their occupational careers so interesting – if challenging to understand. Accordingly, in this paper we use a life course perspective to examine occupational careers of young women with respect to their educational attainment. Our objective is to outline the contours of young women's occupational careers by ascertaining whether systematic occupational trajectories exist and what form they take. Specifically, using the National Longitudinal Survey of Youth (WorkHistory file) we depict the *timing* and *frequency* of occupational transitions. We develop “career trees” for most frequent occupational paths to portray the *pattern* and *quality* of occupational career lines, emphasizing patterned variation among educational groups.

Our results show that women's occupational changes are concentrated at younger ages, with relative stability around age 22, but trajectories highly differentiated by educational attainment. College graduates experience more occupational transitions than women with less education, particularly during the critical ages of career formation.

¹ See also Spilerman (1977) for excellent description of the literature, the main gaps in it and strategies to overcome those gaps.

Although occupational segregation is a pervasive feature of the female labor force, the profiles of segregation depend crucially on educational attainment. High school dropouts experience a chaotic career trajectory from adolescence to mature adulthood, while after graduation, college-educated women experience an orderly trajectory either to management occupations or often professional careers.

Before presenting the empirical evidence, we first review relevant studies about occupational careers. This serves as backdrop for developing an integrated approach to evaluate the frequency and timing of occupational changes and to assess the existence of women's career lines. Subsequently we describe the NLSY data and the file construction needed to portray occupational trajectories. Following a description of women's profiles and an overview of the timing and frequency of occupational changes, we identify the occupational trajectories by education level. The concluding section identifies future research directions.

Theoretical Considerations and Analytic Framework

Individual occupational attainment is an historical event because the occupational position of an individual at any point in time is the outcome of an occupational history - that is, a sequence of prior occupational exchanges (Spilerman, 1977). In addition to prior history, occupational positions and shifts over time reflect changes in the incumbents' educational investments as well as on-the-job skill acquisition. Ascertaining when and how such investments are acquired is an important first step to depicting occupational careers. In what follows we first discuss the timing and frequency of occupational changes from a life course perspective and consider what these portend for

characterizing occupational careers. Subsequently we assess how patterned occupational shifts emerge as career lines.

The timing and frequency of occupational change

Most occupational changes occur during adolescence and young adulthood and decline afterward (Jacobs, 1983; Markey and Parks, 1989; Rosenfeld, 1979; Treiman, 1985). This period – dubbed the “shopping and thrashing stage” – is associated with career exploration and market testing, and is considered normal. From the perspective of *job search theory*, work-related transitions (i.e. employer or occupational changes) allow workers to learn about their comparative market advantages by sampling a variety of jobs and occupations. Human capital theory shows that the costs of employer/occupational change are lower for younger workers, who have less investment in their jobs/occupations and therefore less to lose (and much to gain) from switching. Moreover younger workers have more time to reap higher rewards in new jobs and are more likely to shop for occupations that will maximize lifetime employment prospects. Indeed, mounting evidence suggests that *job* changing during the early career is a critical component of men’s and women’s movement toward stable employment, which also is typically associated with wage gains (Alon and Tienda, 2000; Borjas and Rosen 1980; Topel and Ward 1992; Abbott and Beach, 1994).

Search theory suggests that average transition rates will decline as workers mature because most “learning” takes place in the early matches, and because the benefits of subsequent job changes diminish as workers age. Older workers with long occupational tenure often incur high penalties when changing occupations, such as loosing

accumulated benefits and potential earnings losses. They also have a shorter time span to realize the returns from occupation-specific skill acquisition. Markey and Parks (1989) report that 29% of men and women ages 16 to 19 experience an occupational transition in a given year compared to 22% of 20 to 24 year olds. Thereafter, the likelihood of occupational transitions declines. The age pattern of occupational shifts suggests that an examination of these transitions during adolescence and young adulthood should yield important insights about the process of career formation.

The amount of occupational change women experience depends also on educational investments and their skill acquisition during the early life course. Educational attainment facilitates career advancement in two important ways. First, educational credentials are necessary to gain access to “good” occupations, i.e. those that offer options for career advancement. Second, educational attainment represents general skills, which are more transferable than job-specific skills. According to Shaw (1987), the probability of occupational change increases with the transferability of skills. Consequently, rates of occupational change are higher among women with more education and lower for those with narrow job-specific skills (Markey and Parks, 1989). Rosenfeld (1978) also asserts that formal credentials are more important than employment experience in explaining women’s status gains. Nonetheless, most of the research on work and occupations treats education and age as control variables rather than as key determinants of occupational trajectories. Consequently, sociologists have paid little attention to the significance of different stages of individual work experiences for structuring careers (Abbott, 1993).

From a macro perspective, occupational transitions are the mechanisms that produce changes in occupational profiles among demographic groups; from a micro perspective occupational transitions are the engine behind individual occupational trajectories over time. Because work transitions are an important mechanism to optimize worker-job matches, differences in the number of occupational transitions, particularly during the career formation stages, imply unequal opportunities to enhance market options at later ages. However, above and beyond the amount and timing of occupational mobility, group disparities in *patterns* of occupational change, should portray different career lines, particularly among women with varying levels of education (Spilerman, 1977).

Occupational change and career lines

Aggregate occupational mobility derives from sequences of occupational transitions that define career lines or job trajectories at the individual level (Spilerman, 1977). While there is a substantial literature about the structure and rate of occupational mobility over time and among demographic groups, there are immense gaps in the literature about career trajectories. Status attainment research produced a plethora of studies about occupational mobility (both upward and downward), much of it based on Duncan's SEI (for example, Sewell, Hauser and Wolf, 1980; Featherman and Hauser, 1976a;b; Rosenfeld, 1978; 1979; 1980), but relatively little about women's occupational trajectories. Rather, studies of women's occupational positions tend to focus on segregation and gender disparities.

Ethnographic studies of occupational careers generally consist of case studies of specific career lines or very few occupations. Abbott's (1993) meta-analysis of the work

and occupation literature (see also Spilerman for literature review) reports that about one-third of articles focus on a limited group of workers; ten percent are concerned with a general category, like white or blue collar jobs or professionals, and an additional quarter address a particular type of occupation. However, neither macro nor micro-level approaches to occupational transitions provide insights about the transitions that produce career lines. Conceivably, this reflects the analytical challenge of aggregating individual histories over more than 300 occupations across a protracted period of time into coherent sequences – if in fact such coherent sequences exist. Nonetheless, it is the area of research with great potential payoff because an understanding of career lines promises to explain disparities in employment prospects and life chances of individuals (Spilerman, 1977; Treiman, 1985).

Spilerman defines a career line as a collection of jobs in which there is a high probability of movement from one position to another. He specifies three career trajectory categories by defining the pattern (or lack of it) of occupational change. An *orderly* career line emerges when the movement from one occupation to another is predominantly in one direction; when older persons tend to be found in each succeeding position; and when there is an improvement in earnings along the sequence of occupations. A *chaotic* career line is defined by the absence of these orderly progressions in direction, in age, and in remuneration. The third trajectory corresponds to *craft/professional* career lines, which are characterized by low probabilities of occupational change over the life cycle because of the unique skills required for entry to the profession.

There is very little empirical evidence on the career line structure of the labor force, and what does exist focuses on men. Wilensky (1961) finds that among the 678 men in his sample, only one-third have work histories that can be described as orderly. Hodge (1966), who used a sample of men and women from the Six City Study of Labor Mobility 1940-50, also concludes that the notion of an orderly and consistent career applies to only a minor fraction of the workforce (see Palmer, 1954). Although Hodge's sample included both men and women, the latter are underrepresented. Palmer (1954) reports that most of their findings concern the work experience of men because of women's lower labor force participation rates. Furthermore, women's higher labor force instability made it even more difficult for researchers to assess their work histories. Consequently, even less is known about women's career lines.

Rosenfeld (1979), who describes women's occupational careers by depicting upward/downward mobility based on Duncan's SEI, reports that women's profiles are based on incomplete occupational histories because of their labor force intermittency. The women in her sample experienced considerable occupational mobility, but "much of this mobility is the result of including "no employment" as a possible destination" (p.291). She reports that 40-60% of white women are destined to this non-occupational category. The alternative – that of focusing only on women with greater commitment to the labor force – creates serious biases in representing women's occupational trajectories. Specifically, women who are employed during all years covered in her sample are more likely to acquire college education and to be married; less likely to work in service jobs; and are more likely to be professionals, clerical or operative compared to the general population of female workers (Rosenfeld, 1980)

A strong force structuring women's career lines is their family formation process and its associated responsibilities. However, McRae (1991) finds that the large majority of women who return to work after childbirth go to the same occupational group.² Rosenfeld (1978) reports that the effect of education on occupational status attainment was not altered by adding family responsibility variables into a multivariate model, but this strategy can not address the counterfactual, namely whether their mobility would have been higher in the absence of family responsibilities. What is more important for women's advancement in the occupational hierarchy is the proportion of their work life spent in the labor market (Rosenfeld, 1978). These insights from prior studies provide clues about the critical correlates of occupational careers, but they have not been successfully integrated into either a description or explanatory framework.

Although a vast empirical literature shows that educational attainment influences early employment (Arum and Hout, 1998), there is less evidence about the long-term effects of education on occupational trajectories. The wage returns to education increase (at a decreasing rate) over the life course, but whether a similar pattern obtains for occupational careers is an open question. Arum and Hout (1998) suggest that the educational advantages of university graduates accrue later in their career, when promotion to management differentiates workers within the same initial occupational group (Wright, Baxter, and Birkelund, 1995; Althausen, 1989). A comparison of the occupational trajectories of women with different educational levels should prove instructive in this regard.

² Of course, is not to say that their probability of re-employment was unaffected.

Summary

To recapitulate, we know a little about the timing and frequency of young women's occupational changes, but virtually nothing about the structure of women's career lines. In this initial foray, we unfold women's occupational careers beginning with their first occupation through all stages of career formation until they reach mature adulthood. Given the parity of prior empirical work on occupational trajectories, and the complex nature of women's occupational careers, we advance over prior attempts to characterize women's work careers by including women with different labor force patterns: those with very little labor force experience throughout adolescence and young adulthood, as well as women with high levels of labor force attachment. Our strategy avoids the selection bias usually associated with studies of women's occupational attainment that excludes women with intermittent work careers.

In order to accommodate women's labor force intermittency, we use a person-month metric to gauge occupational mobility. We first compute the age-specific distribution of person months across all occupations. Subsequently we assess the timing and frequency of young women's monthly transitions among occupations. Finally, we construct "career trees" for the most frequent occupational career paths (by entry portal) among women of varying education levels.

Data

We analyze the National Longitudinal Survey of Youth (NLSY), a national probability sample of 12,686 individuals ages 14-21 as of January 1, 1979, who were re-interviewed annually until 1994. We restricted our sample to women who were not enlisted in the

military as of 1979 and who were ages 13-16 as of 1978 to minimize left censoring of occupational careers. We included the random oversamples of black and Hispanic youth, but excluded the poor white sample, which was not randomly drawn. After reductions for missing data, the sample includes 1,755 young women who had at least 2 months of work experience during the 15 years over which we observed their work careers³. The final sample includes 302 high school dropouts; 674 high school graduates; 438 women with some college education and 341 college graduates. All descriptive statistics are weighted to the population.

We use the NLSY Work History file containing weekly employment status for each respondent to construct a monthly history of primary employment status based on the job in which respondents worked the most hours per month.⁴ That respondents average 200 person-months in their work history records enables us to track more precisely *all* occupations and occupational transitions from ages 16 to 30. A person-month work history is an appropriate strategy for portraying women's occupational profiles because large numbers experience labor force instability over their careers (Alon, et al., 2000). This is especially critical for describing adolescents' and young adults' employment experience, whose labor market behavior is characterized by high labor force instability, i.e. temporary employment, and high job turnover rates. Furthermore, a person-month metric yields more precise estimates of time spent in each occupation.

³ Two months of work experience are the minimum needed to be assigned an occupation and experience the risk of a transition.

⁴ The NLSY provides detailed information only up to 5 jobs per year.

Therefore, for the purpose of describing women's occupational profiles and occupational changes, we use the rich information available on the person-months level ⁵.

The NLSY uses the 1970 3-digit occupational classification throughout the survey. Initially we transform the 3-digit 1970 codes into corresponding 3-digit 1980 codes (U.S. Bureau of Census, 1988), and then aggregate them into 50 CPS 2-digit codes based on the 1980 occupational classification (CPS Utilities User's Manual, 1995). This procedure enables us to portray women's occupational careers in terms of the occupational classification closest to the time of the survey.

Occupational Profiles

We begin by portraying young women's occupational profiles to identify the aggregate changes in their occupational placement over the early life course. Table 1 presents women's person-month occupational distribution between ages 16 and 30 based on the 2-digit 1980 codes. All occupation categories that represent more than 5 percent of person-months in each age year are highlighted to more easily identify those where women cluster.

The most salient (although not surprising) result is the occupational segregation that begins early in women's life course. Between ages 16 and 30, only four to six of occupational categories account for at least five percent of women's person-months at work. However there is a major change in the occupational map over this life course period. Food service and private household service occupations that engage large shares of adolescent women almost disappear from women's occupational map by age 30. Sales

⁵ However, owing to the pervasiveness of occupational segregation, distributions based on annual measures yield similar inferences. Results are available from authors.

occupations, which account for more than 29 percent of adolescent person-months, diminish slightly, but do not totally disappear from adult women's occupational profiles. Young adult women remain segregated in sales and food service occupations, but also hold clerical and administrative support occupations (i.e., "pink" collar jobs). Beyond adolescence (age 20 and higher), women's presence in managerial jobs rises from 5 percent of all person-months spent working at age 20 to about 13 percent of all working person-months at age 30. Other categories that become salient in young adult women's occupational profiles are teaching and financial records processing occupations. Despite the growth of jobs in computing and information services during the 1980's and 1990's, women's presence in them never exceeds 1 percent of person months at any give age.

(Table 1 about here)

Because access to some occupations depends on obtaining requisite skill and training, we disaggregated the age specific person-year distribution into four educational groups: high school dropouts (Table 1a); high school graduates (Table 1b); those with some college education (Table 1c) and college graduates (Table 1d). For simplicity, we record only occupation categories that comprise more than 3 percent of women's person-months at a given age and for ease of interpretation, highlight categories that exceed 5 percent of the age-specific person-months.

Tables 1a to 1d show that occupational stratification begins during early adolescence and widens over the life course as some women prolong their educational investments while others truncate their educational careers. High school dropouts are more likely to be in private household service occupations between ages 16-17, and they are less likely to work in sales occupations compared to women who obtain more

education. As the work careers of high school dropouts unfold, they persist in sales and food service occupations to a greater extent than women with more education. At age 30, high school dropouts allocate 13 percent of their employed person-months to sales occupations compared to 8 percent of high school graduates, 6 percent of women with some college, and only 4 percent of college graduates. High school dropouts also work in lower manual occupations throughout their occupational careers, such as machine operators and tenders; fabricators, assemblers and hand workers; and handlers, equipment cleaners and helpers.

(Tables 1a-1d about here)

All four educational groups face occupational segregation, but in different parts of the occupational structure. High school-educated women are segregated in manual and non-manual low status occupations, while college-educated women are concentrated in managerial and professional occupations that generally offer better employment conditions and compensation. Nonetheless, the major difference among the educational groups is the change in occupational profiles over the early life course. Whereas the occupational distribution of high school dropouts is relatively stable from ages 16 and 30, that of college graduates witnesses dramatic changes, as they exit the low-status, entry-level occupations and enter professional and managerial occupations. By age 30, college graduates allocate 20 percent of their person months to managerial and related occupations; 16 percent to teaching, and about 24 percent to miscellaneous professions, including accountants and auditors (6%), health assessors (7%), and various specialty occupations (10%).

The profiles of high school dropouts and college graduates set the outer bounds for stability and change in occupational careers. The occupational profiles of high school graduates and women with some college education fall between these extremes both in the nature of occupations held and the amount of change experienced over the life course. A status hierarchy among the educational groups is evident at very early ages, suggesting a strong selection into occupational strata. High school graduates evince a superior occupational profile in comparison to dropouts, on average, and women with some college experience achieve an inferior occupational profile relative to college graduates. Partly, these differences arise from a meritocratic selection scheme that utilizes formal credentials as criteria to enter some high status occupations. However, those apparent differences among educational groups probably also reflect an early sorting process as well. In other words, the distinctive occupational careers of women with differing educational investments most likely reflect pre-existing differences that sort women into different human capital investment profiles (Hotz et al., 1999; Alon, Donahoe and Tienda, 2000).

The disparities in occupational profiles depicted in Tables 1a to 1d indicate appreciable differences both in the amount and in the pattern of occupational change among educational groups. Although the occupational profile of college-educated women changes dramatically between ages 16 to 30 while that of high school dropouts does not, it is conceivable that both groups experience similar numbers of occupational transitions. The diverse occupational profiles can also emerge because of different patterns of occupational mobility, that is, different career trees. We turn to these issues next.

The Timing and Frequency of Occupational Changes

To represent occupational changes we record all months in which occupational changes occur and express transition months, as a share of the total number of months women are at risk of experiencing a transition. We consider women to be “at risk” of an occupational change if they were employed at least 1 months in each age year.⁶ For analysis purposes we compare the share of transition months based on the 3-digit 1970 classification and the 2-digit 1980 classification. This comparison evaluates the amount of occupational transitions *within* 2-digit occupational categories (i.e. on a 3-digit level) to that *between* categories (i.e. on a 2-digit level) for each age-year.

Table 2 depicts the frequency and timing of occupational transitions from ages 16 to 30. By definition the number of occupational changes will be higher when a 3-digit rather than a 2-digit occupational scheme is used. The ratio between those 2 metrics reveals that, until age 18, women experience slightly more 3-digit occupational changes than captured by the 2-digit classification relative to older women. However, the core substantive issue is whether the conclusions based on either metric differ. Because the pattern depicted by both classifications is virtually identical, we focus hereafter on the 2-digit classification. This has the advantage of parsimony while not jeopardizing substance.

(Table 2 about here)

⁶ This is a way of specifying “exposure”. Women with zero months of employment in each age-year are not at risk of occupational change and therefore are deleted from the risk set for that specific year. If, however, they have employment activity in another year, they are included in the analysis for that age-year. This tactic set the minimum criteria for analyzing women’s occupational changes while maximizing flexibility in accommodating variation in labor force attachment.

The frequency of transitions rises after age 16, when 1.3 percent of all person months recorded a transition, and peaks at ages 19-22, when more than 6 percent of all person months involved an occupational transition. By age 30, only 4 percent of working women's person months involved an occupational transition. These results are consistent with prior work showing that most employment transitions occur at younger ages (Alon and Tienda, 2000; Toppel and Ward, 1992; Klerman and Karoly, 1994).

Table 3 presents information on the frequency and timing of occupational transitions by age for women at risk of a change. The left section of the table represents the number of occupational transitions in a given age year. Except for ages 19-22, the modal number of transitions in each year is zero, but the share of women making at least one transition rises up to age 20 and declines after age 22. Between ages 19 and 22, 44 percent of women experience one transition in each year, and 17 percent experience 2 or more transitions. These figures are higher than those reported by Markey and Parks (1987), suggesting that measuring occupational change using annual rather than monthly periods underestimates mobility by about 35%.⁷ It also indicates that the conventional age aggregation (16-19; 20-24) used by Markey and Parks blends periods of greater and lesser occupational mobility, thus blurring the timing of greatest flux.

(Table 3 about here)

The right section of Table 3 presents the cumulative number of occupational transitions experienced over the early life course. By age 18, nearly half of all women does not experience a single occupational transition. Yet, by age 21, about one-in-three

⁷ Markey and Parks report that the average rate of changing occupations for women aged 20-24 in 1980-81 (that approximately correspond to our sample time frame) is about 23%. We find that 58% of women, on the average, in that age frame, experience at least one annual transition.

women experience 1-2 transitions; an additional 30 percent experience 3-4 transitions, and 25 percent experience 5 or more transitions. Up to age 27, one in four women accumulated less than 4 transitions; 22 percent accumulated 5 to 6 transitions, and about half of all women experienced 7 or more occupational transitions. By age 30, over one-in-three women experience 6 or less transitions, and 63 percent accumulated 7 or more transitions.

Differences in the timing and frequency of occupational transitions among women with different levels of education are striking, as Table 2 shows, and especially between college graduates and those with less education. Although the frequency of occupational transitions rises after age 16 for all education groups, occupational transitions of college graduates peak at age 22 when 8.6 percent of their person months involve a shift in occupation compared to 6.4 percent at peak age 20 for women with some college education. Women with no college education experience fewer transitions than their college-educated age counterparts, but these differences disappear after age 24. College-educated women explore occupations commensurate with their newly acquired skills between ages 19 and 22, while they are enrolled in school and around graduation. However, it is the *frequency* rather than the *timing* of occupational change that differentiates college graduates from less educated women. By age 30 college-educated women experienced more occupational transitions than any other education group.

Figure 1 depicts cumulative occupational changes experienced by women according to the four education strata. By age 30 college graduates averaged 9.6 occupational transitions, compared to 8.3 transitions among women with some college; 7.3 for high school graduates, and only 6.1 by high school dropouts. Taken together,

Tables 1, 2, 3 and Figure 1 indicate that occupational profiles and occupational mobility are sharply differentiated by education levels. This is not a novel sociological finding in and of itself; what is new, however, is the evidence we marshal to show that sorting into occupational mobility trajectories begins early in the life course and that it is the *frequency* rather than the *timing* of transitions that drives occupational differentiation by education groups.

All groups experience a considerable number of occupational transitions over their lifetime, but particularly when they are young. However, it is not obvious from the age-specific transition rates whether occupational changes produce churning or occupational mobility. Neither is it obvious whether the occupational transitions produce orderly career lines or chaotic career trajectories. These considerations require more detail about the nature of occupational exchanges, to which we turn next.

(Figure 1 about here)

The Pattern of Occupational Transitions – Career Lines or Random Walks?

Ironically, the complex task of describing women's career lines benefits from occupational segregation. Because women are concentrated in relatively few occupations, we focus on these to depict their career lines. We include most occupations in which women work throughout the life course, including those specific to one or two education strata. Extensive diagnostics revealed four periods of the early life course are germane for depicting occupational careers: late adolescence (16-17), early adulthood (18-21), young adulthood (22-25), and mature adulthood (26-30). These periods correspond roughly with the transition to adulthood which embraces high school

enrollment; the transition from high school to work or college; the transition from college for those who attend; and the establishment of a mature career after age 26, which is close to the standard age marker for adult workers. Because occupational profiles and rates of occupational transitions differ appreciably according to schooling completed, we separately depict the career structure by educational strata.

For this exercise we construct a file that contains one observation from the first month of each age-year, for a total of 16 observations per woman. To create women's career lines, we start with ages 16-17, select the most common occupation categories at those ages, and trace transitions from these origin states to various destinations. We record annual transitions that occurred from age 16 to 17 and from age 17 to 18. In order to avoid small cell sizes, transitions are included in career lines only if (1) the origin state employed at least 5 percent of all women, and (2) more than 10 percent of women in that state choose the same destination. We proceed to subsequent ages (18-21) following the same strategy, recording transitions between ages 18-19; 19-20; 20-21 and 21-22 that meet the cell size criteria. As such, this approach identifies major career lines rather than portray the full complexity of occupational transitions.

Figure 2a depicts **high school dropout's** career lines, and Figure 2b portrays persistence in each state. Combined these figures provide a balanced picture of the "movers" and "stayers" in each occupation category. The width of each line corresponds to the percentage of women in a particular path. At ages 16-17, women who did not graduate from high school are concentrated in sales, administrative support, private household and food service occupations. Their main "career lines" involve moves from sales and administrative support to food service, and private household service to sales.

Women in other unspecified occupations also move to food service occupations. Overall, high school dropouts experience relatively high stability in administrative support occupations – primarily low skill jobs – as well as in private household and food services.

(Figures 2a and 2b about here)

At ages 18-21, transitions from food services to sales occupations continue, but there is also movement in the opposite direction, which suggests that transitions produce churning rather than mobility. Additional occupational flows involve shifts from private household services and machine operation to administrative support, and shifts from administrative support to sales, and from “other” occupations into machine operations. At this life cycle stage there is high occupational stability for machine operators and administrative support workers, possibly due to benefits that accrue from job tenure.

During young adulthood, women with less than high school do not enter new occupational arenas, but rather continue shifts from food services and administrative support to sales and vice versa. . Machine operators move to administrative support occupations and those in the residual occupational category transit to machine operations. Relatively few women move from food services and sales occupations to management/administration occupations but there are also moves in the opposite direction.

As mature adults (26-30), women who did not complete high school move from administrative support to sales; from food services to personal services; and from personal services to private household services. As opposed to younger dropouts, most mature women experience few occupational transitions, evident in their high stability in all occupations except administrative support.

On balance, high school dropouts experience a *chaotic* occupational trajectory throughout their work career: they cycle among occupations with no linear progressions.⁸ Spilerman's description is apt (1997:578): "this sort of trajectory can be viewed as an array of activities requiring few special skills that might be obtained through prior employment in their career line, so each job serves, in practice, as an entry portal for new workers". The stability chart emphasizes the dead-end character of these occupations. Women who lack the resources and human capital to transcend the occupations of adolescents become trapped in a flat occupational profile that changes little from age 16 to age 30. Their early occupational transitions do not represent a temporary period of "shopping and thrashing," and later transitions are not part of a career development process that promotes economic mobility.

At the opposite pole are **college graduates** (Figures 3a and 3b). Sales and administrative support occupations are popular destinations for high school students destined to become college graduates. In addition we witness stability in sales and food services. Consequently, during adolescence, women who eventually graduate from college are most highly represented in sales and food service occupations but establish an early presence in administrative support occupations while they are enrolled in school.

(Figures 3a and 3b about here)

During early adulthood, college graduates work in sales, secretarial, administrative support and food service occupations. Generally this life course stage is characterized by high mobility, wherever most "movers" are destined to administrative support

⁸ Although we do not control for all conditions suggested by Spilerman (1977) to determine a career trajectory, we believe these results are clear enough to address whether career lines exist.

occupations. However, the occupational profile of college-educated women is about to change dramatically.

At the peak age for their occupational change, as most occupational changes occur at age 22, Young adults use their new credentials to enter new occupational terrain, as they secure jobs as teachers, professionals and managers. This shift is evident as a small share of women in every occupational category moves to management, which is consistent with within-firm occupational mobility⁹. Moreover, occupational persistence rises for managers, teachers and professionals, as greater numbers remain stable in these higher status occupations.

Entering mature adulthood (26-30), female college graduates have established stable careers as managers, professionals and teachers as well as in administrative support occupations. In addition to their increasing occupational stability in the higher status jobs, transitions to management continue.

Apparently college graduates have two distinct periods in their occupational career: until college graduation their career tree is a *chaotic* trajectory that involves cycling among positions manual and lower non-manual occupations which, most likely are temporary jobs to supplement college expenses. College graduation accelerates the rate of occupational change and two different career trajectories become visible: the first is an *orderly* career line for women who move to managerial positions from different origins. The second trajectory is a *professional* career line involving women who enter the professions and experience a low rate of occupational mobility. This trajectory also includes accountants, women in health assessment occupations, teachers, and women in

⁹ Most transitions to teaching and professions did not exceed 10 percent of women, so they are not evident in figure 3a.

other professions. That these occupations require special credentials and/or licensing provides disincentives to exit, hence the increasing levels of persistence over time.

High school graduates (figures 4a and 4b) experience chaotic occupational trajectories during adolescence, but upon finishing high school they witness a patterned movement to administrative support and secretarial occupations (lower non-manual). This *orderly* career line becomes more defined throughout adulthood, when women from many other occupational categories shift either to administrative support or clerical support occupations. By age 30, 17 percent of high school graduates are channeled into administrative support occupations and 10 percent are employed as secretaries and typists. Figure 4b shows the inertia in these “pink collar” jobs, as the flat bars widen over their life cycle.

(Figures 4a and 4b about here)

Not surprisingly, women with **some college education** (Figures 5a and 5b) share career line features with both college graduates and high school graduates. Partly this is because their prolonged school attendance may restrict their access to some occupations that require full-time effort. However they may also lack the necessary credentials to compete with college graduates in accessing the highest status professional jobs that require special licensing and credentials, except for vocational education tracts. Accordingly, until age 21 women with some college follow similar occupational pathways to college graduates: transitions to secretarial and food service occupations between ages 16-17, and transitions to administrative support occupations between ages 18-21. Thereafter college graduates depart this career line, but women who do not graduate continue moving to administrative support occupations, as do high school

graduates. Like college graduates, women with some post secondary schooling also move into managerial positions, but they differ from college graduates in that they are less likely to enter professions that require degrees. Like high school graduates, 17 percent of women with some post-secondary schooling occupy administrative support occupations at age 30, but like college graduates, 15 percent of them hold managerial positions at this age.

(Figures 5a and 5b about here)

Based on this data, we cannot distinguish the levels of managerial positions held by women with college degrees versus some post secondary education, but it is highly conceivable that women with some college education are concentrated in the lower levels of management, while women with college degrees gain access to the higher status managerial positions. Wentling's (1996) study of women in middle management in Fortune 500 companies reports that in her sample all managers but one held a bachelor's degree and 60 percent earned a master's degree. Moreover, all women in managerial positions reported that at least a bachelor's degree is necessary to attain a position in middle management. Similarly, Spilerman and Lunde (1991) find that MA degree increases one's promotion prospects to management.

Discussion

Occupational exchanges are a pervasive feature of the U.S. labor market as millions of persons change their occupation in any given year; the majority do so voluntarily, seeking better pay, job advancement, or improved working conditions (Treiman, 1985; Markey and Parks, 1989; Shaw, 1987). Yet prior empirical research

never really confirmed whether and to what extent transitions involve a systematic sequence among successive jobs, or if they are random walks among unordered alternatives. Our examination of the occupational careers of young women based on “career trees” of the most frequent occupational paths reveals systematic occupational trajectories with varying degree of orderliness. We discerned four modal career types that correspond to the four broad educational strata.

High school dropouts experience a chaotic career trajectory from adolescence to mature adulthood, while most college graduates, experience either an orderly trajectory to management occupations or a professional career line after graduation. High school graduates, also face an orderly career line after completing school, but mainly to “pink collar” jobs, particularly administrative support and clerical occupations. Women with some college education share their career line features with both college and high school graduates. They move to administrative support occupations as do high school graduates, but also experience some movement to managerial positions like college graduates.

It is not new that educational attainment, but especially completion of high school and college credentials, has a major role in explaining women’s occupational pathways. However, while most of the research on work and occupations treats education as a control or predictor variable, our results suggest that educational investments shape and forge women’s entire occupational trajectories. Credentials help college graduates to re-route from a chaotic career line or from an orderly career line in “pink collar” occupations and to enter professional and managerial occupational terrain. The transferability of their educational credentials makes this a rapid transformation. In a period of four years (18-22), college graduates dramatically alter their occupational

profiles. Accordingly, education not only serves as an entry ticket for high status occupations, but also as the accelerator to change. Women with less education not only lack the credentials needed to enter the more lucrative occupations, but they also lack the accelerator to fuel the process. Perceiving occupational attainment as a return to education, our results suggest that the returns are high and immediate: the more education a woman gets, the higher the likelihood she will shop for occupations that will maximize lifetime employment prospects.

In accord with the vast occupational segregation literature, we find that all four educational groups experience restricted access to the full range of occupations, but they are concentrated in different parts of the occupational structure. High school-educated women are segregated in manual and lower non-manual low status occupations, while college-educated women are comfortably segregated in the “Velvet Getto” (Ghiloni, 1987; Kanter, 1977), i.e. in managerial and professional occupations that generally offer better employment conditions and compensation. Nonetheless, despite these better prospects for college educated women, especially college graduates, they probably face fewer advancement prospects than men because concentration in feminine occupations decreases their chances for authority positions (Wolf and Fligstein, 1979; Bielby and Baron, 1986; Kanter, 1977). Our approach that focuses on women’s most frequent career paths neglects career lines of women in non-traditional occupations, which may represent women’s penetration into new arenas (Waite and Berryman, 1986). These women not only are located in unconventional occupations, but they also may experience different career lines. This is an empirical question that warrants much further research.

Sociologists have also paid little attention to the significance of different stages of individual work experiences for structuring careers (Abbott, 1993). Using a life course perspective is instructive in showing that occupational careers are age variant, as each stage of career formation produces different career trajectories. A life course perspective helps differentiate transitions that produce upward mobility for some and stagnation for others.

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Table 1
Age-Specific Occupational Distribution of Women Person-Months (Weighted)

Occupations	Code ¹	SEI ²	Age															
			16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Administrators and officials, public	1	64	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.5	0.5	0.6	0.5	0.7	0.4
Managers and administrators, except public	3	65	0.4	1.0	2.5	4.3	5.5	5.8	5.8	6.2	10.0	10.3	11.4	11.4	10.9	11.3	10.8	12.6
Management related occupations	5	68	0.1	0.0	0.1	0.4	0.2	0.3	0.3	0.6	1.3	1.5	1.8	1.8	1.3	1.3	1.5	1.9
Accountants and auditors	6	77	0.0	0.1	0.2	0.8	0.6	0.9	0.9	2.2	2.7	2.7	2.6	2.6	2.3	2.7	2.8	2.7
Engineers, architects, and surveyors	7	85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Engineers	8	85	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.3	0.2	0.2	0.2	0.3	0.3	0.6	0.4
Natural scientists and mathematicians	9	75	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.4
Computer systems analysts and scientists	10	65	0.0	0.1	0.0	0.2	0.3	0.5	0.8	0.8	0.9	0.9	1.0	1.0	0.5	0.7	0.6	1.0
Health diagnosing occupations	11	70	0.0	0.0	0.1	0.0	0.1	0.0	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2
Physicians and dentists	12	94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.5
Health assessment and treating occupations	13	55	0.0	0.0	0.2	0.4	0.4	0.6	0.6	1.7	2.5	2.7	3.1	3.1	3.6	3.3	3.7	3.7
Teachers, librarians, and counselors	14	80	0.0	0.0	0.2	0.6	0.6	0.5	0.8	0.8	0.6	0.6	0.6	0.5	0.5	0.8	0.7	0.6
Teachers, except postsecondary	15	72	0.6	0.2	0.2	0.2	0.5	1.0	2.0	2.0	3.8	4.0	4.4	4.4	4.4	4.9	5.2	5.3
Other professional specialty occupations	16	67	1.4	0.9	1.1	1.0	1.5	1.8	2.9	2.9	3.0	2.6	3.2	3.5	3.5	4.0	4.8	3.8
Health technologists and technicians	17	46	0.2	0.2	0.4	0.7	1.2	1.9	2.8	2.8	2.6	2.9	2.6	2.5	2.5	3.0	3.0	2.9
Engineering and science technicians	18	60	0.2	0.3	0.2	0.5	0.3	0.6	1.0	1.0	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.9
Technicians, except health, engineering, science	19	64	0.0	0.0	0.2	0.2	0.2	0.4	1.0	1.0	1.5	1.3	1.1	1.2	1.2	1.3	1.2	0.5
Sales reps, commodities and finance	21	68	0.0	0.0	0.0	0.2	0.2	0.5	0.9	1.2	1.2	1.7	1.7	1.6	1.6	1.5	1.4	1.3
Other sales occupations	22	38	19.1	23.5	22.1	17.7	15.6	12.9	10.9	10.9	9.6	8.6	8.2	8.1	8.1	7.0	6.0	6.7
Computer equipment operators	23	45	0.2	0.7	0.9	1.3	1.6	1.4	1.6	1.6	1.4	1.5	2.2	2.4	2.4	1.7	1.5	1.4
Secretaries, stenographers, and typists	24	61	3.7	5.9	7.8	8.5	11.4	13.2	12.1	10.1	9.7	9.7	8.7	9.0	9.0	9.1	7.8	7.2
Financial records processing occupations	25	46	1.2	2.2	3.4	3.4	4.0	4.1	3.2	4.1	4.2	4.2	5.1	5.0	4.6	4.6	4.9	5.5
Other administrative support occupations	26	45	9.2	12.4	16.2	17.2	16.6	16.6	16.6	16.6	15.4	15.7	14.9	14.5	14.5	14.7	14.8	13.9
Private household service occupations	27	9	13.3	6.5	4.0	3.3	2.9	2.7	2.1	2.1	1.7	1.9	1.7	1.5	1.5	0.9	0.9	1.5
Protective service occupations	28	28	0.1	0.1	0.3	0.3	0.5	0.6	0.4	0.4	0.5	0.4	0.3	0.5	0.5	0.7	0.8	0.8
Food service occupations	29	14	33.1	26.6	19.4	16.2	12.7	10.7	9.2	9.2	7.0	6.9	5.0	5.1	5.1	4.7	4.2	4.3
Health service occupations	30	32	2.9	5.6	5.1	4.9	5.7	4.6	3.8	3.8	3.9	3.0	3.4	4.0	4.0	3.6	3.7	3.4
Cleaning and building service occupations	31	11	3.1	2.4	2.0	1.4	1.1	1.3	1.0	1.0	1.2	0.7	1.1	0.9	0.8	0.8	1.0	1.2
Personal service occupations	32	23	3.5	3.2	4.0	4.3	3.8	3.7	3.3	3.3	3.2	3.2	3.0	3.7	3.7	4.4	4.5	3.9
Farm operators and managers	33	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Farm occupations, except managerial	34	16	1.5	1.0	0.7	0.8	0.6	0.3	0.2	0.2	0.4	0.4	0.1	0.1	0.1	0.3	0.3	0.5
Related agricultural occupations	35	14	0.9	1.1	0.4	0.3	0.3	0.3	0.7	0.7	0.2	0.3	0.3	0.6	0.6	0.3	0.3	0.3
Forestry and fishing occupations	36	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

continues...

Table 1 (continued)

Occupations	Code ¹	SEI ²	Age																
			16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Mechanics and repairers	37	30	0.0	0.0	0.1	0.0	0.1	0.1	0.3	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.3
Construction trades and extractive occupations	38	26	0.0	0.1	0.1	0.4	0.2	0.2	0.2	0.4	0.2	0.0	0.2	0.0	0.0	0.2	0.2	0.1	0.2
Carpenters	39	25	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.0	0.2
Supervisors, production occupations	40	50	0.1	0.0	0.0	0.1	0.2	0.4	0.2	0.5	0.2	0.4	0.3	0.3	0.7	0.8	0.8	0.6	0.7
Precision metal working occupations	41	39	0.1	0.2	0.3	0.4	0.4	0.2	0.2	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.2
Other precision production occupations	42	29	0.3	0.1	0.2	0.6	0.8	0.7	0.7	0.8	0.8	0.6	0.6	0.4	0.6	0.8	0.8	0.6	0.8
Machine operators and tenders, not precision	43	23	1.1	2.2	3.4	4.2	4.2	4.1	4.0	4.0	3.2	3.4	3.6	3.4	3.1	3.6	2.9	2.9	2.8
Fabricators, assemblers, and hand working	44	18	0.1	0.3	0.8	1.0	1.2	1.2	1.2	0.6	0.9	1.3	1.3	0.8	1.1	1.0	1.1	1.1	1.1
Production inspectors, testers, samplers	45	22	0.2	0.2	0.5	0.9	0.8	1.7	1.4	1.4	1.1	1.2	1.1	1.4	1.5	1.1	1.1	1.1	1.2
Transportation occupations	46	31	0.8	0.5	0.2	0.4	0.2	0.5	0.5	0.5	0.3	0.4	0.8	0.5	0.7	0.6	0.8	0.9	0.9
Material moving equipment operators	47	18	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.2	0.1	0.2	0.2
Construction laborers	48	7	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.0	0.1	0.0	0.0	1.5	0.0	0.1	0.2	0.1	0.1
Freight, stock and material handlers	49	11	1.3	1.4	1.1	0.6	1.0	0.8	0.8	0.8	0.9	0.8	0.3	0.6	0.5	0.5	0.2	0.2	0.3
Other handlers, equipment cleaners, and helpers	50	18	0.5	0.5	1.0	1.3	0.9	0.8	0.8	0.9	0.9	0.9	1.1	1.0	1.1	0.8	0.7	0.7	0.7
Laborers, except construction	51	8	0.6	0.6	0.1	0.5	1.0	0.8	0.8	0.6	0.5	0.5	0.1	0.1	0.2	0.2	0.6	0.4	0.4

¹In the CPS 2 digits classification, occupational category 2 does not exist; categories 3 and 4 are aggregated into category 3; and category 20 is missing because there is no 1970 3-digits occupation that corresponds to that 1980 2-digits category.

²Duncan Socioeconomic Index for 1970 Census Detailed Occupation Codes from Robert M. Hauser and David L. Featherman (1977) The Process of Stratification: Trends and Analyses. New York, NY: Academic Press. P. 319.

Table 2
Age-specific Occupation Transition Months as Shares of Total at Risk Person-Months, by Education

Age	Total N of Person Months in Age	Total N of Person Months in Risk		Transition Person Months			Transition Months as Share of total Person Months: 1980 2-Digit Codes				
		1970 3-Digit Codes	1980 2-Digit Codes	Ratio	1970 3-Digit Codes	1980 2-Digit Codes	HS Dropout	HS Diploma	Some College	College Degree	
16	19843	183	141	.77	1.7	1.3	1.7	1.4	1.2	1.2	
17	22864	688	541	.79	4.4	3.5	2.5	3.4	4.2	3.4	
18	22861	1111	884	.79	6.7	5.3	4.6	5.3	5.8	5.3	
19	22887	1301	1079	.83	7.6	6.3	6.1	6.0	5.7	7.4	
20	22940	1333	1113	.83	7.7	6.4	6.4	5.9	6.4	7.0	
21	22899	1362	1137	.83	7.4	6.3	5.8	5.1	6.2	8.2	
22	22889	1345	1114	.83	7.4	6.2	5.7	5.1	5.5	8.6	
23	22861	1212	994	.82	6.5	5.4	6.0	4.5	5.3	6.4	
24	22943	1138	941	.83	5.9	4.9	5.5	4.6	4.8	5.3	
25	22877	1105	915	.83	5.8	4.9	5.4	4.8	5.3	4.6	
26	22886	1082	901	.83	5.6	4.7	5.6	4.4	4.6	4.8	
27	22885	1067	883	.83	5.6	4.7	5.1	4.5	4.5	4.7	
28	22934	1026	854	.83	5.4	4.5	4.3	4.6	4.5	4.3	
29	22881	893	730	.82	4.8	3.8	4.5	3.3	4.4	3.7	
30	22869	898	728	.81	4.8	3.9	3.5	3.8	4.1	3.9	

Source: NLSY Work History Files

Table 3
Age-Specific Number of Occupational Transitions for Women at Risk of a Transition, N=1755 (Weighted).

Percent at Risk	Number of Occupational Transitions in a Given Age-Year										Accumulation of Occupational Transitions up to Age					
	0	1	2	3	4	0	1-2	3-4	5-6	7-8	9-10	11-12	13+			
16	54.7	86.8	10.4	2.8			91.9	8.1								
17	69.6	63.9	28.1	6.7	1.1	0.1	69.1	28.1	2.6	0.1						
18	76.5	48.0	37.5	11.8	2.4	0.3	45.0	43.4	10.5	1.0	0.1					
19	78.0	39.3	42.7	14.3	3.3	0.3	27.8	43.3	23.8	4.2	0.6	0.2				
20	79.4	37.9	44.6	13.6	3.6	0.2	18.3	38.2	29.3	10.9	2.9	0.2	0.1			
21	81.5	39.4	43.5	13.8	3.0	0.4	12.6	32.3	29.6	17.4	5.6	1.8	0.4	0.2		
22	81.2	39.2	43.9	13.9	2.8	0.3	9.8	24.5	30.1	20.6	10.0	3.3	1.4	0.3		
23	81.9	44.8	42.4	11.0	1.4	0.3	7.5	19.2	27.9	24.5	12.7	4.7	2.7	0.7		
24	83.4	47.1	42.4	9.1	1.4	0.0	6.1	15.7	23.9	25.9	16.5	7.5	3.0	1.5		
25	83.9	47.3	42.8	8.4	1.2	0.3	4.7	13.7	20.7	25.3	17.9	10.6	5.0	2.1		
26	84.1	51.0	38.4	9.5	0.9	0.2	3.9	11.5	17.8	24.9	19.3	12.0	6.6	4.0		
27	82.4	50.0	40.4	9.6	0.8	0.1	3.5	9.8	15.3	22.3	20.5	14.5	8.3	5.7		
28	81.4	50.7	40.4	8.0	0.8	0.1	3.0	9.1	13.4	20.0	20.6	15.1	10.9	7.9		
29	81.0	59.2	32.8	6.8	1.1	0	2.5	8.2	11.8	18.5	20.9	15.1	12.3	10.7		
30	81.0	57.7	35.3	6.1	0.7	0.1	2.1	7.5	10.9	16.9	20.2	15.9	13.2	13.3		

Source: NLSY Work History Files/ 2-Digit 1980 Occupational Codes

Figure 1. Cumulative Occupational change, by Educational Attainment

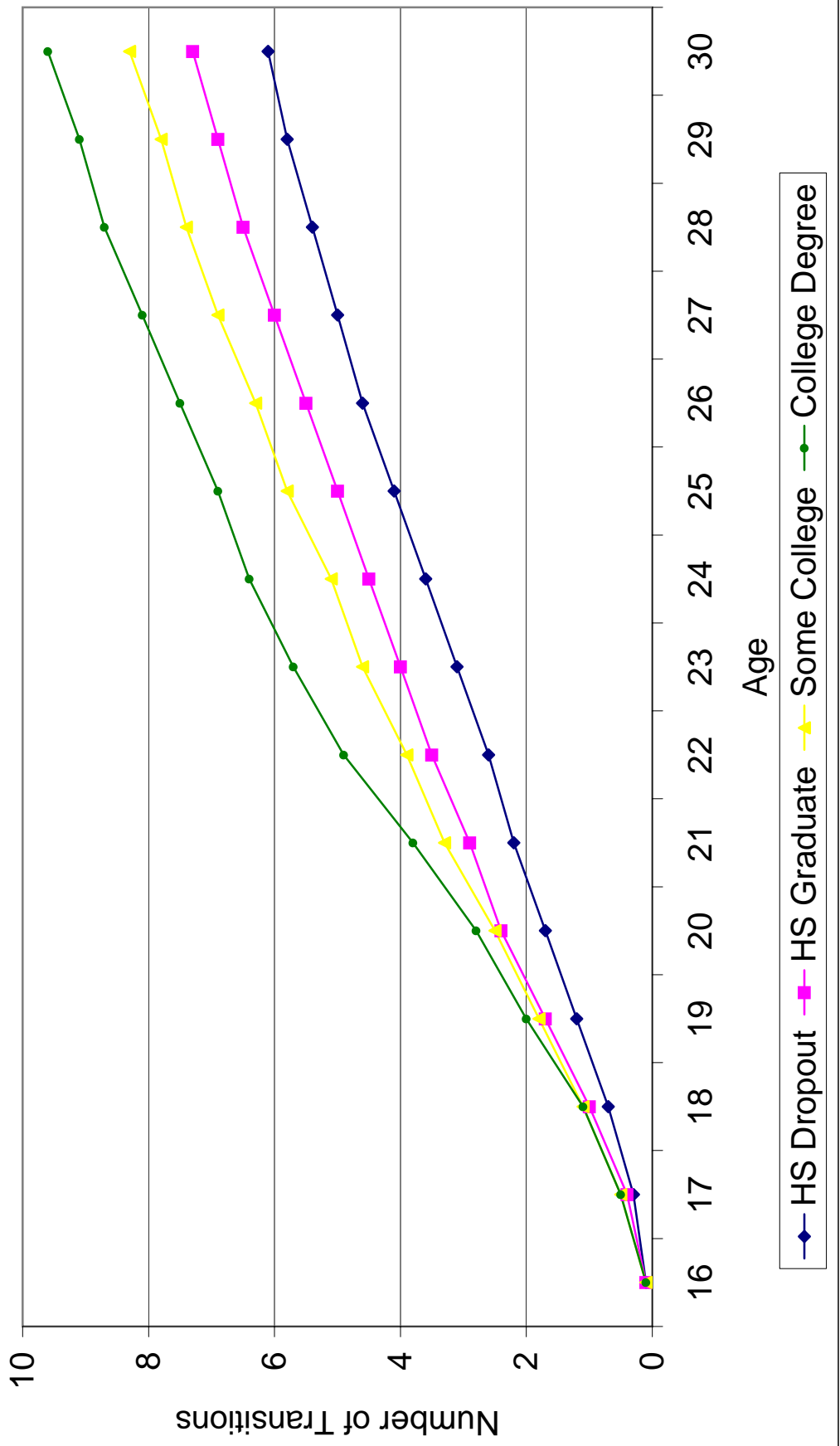


Figure 2a. Annual Occupational Transitions for High School Dropouts (N=302)

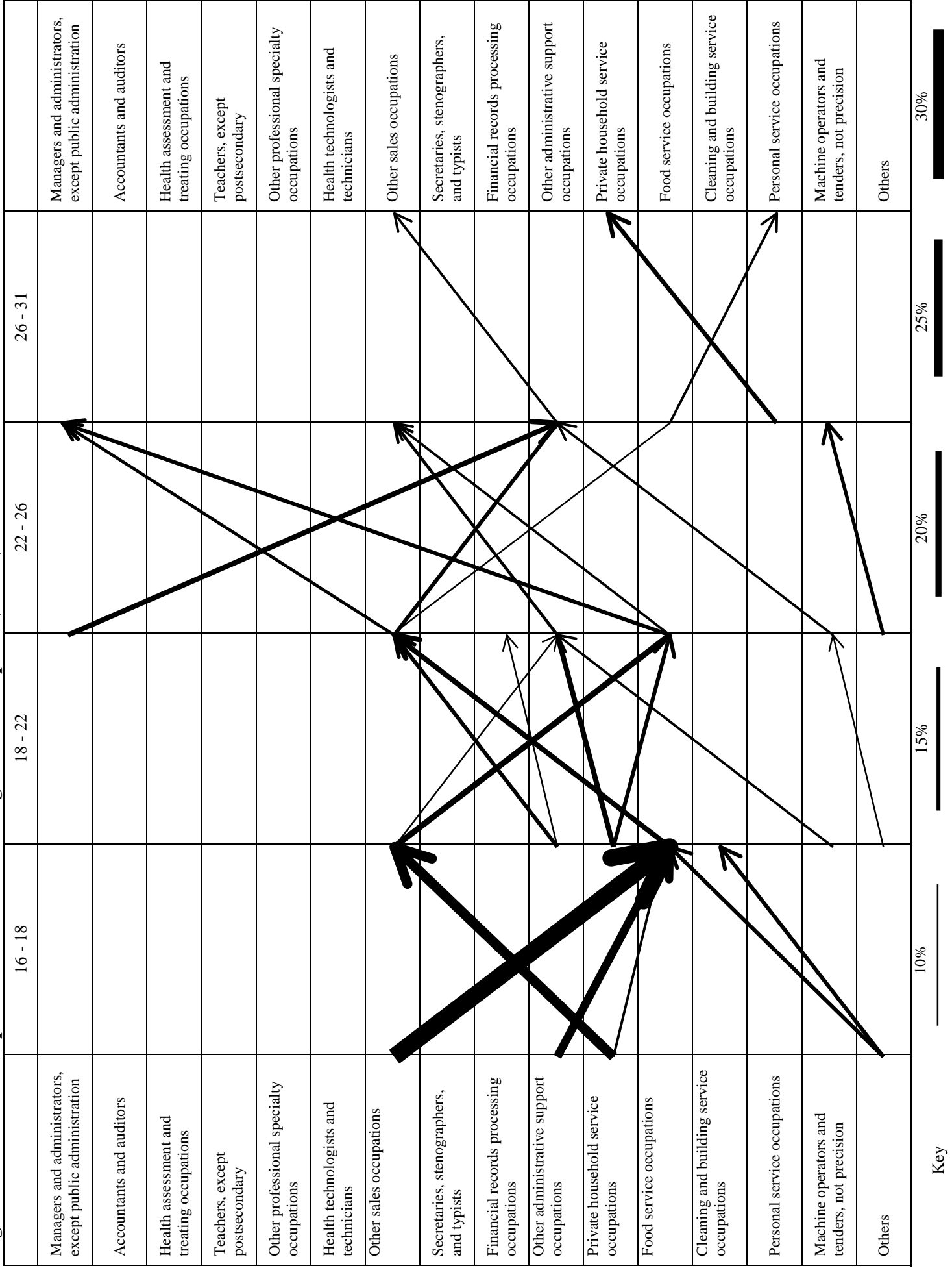


Figure 2b. Annual Occupational Persistence for High School Dropouts (N=302)

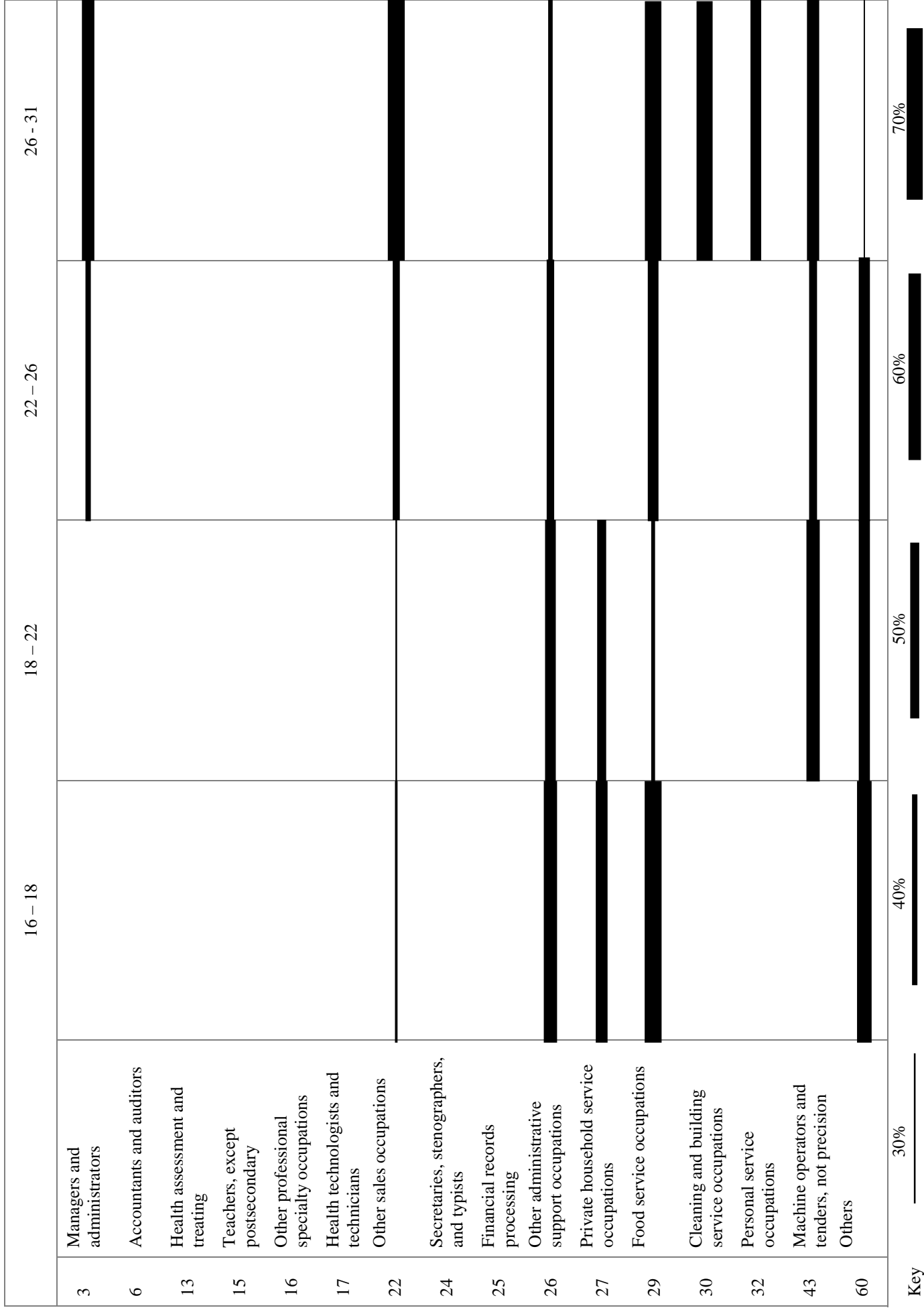


Figure 3a. Annual Occupational Transitions for Women with College Degree (N=341)

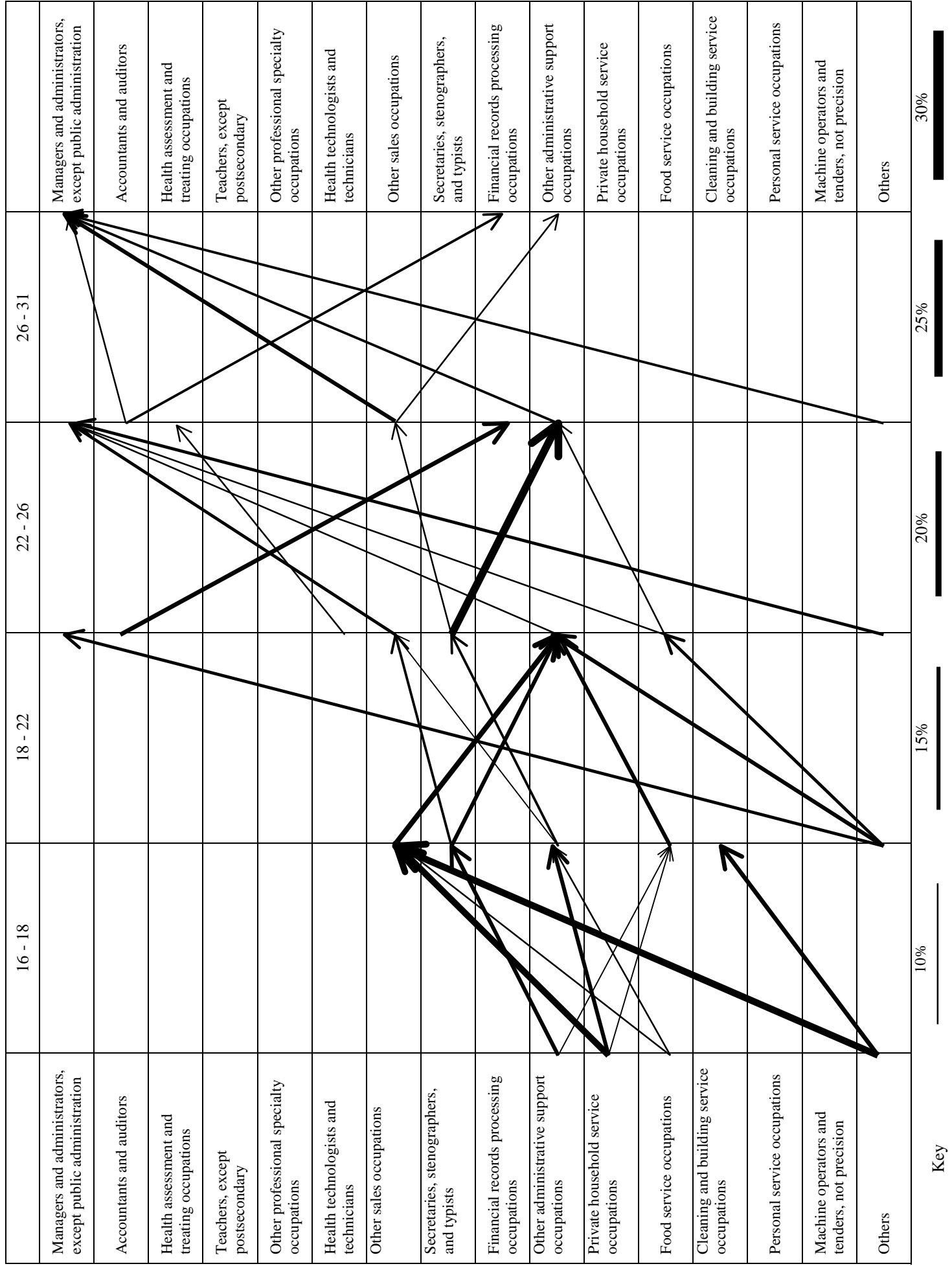
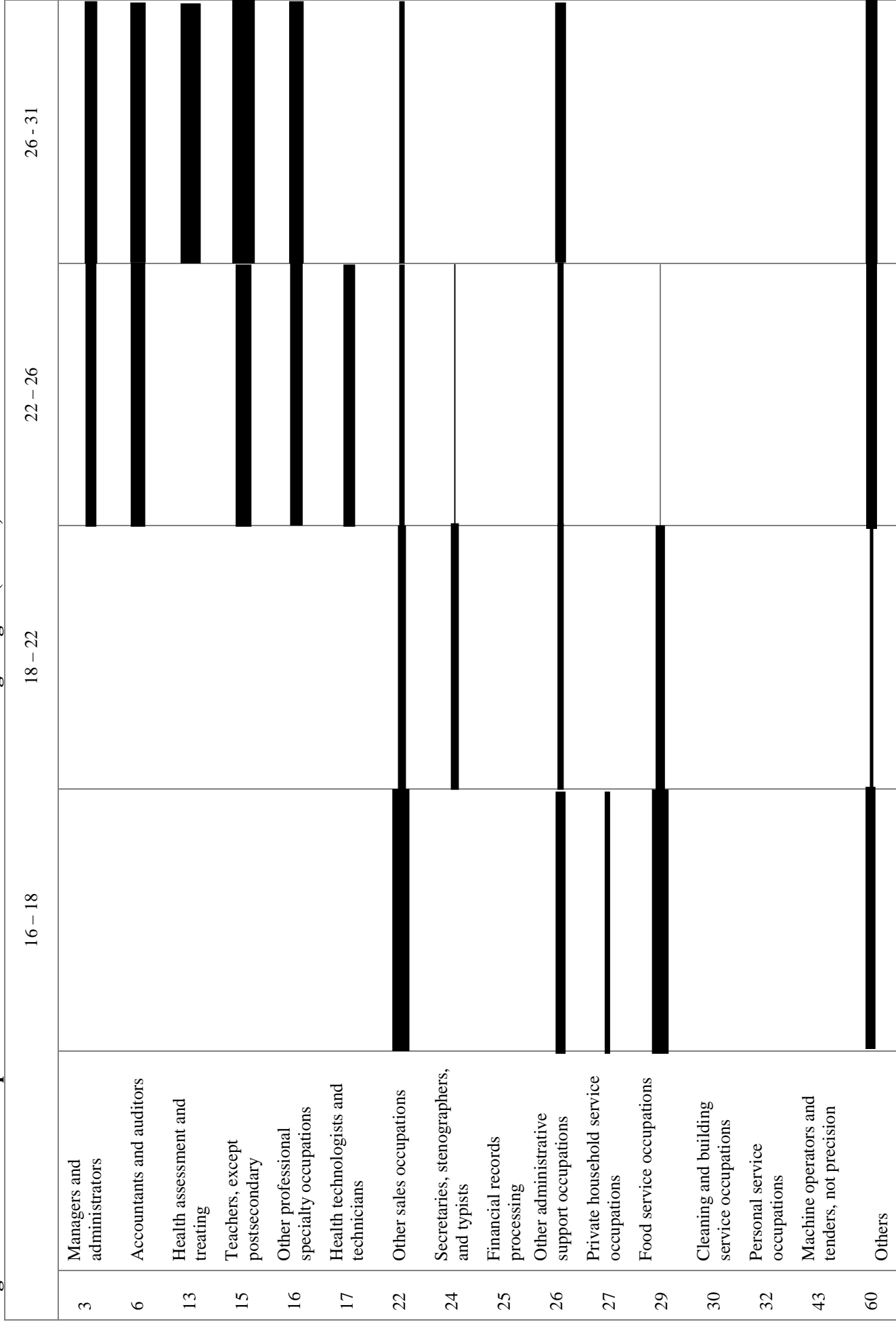


Figure 3b. Annual Occupational Persistence for Women with College Degree (N=341)



Key 30% 40% 50% 60% 70%

Figure 4a. Annual Occupational Transitions for High School Graduates (N=674)

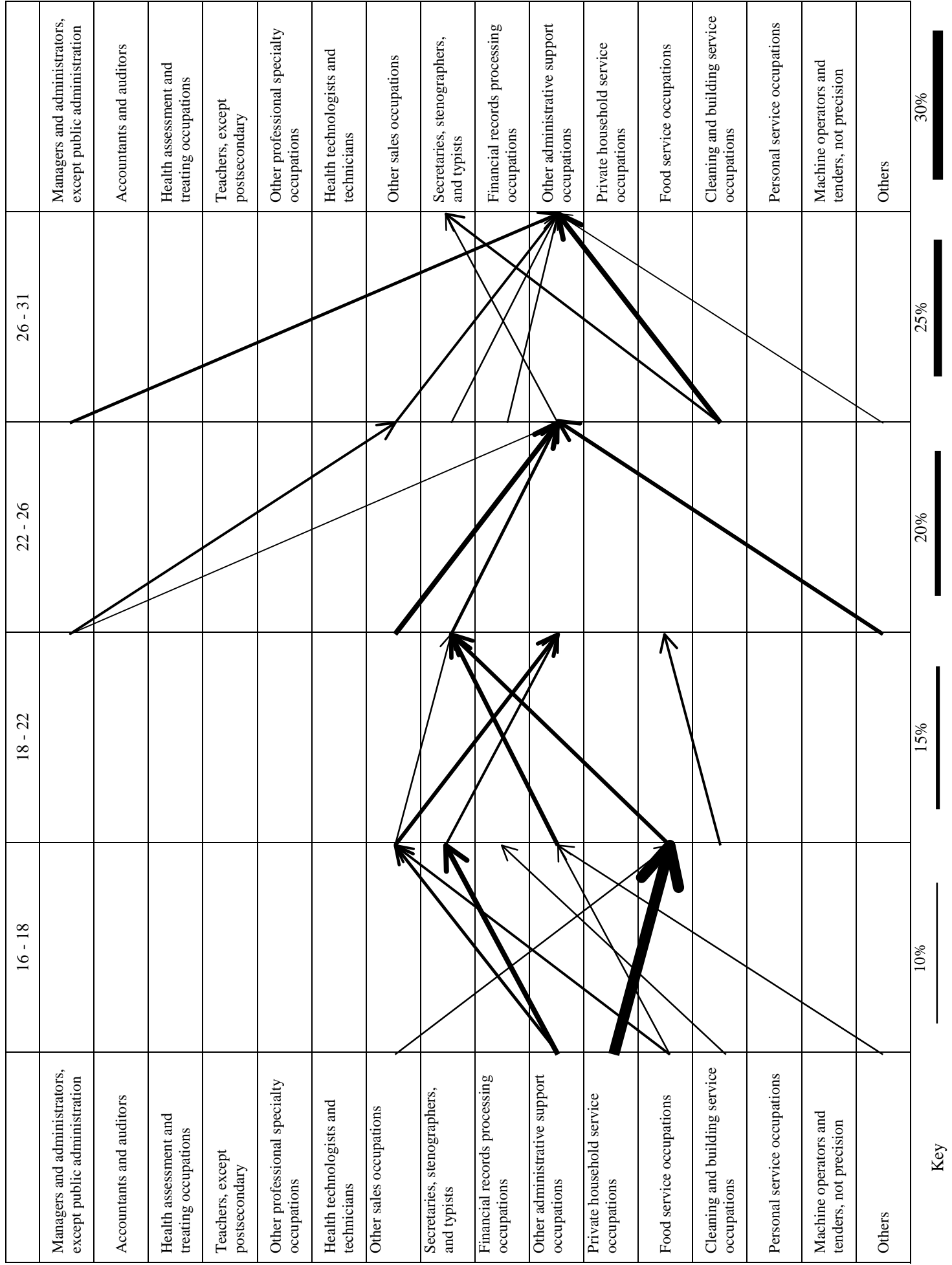


Figure 4b. Annual Occupational Persistence for High School Graduates (N=674)

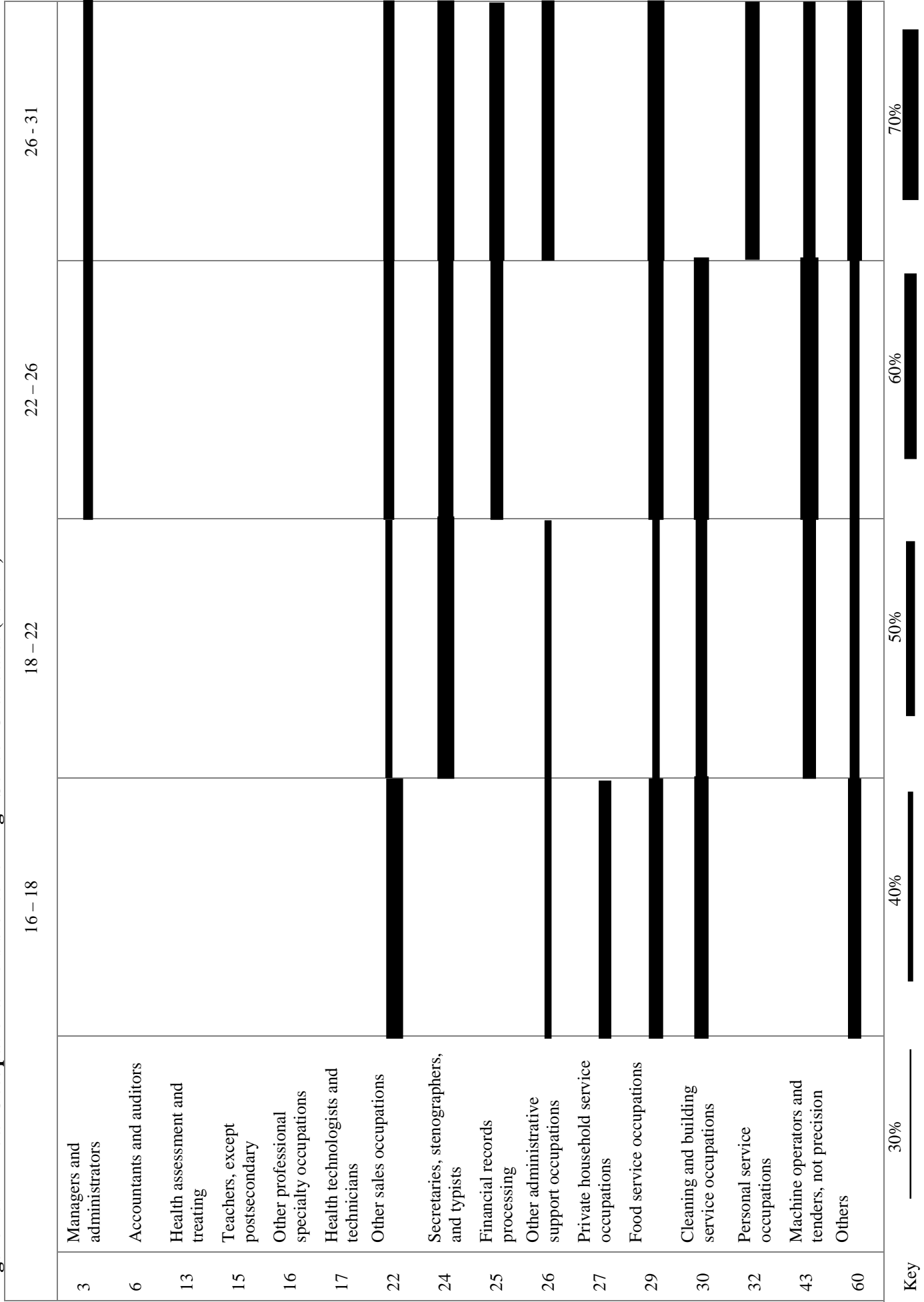


Figure 5a. Annual Occupational Transitions for Women with Some College Education (N=438)

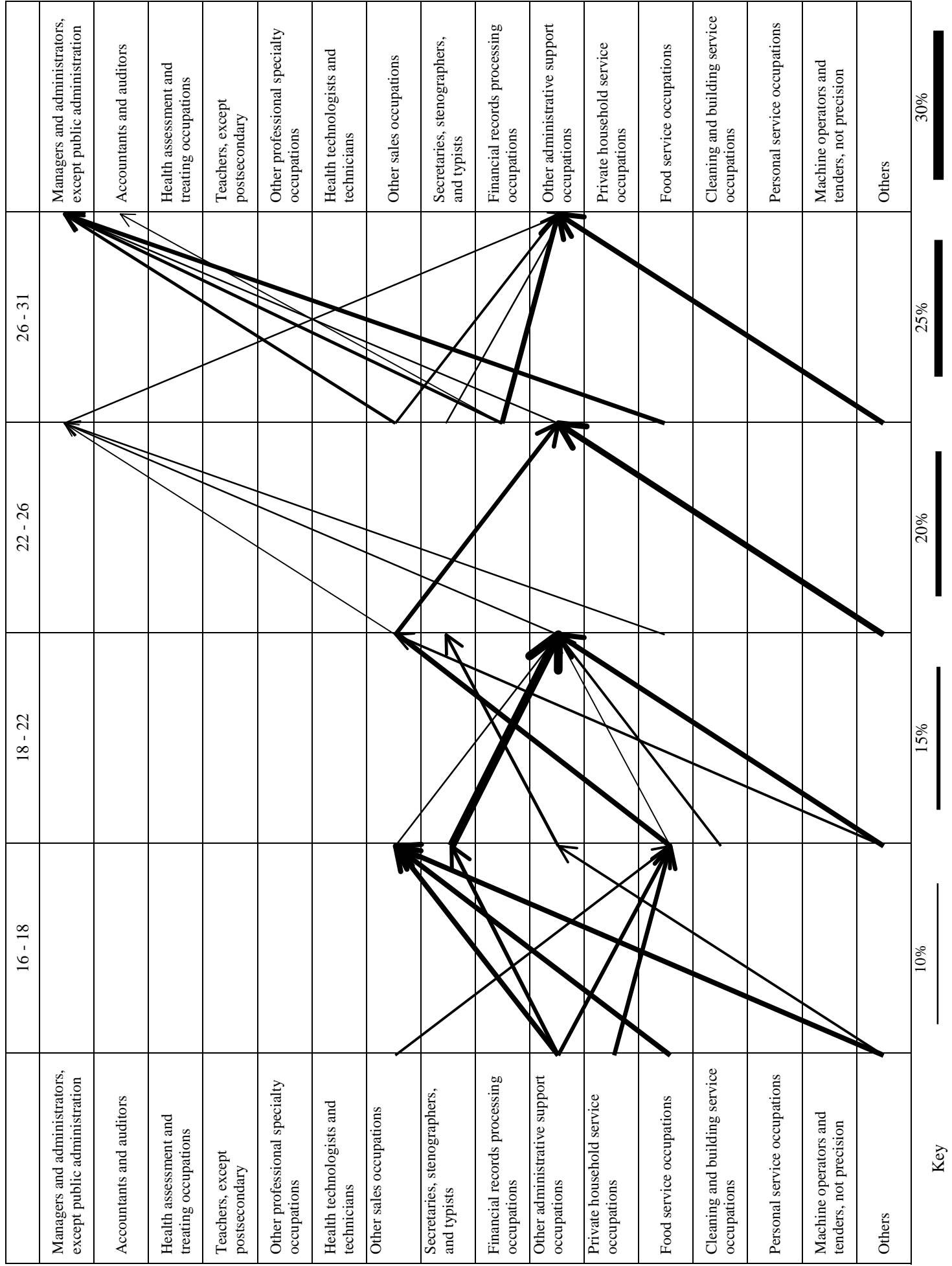


Figure 5b. Annual Occupational Persistence for Women with Some College Education (N=438)

