

**The Characteristics of Career Paths among  
Out-of-School Youth  
From the Center for Employment Training  
Replication Project Sites**

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## 1. Introduction

This paper documents the early career trajectories of economically disadvantaged out-of-school youths who participated in the Center for Employment Training (CET) Replication Project. The project was implemented at twelve sites across the country to replicate the nationally renowned training model of CET in San Jose, California. The CET model is characterized by its provision of employment and training services in a worklike setting, its requirement for intensive (full-time) participation in services, employers' involvement in the design and delivery of training, and no pre-screening of applicants, combined with extensive pre-enrollment orientation. The CET model focuses on job skills development, and does not explicitly provide basic skills or educational training such as basic reading and writing, English as a Second Language (ESL), or GED preparation classes. A random assignment evaluation of the project was conducted to test whether the impacts attributed to the CET model in earlier studies could be replicated in other locations. Discussion of the implementation of the CET Replication Project and the findings on program impacts are detailed in the reports prepared by MDRC and Berkeley Policy Associates.

This paper supplements the impact evaluation by illustrating the career trajectories of the youth during the course of their participation in the study. The primary goal here is to document how the CET study youth have progressed in their vocational development. By doing so, the paper aims to provide additional contextual information for the impact study and to contribute more broadly to the understanding of how disadvantaged out-of-school youth navigate the early years of their careers.

## 2. Data

The data used include two follow-up surveys conducted at approximately 30 and 54 months after random assignment, and baseline data on participant characteristics collected during intake for the study. The study cohort includes both the program and control groups, for whom results from both surveys are available. There are a total of 1,076 youth in the sample. We limit observations to the first 50 months after random assignment because the number of responses after the 50th month drops considerably.<sup>1</sup> Basic demographic profiles of the CET youth are summarized in Table 1.

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<sup>1</sup> The “54-month” follow up survey was actually conducted earlier than the exact 54 month anniversary.

The CET study youth represent a disadvantaged population from 16 to 21 years of age. The study youth were eligible for Title II-C of JTPA-funded services, meaning that the participants or their families had recently received public assistance or had low incomes.<sup>2</sup> In addition, the CET study limited eligibility to those who were not enrolled in school or in a program leading to a high school diploma at the time of random assignment. Thus, the study cohort represents a youth population who were at risk of having limited career opportunities.

In documenting the career paths of the CET study youth, we use the date of random assignment as a reference point in time. At the time of random assignment, all study youth were in similar life situations in which they were unemployed or underemployed,<sup>3</sup> not involved in formal education, and were looking into training opportunities, in addition to being economically disadvantaged and young. We follow these youth over time from this particular point for 50 months, with the assumption that they were more or less equal to each other at the beginning in terms of career development. We also investigate whether other participant characteristics, such as age, matter in the ensuing career paths.

The rest of this paper is organized as follows. In Section 3, we document the characteristics of the career trajectories by examining trends and turnover in employment generally, and at the industry and job levels. In Section 4, we summarize how the employment outcome measures relate to the characteristics of the career paths. Section 5 provides a conclusion.

### 3. Characteristics of Career Trajectories

A career path in this study is broadly defined as the process in which a youth's work experience unfolds over time. There are many ways to document this process. For example, the career path may be described by trends in the incidence of employment as well as by changes in job types. Since our goal is to document this process as fully as possible, this section illustrates the career trajectories of these youth from many perspectives. First we illustrate how participation in employment and other career-enhancing activities progressed

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<sup>2</sup> An economically disadvantaged individual is defined under JTPA as a person who (1) receives, or is a member of a family which receives, cash welfare payments under a federal, state, or local welfare program; (2) has, or is a member of a family which has, received a total family income for the six-month period prior to application, in relation to family size and location, that when annualized did not exceed either (a) the official poverty line as defined by the Department of Health and Human Services or (b) 70 percent of the lower living standard income level as determined by the Department of Labor, whichever is greater; (3) is receiving or has been determined eligible to receive food stamps in the 6-month period prior to the application; (4) qualifies as a homeless individual; (5) is a foster child; or (6) is an individual with a disability who meets the requirements of (1) or (2) above, but who is a member of a family whose income does not meet such requirements.

<sup>3</sup> Some youth (230 of 1,136 youths) reported working at the time of random assignment; however, their employment was marginal. For the month of random assignment, among those who reported working, average earnings were just \$397.12 (s.d. \$336.63) and average hours were 60.0 hours (s.d. 42.0 hours).

over time. Second, we describe work experience in the first 50 months in terms of the number of months employed and the frequency and length of employment episodes. Third, we will discuss the characteristics of the jobs and how they changed over time.

### **3.1 Trends in Monthly Participation in Employment, Training, and Educational Activities**

Overall, the CET study youth moved quickly from being minimally engaged in employment at the beginning of the study to being actively engaged. Within 24 months, over 50 percent reported being employed. The likelihood of employment continued to increase to over 60 percent by the 30th month and maintained that level through the 50th month. This overall pattern is displayed in Figure 1, which summarizes the participation in vocation-related activities over time.

In Figure 1, the study youths are categorized into five groups by activity type: (i) employed and not involved in any other training or educational activities; (ii) employed and engaged in at least one training-related activity; (iii) employed and engaged in at least one educational activity; (iv) not employed but engaged in at least one training or educational activity; and (v) neither employed nor engaged in any training or educational activity. The first three categories (i, ii, and iii) represent those who are employed, while the second through fourth categories (ii, iii, & iv) represent those who are in training or educational programs. Training activities include vocational skills training classes, on-the-job training, and other training-related programs. Educational activities include high school classes, ESL, GED preparation/basic skills classes, and college courses. Figure 1 shows the distribution of the five activity types by month. As summarized above, the employment rate quickly increased and leveled off at around 60-65 percent, while the number of those who were inactive (neither working nor enrolled in other activities) decreased dramatically from over two-thirds of the cohort to less than one-third. The proportion of youth reporting involvement in training or educational activities remained relatively stable at around 12-15 percent.

The overall career path did not vary much by demographic characteristics such as gender, age, and race/ethnicity. The basic pattern of a rapid increase in the likelihood of employment and a rapid decrease in non-activity status is repeated for all demographic subgroups. Slight differences across demographic subgroups are observed in terms of the *level* of participation in a vocation-related activity at a given point in time. For example, women were found to be less likely to be employed than men throughout the study period, and older youth were slightly more likely to be working than younger youth, especially during the initial months. Those with a high school diploma or GED at the time of random assignment were more likely to be employed than high school dropouts at any given month. Despite these small differences, however, the overall trends are virtually the same for all groups. Figures 2 to 7 illustrate the similarities and differences by subgroups.

While Figure 1 illustrates the average career path of the CET study youth in terms of the likelihood of employment and other activities over the course of 50 months, any given individual could follow a career pattern that was quite different from the average. One significant factor in determining the subsequent career path appears to be the individual's initial work-related experience. To illustrate, Figures 8-11 show career paths by status in the first six months. Those who had worked at least four out of the first six months after random assignment were more likely to stay employed throughout the study period (Figure 8). In contrast, those who were neither employed nor engaged in other training or educational activities in the first six months increased their rate of employment over time, but remained significantly lower than the average (Figure 9). For those who were involved in training or educational activities for at least two out of the first six months, participation in those activities remained relatively high (Figures 10 and 11).

### **3.2 Employment Patterns**

The previous subsection presented an overview of changes in the incidence of employment from month to month over the course of the 50-month period. In this subsection, we discuss the characteristics of the youth's employment experience in more detail, with particular focus on the employment episodes experienced by individuals.

#### **The Number of Employed Months**

In terms of the number of months, the CET study youth were just as likely to be employed as not employed over the 50 months. On average, the youth worked 25 of 50 months. About a quarter of the youth (24 percent) did not work at all or were employed for 12 months or less over the period. Those who did not work in all 50 months count for 7 percent of the sample. About half of the youth (49 percent) were employed for 13–36 months, and another quarter (27 percent) were employed for 37 or more months.

The number of employed months varied by key demographic characteristics, as suggested above for the monthly participation trends. For example, as summarized in Table 2, men on average worked more months than women. Those with a high school diploma or GED worked more months than dropouts. These differences are statistically significant, but small in magnitude. The number of employed months also varied by initial work and work-related experiences. Table 2 shows that there was a large difference in the total employed months based on employment in the first six months. The average total months for those who worked in four or more months during the first six months was 40, compared to 21 for those who did not, underscoring early employment status as a strong predictor of later employment experience. In addition, those who were involved in training activities for at least two of the first six months worked more months over the 50-month period than those who were not. However, there was not a significant difference between those who participated in educational activities and those who did not.

## The Length and Number of Periods of Consecutive Employment

On average, the CET study youth were likely to experience long periods (more than a year) of consecutive employment, and similarly long periods of consecutive non-employment. As shown in Table 3, the vast majority of youth (76 percent) had only one or two periods of employment. On average, a period of employment lasted 15 months (median=10 months), while a period of non-employment lasted 13 months (median=10 months).<sup>4</sup>

Consistent with the findings discussed so far, the length and number of employment periods varied by gender and education status at the baseline, suggesting less stability of employment for women and for dropouts. As shown in Table 3, women had slightly more but shorter employment periods than men; likewise for dropouts compared to those who had a high school diploma or GED. The average employment period for those who worked in the initial six months was also considerably longer than for those who did not (21 vs. 13 months).

## Transition in Employment Status Over Time

To capture how each individual's experience of employment changed over time, we next describe the changes in employment status between the first 30-month period after random assignment and the next 20-month period. To facilitate this, we divide the youth into three categories: (a) those employed for 20 percent or less of the time in terms of the number of months; (b) those employed for 21 to 80 percent of the time; and (c) those employed 81 percent or more of the time.<sup>5</sup> We then examine the changes in status between the two periods.<sup>6</sup> The 30-20 month breakdown is chosen to correspond to the periods covered by the two follow-up surveys.

Table 4 displays a matrix mapping the employment status among CET youth between the two periods. As shown in the table, 36 percent of the study youth barely worked or did not work at all during the first 30 month period, 44 percent worked in some months, and only 20 percent can be regarded as working in most months (25 or more out of 30 months). As indicated in the earlier figures, youth were more likely to be working in the later years of the study. For the last 20 months, the share of youth working in most months (17 or more out of 20) increased to 45 percent, while the share of those who were not working or barely working (4 or fewer months) decreased to 21 percent.

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<sup>4</sup> Both right- and left-censored employment periods are included in calculating the number and length of periods.

<sup>5</sup> For the first 30 months, the participants were grouped into those who worked for 0-6 months, 7-24 months, and 25-30 months. For the last 20 months, the participants were grouped into those who worked for 0-4 months, 5-16 months, and 17-20 months.

<sup>6</sup> We also examined the transition by grouping the individuals in three equally sized groups according to the number of months employed. The findings are consistent with those based on the percent-time grouping discussed in the text.

The table also shows that the majority (71 percent) of those working in most months in the first 30 months continued to do so in the following 20 months. The majority of the others also increased their number of months working. Even among those who did not work or only barely worked in the first 30 months, nearly a quarter (24 percent) were employed in most months in the next 20 months. On the other hand, a substantial percentage (39 percent) of those who were barely or not employed at all in the first 30 months continued to remain minimally employed. However, the absolute numbers of those who decreased their work time, or stayed as barely or not working at all, are relatively small.

In Table 4, the different types of career paths are identified. The distribution of these career path types is summarized in Table 5. As shown in the table, about 14 percent of the sample were regarded as “high-employment stayers” (i.e., worked in most months in both periods), and another 4 percent as “low-employment stayers” (i.e. did not work or barely worked in either period). The largest group (45 percent) can be characterized as upward movers, who increased their percentage of time employed over the two periods (i.e., from less than 20 percent to more than 20 percent or from less than 80 percent to more than 80 percent). The middle range stayers, who are defined as those working in at least some months (20-80 percent of the time) in both periods, accounted for 20 percent.<sup>7</sup> Finally, 7 percent were regarded as downward-movers, who worked at least some months in the first 30 months but did not work or just barely worked in the second 20 months.

Table 6 summarizes the characteristics of the youth in each of these different career path types. As one might expect, those who were upward movers and high-employment and mid-range stayers were disproportionately more likely to have held a high school diploma or GED at the time of random assignment. High-employment stayers were also found to be disproportionately male and older, as well as less likely to have been welfare recipients. The disproportionate representation of dropouts, women, welfare recipients, and others in the low-employment stayer category, however, does not mean that these subgroups were all stuck at the bottom in their career development. As shown in Table 7, even among dropouts and welfare recipients, the majority fell into the upward mover, middle range stayer, or high-employment stayer categories.

### **3.3 Job Patterns**

So far our discussion has been concentrated on employment-level characteristics of career paths; in this section, we analyze job-level characteristics for CET youth.

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<sup>7</sup> The middle range stayers include those who worked in most months (25 or more months) in the first 30 months and worked in some months (5 to 16 months) in the last 20 months.

## Industry of Employment and Industry Stability

In this section, we examine industries of employment for CET youth, the characteristics of jobs by industry, and industry stability over time. Table 8 shows the dominant industries of employment for CET youth for waves 1 and 2 (the first 30 and last 20 months, respectively). Because many CET youth were employed in multiple jobs in each wave, we define the dominant industry as the industry in which the youth was employed the longest. In wave 1, the dominant industry of employment was retail trade; in wave 2, the dominant industry of employment was repair and maintenance.

We characterize industry stability for each youth by examining whether the dominant industry of employment was the same in both waves. As shown in Table 9a, we found that about one-third of CET youth stayed in their same dominant industry between waves. We also compared the characteristics of those youth who stayed in the same industry across waves and those who went to a different industry in wave 2. Although industry “stayers” were more likely than industry “leavers” to be high school dropouts, we found no other differences between the two groups.

Table 9b displays industry stability by the dominant industry of employment in wave 1. The table shows that there is a large amount of variability in industry stability across industries. Industry stability was lower in the lower-paid industries, such as eating and drinking establishments, personal services, and agriculture, while industry stability was highest in higher-paid industries such as health and professional services.

## Number of Jobs Held by CET Youth

In this section, we examine the number of jobs held by CET youth. First, we look at the average number of jobs held in each month after random assignment. We then examine the total number of jobs held in each survey wave. Finally, we analyze the number of jobs held per employment spell.

### *Average Number of Jobs Held At One Time*

We found that very few CET youth were employed in multiple jobs at any one time during the study period. We looked at the average number of jobs held in each month of waves 1 and 2, and found that that most CET youth (94 percent) held only one job at a time when they were employed. To show how job-holding varied by industry of employment, in Table 10, we display the average number of jobs held in wave 1 by the dominant industry of employment. Although, as discussed above, most CET youth on average worked one job at a time, certain industries were more associated with multiple job holding than others. For example, 11.6 percent of youth whose dominant industry in wave 1 was professional services, 10.0 percent of youth engaged in entertainment, and 7.7 percent of youth



employed in agriculture worked multiple jobs at a time in wave 1.<sup>8</sup> By contrast, only 2.5 percent of youth who worked in health services worked in multiple jobs concurrently in wave 1.

#### *Total Number of Jobs Held In Each Wave*

Although most CET youth held, on average, only one job at a time, many of these youth held more than one job total in each wave, suggesting that CET youth changed jobs fairly frequently. As shown in Table 11, we found that among CET youth who were employed in wave 1, 53.6 percent held two or more jobs during the 30-month wave 1 period. The pattern was similar in wave 2. The average tenure for each job in wave 1 was 10 months, while it was 16 months in wave 2.

#### *Number of Jobs Per Employment Spell*

In examining the number of jobs worked per employment spell, we are interested in characterizing the job-seeking and job-changing patterns of CET youth. Do most youth move straight from one job to another? Or does the termination of one job lead to a period of unemployment? As shown in Table 12a, in 73.4 percent of employment spells CET youth were employed in only one job; thus, for these spells, employment at one job was followed by a spell of unemployment. 19.2 percent of employment spells comprised two jobs, and 7.7 percent comprised 3 or more jobs. As discussed above, because very few CET youth held multiple jobs in any given month, we know that most youth who had employment spells with multiple jobs held the jobs consecutively, rather than concurrently.

Table 12b displays the cell percentages of CET youth for the number of jobs per spell by the total number of employment spells. An examination of the table suggests that the likelihood of holding multiple jobs per employment slightly increases if CET youth had only one employment spell.

## 4. Career Trajectories and Employment Outcomes

The previous section primarily looked at employment paths and how they varied due to factors such as the youth's characteristics (gender and educational attainment), and participation in training and employment immediately following random assignment. In this section we examine the relationships between career paths and employment outcomes. Our objective is not to estimate the causal effects of a particular career path on outcomes. Because career paths are constructed by elements that are endogenous with respect to the outcomes themselves, an impact assessment of career trajectories would be a methodologically complicated task and is not within the scope of this paper. Rather, our

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<sup>8</sup> As shown in Table 3a, very few (2) CET youth (on average) worked more than 2 jobs at a time in wave 1. During wave 2, four youth worked more than 2 jobs at a time.

goal here is to document how the within-person trends in earnings and wages of the CET study youth are linked to the career paths they followed.

#### **4.1 Variation in Earnings by Employment Path**

We first summarize earnings trends by the different employment patterns and characteristics discussed in previous section. Table 13 displays total earnings over the 50-month period and the wages in the first and last six months by employment spell characteristics and by career path type. Not surprisingly, those who worked for more months received higher earnings over the period. As shown in Table 13, those who worked for a total of 1 to 6 months received minimal earnings (\$3,080) over the 50-month period, while those who worked 49-50 months received total earnings of \$76,965 on average. The table shows that wages increased for all groups. By the end of the 50-month period, most employed youth earned at a rate exceeding the minimum wage, even those with limited employment experience. However, as would be expected, estimated hourly wages are higher for those who worked more months. Table 13 also shows that higher earnings and wages are associated with longer employment spells and a smaller number of spells, suggesting that frequent movement in and out of employment is inversely related to wages and earnings.

Earnings and wages also varied by career path type. As shown in Table 13, high employment stayers who worked for most months in both the first 30- and next 20-month periods received the highest earnings and wages. The high employment stayers received on average \$71,954 over the 50-month period, which was considerably higher than the total earnings for any other group. They also received relatively high hourly pay in the first 30 months of the study, and reached the average wage of \$11 per hour at the end of the 50-month period. At \$11 per hour, a youth is earning an income that is well above poverty level.<sup>9</sup> For low employment stayers, who did not work or barely worked in either the first 30 months or the last 20 months, and downward movers, who worked at least some months in the first 30 months but did not work or barely worked in the next 20 months, total earnings were very low. However, when they did work, their wages generally exceeded the minimum wage.

#### **4.2 Variation in Earnings and Employment Patterns Over Different Job Characteristics**

In this section, we examine how earnings and employment rates vary over time for different job characteristics. Specifically, we examine the earnings and employment patterns by:

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<sup>9</sup> The annual income for poverty threshold was \$9,573 for a one person household (under 65 years old), \$12,682 for a single parent household with one child, \$18,550 for two-parent families with two children. (Source: U.S. Census Bureau.)

- Employment industry in wave 1;
- Industry stability across waves; and
- The total number of jobs held in each wave.

### Earnings and Employment Patterns by Employment Industry in Wave 1

Figures 12 and 13 display the earnings and employment patterns for CET youth for certain industries in wave 1 and wave 2: manufacturing, retail, repair and maintenance, and health services. For presentation purposes, we chose to display only the industries in which the largest number of CET youth were employed. Fifty-eight percent of CET youth were employed in these industries in wave 1, dropping to 53.4 percent in wave 2. As shown in Figure 12, earnings increased during both waves for all industries, but the rate of earnings increase varied. Earnings were the lowest for CET youth employed in retail; this pattern persisted through both waves. Youth whose dominant industry was health services had substantially higher earnings during wave 1, but not in wave 2. Similarly, employment rates were highest for youth employed in health services in wave 1, but employment rates were similar to the other groups during wave 2.

### Earnings and Employment Patterns by Industry Stability

In Figures 14 and 15, we examine the earnings and employment patterns by industry stability, i.e. whether youth were employed in the same industry in both waves. Although it is possible that industry stability is endogenous with respect to earnings—youth may stay in the same industry because they are more focused and motivated and thus would be likely to have higher earnings regardless of industry stability—Figure 14 strongly suggests that industry stability does affect earnings growth. Generally, earnings were higher for industry stayers throughout the 50 months after random assignment, indicating that industry stability is somewhat endogenous with respect to earnings. However, in wave 2, earnings for youth who were industry stayers increased at a much higher rate than did industry leavers, indicating that industry stayers, having accumulated more industry-specific experience, gained an earnings premium in wave 2. Figure 15, which shows employment rates by industry stability, tells a similar story: although employment rates were already slightly higher in wave 1 for industry stayers, their employment rates increased significantly in wave 2.

### Earnings and Employment Patterns by the Total Number of Jobs Held In Each Wave

Figures 16-19 display the earnings and employment patterns by the total number of jobs held in each wave. Because earnings are likely to be higher for individuals who held more than one job at a time, this sample includes only youth who, on average, worked one job in each month. The figures show that there are significant differences between earnings patterns in waves 1 and 2. In wave 1, although their earnings and employment rates were slightly more volatile, youth who worked more than one job had higher earnings and

employment rates than those who only worked one job. In wave 2, however, the story is very different: earnings and employment are mostly higher for youth who were employed in only one job. Because there is a correlation between the number of jobs held in each wave (47.6 percent of youth who held only one job in wave 1 also held one job in wave 2), these figures strongly suggest that again, during wave 2, CET youth who had more stable job trajectories and who had accumulated more job-specific experience, earned a premium in the marketplace.

### 4.3 Variation in Wage Growth by Employment Path

To summarize how within-person trends in wages are linked to employment paths, we conducted multivariate analyses. First, we estimated OLS models in which wages (hourly pay rates) based on the last six months of the 50-month follow-up period are regressed on career path indicators and demographic variables. The career path indicators include: the total number of months employed through month 45 (the first month of the last six-month period); the number of employment episodes through month 45; the number of jobs in the first 30 months (based on the 30-month follow-up survey) and in the last 20 months (based on the 54-month follow-up survey); an indicator for those who stayed in the same industry over the 50-month period, and the industry type for the main job the individual held in the first 30 months.<sup>10</sup> The results are shown in Table 14.

The first column of the table shows the results from regressing wages against key career path indicators only. It shows that the number of jobs held in the last 20 months is negatively correlated with wages, while the number of months employed and staying in the same industry are positively correlated with wages. These coefficients are statistically significant at 1 to 5 percent levels. When we add the industry type (a set of 14 dummy variables indicating each major type) and demographic background variables to the models, however, the coefficient of the indicator for staying in the same industry becomes no longer significant. Gender and race/ethnicity are found to be significant, as are the receipt of training certificates and a high school diploma or GED. The coefficients for most industry types are not statistically significant.

The models presented in Table 14 use the last six months of the 50-month period as an arbitrary reference point. To test the robustness of the results above, we also estimated monthly wages, taking advantage of the longitudinal information.<sup>11</sup> We estimated both

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<sup>10</sup> The main job is defined as the job with the longest tenure (most consecutive months) during a given period. Staying in the same industry means that the industry of the main job in the first 30 month period remained the same in the last 20 month period.

<sup>11</sup> Fixed-effects models are estimated by transforming variables by subtracting out time-series means and applying the ordinary least squares method. Random effects models are estimated using the two-step generalized least squares method, which produces a weighted average of the within-group and between-group estimators (first estimate the between-group and within-group variance components by OLS and then transform the data by subtracting individual means adjusted by those covariance components and apply the OLS).

fixed- and random-effects models to check the consistency of the results and to address likely heterogeneity biases. The results are presented in Table 15. For the fixed-effects models, wages in a given month ( $t$ ) were regressed against time-variant career path indicators, including the cumulative months of employment, the number of employment spells experienced, the number of months in which the youth participated in educational or training activities, an indicator for the receipt of a high school degree or GED by month  $t$ , an indicator for the receipt of a training certificate by month  $t$ , and a time trend variable. For the random-effects models, we also added time-invariant indicators, including the number of jobs held in the first 30 and last 20 months and an indicator for industry stability.

As shown in Table 15, the fixed-effects model results show that wages are positively correlated with the number of months employed as well as the number of months spent in training or educational activities. The receipt of a training certificate is positively correlated with wages, as is the receipt of a high school degree or GED. The number of employment spells, which captures how frequently a person goes in and out of work, is negatively correlated with wages. All coefficients are statistically significant at the 1 to 5 percent level. The results confirm that various career path factors determine within-person growth of wages. The time trend itself also has a significant and sizable effect; this may reflect the maturing process of this young cohort as well as the high economic growth experienced during the study period. The random-effects results are generally consistent with those of the fixed-effects models, as shown in the second column of the table. As displayed in the third column, the number of jobs in the first 30 months is negative but insignificant. Overall, the results shown in Table 15 are consistent with the results reported in Table 14.

## 5. Conclusion

This paper has examined career paths for the out-of-school youth in the CET study from a variety of different angles and approaches: employment patterns, participation in training or education activities, and job characteristics. We found that career paths for these youth were somewhat stable. On the one hand, we found that, on average, these youth were employed for about half of the 50-month period, and the average job tenure was 10 months. On the other hand, we found that about two-thirds of the sample switched employment industries between survey waves and that half of the sample switched jobs in each wave.

We found that there is a large amount of variation in employment and earnings patterns according to each career characteristic, and that the choices these youth made early in the study influenced their career paths later. For example, youth who were actively employed in the first six months were more likely than other youth to be employed later. Youth who stayed in the same industry in both waves had higher earnings and employment rates later in the follow-up period. Finally, in a fixed-effects model determining the effect of past employment, training, and education on earnings and wages, we found a positive effect for past employment, participation in training and the receipt of a training certificate, and high school degree or GED on earnings and employment. However, as mentioned

previously, we do not mean to imply that there is a direct causal relationship between these employment patterns and job characteristics and employment outcomes. Our purpose is to simply describe these characteristics and to point out that these relationships exist for this sample.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 1**

**Demographic Background of the CET Study Youth**

	Frequency	Percent
Female	589	60.4
Male	386	39.6
Mean Age	19.2	
16 years old	9	0.9
17	72	7.4
18	219	22.4
19	273	28.0
20	231	23.7
21	171	17.5
22	1	0.1
African American	501	52.0
Hispanic (non-black, non-white)	396	41.1
Others (White, Asian, American Indian)	67	6.7
High school dropout	526	55.7
High school or GED graduates	418	44.3
Limited English Proficiency (LEP)	110	12.2
Non-LEP	788	87.8
Sample Size	1,050	

SOURCE: BPA calculations from CET baseline data.

NOTE: The sample includes those for whom both follow-up surveys were available. The subsample size varies due to missing observations.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 2A**

**Number of Months with Employment Over the 50-Month Period**

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Average Months Employed	<u>Mean</u>	
	25.4	
Distribution of Months	<u>Freq.</u>	<u>Percent</u>
Did not work at all during the 50-month period	77	7.3
Worked 1-6 months	69	6.5
7-12	104	9.9
13-24	267	25.3
25-36	248	23.5
37-48	209	19.8
49-50	<u>81</u>	<u>7.7</u>
Total	1,055	100.0

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SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.



**The Characteristics of Career Paths among Out-of-School Youth**

**Table 2B**

**Number of Months Employed Over the 50-Month Period By Subgroup**

	N.	Mean	Std. Err.	
Male	386	26.9	0.80	***
Female	589	24.1	0.60	
High School/GED graduates	418	28.4	0.73	***
Dropouts	526	22.6	0.65	
16-18 Years Old	300	24.6	0.84	
19-22 Years Old	676	25.5	0.59	
Worked less than 4 months in first 6 months	829	21.2	0.47	***
Worked 4 or more months in first 6 months	226	40.5	0.76	
Engaged in training activity in less than 2 months in first 6 months	925	24.8	0.50	***
Engaged in training activity in 2 or more months in first 6 months	130	29.1	1.24	
Engaged in educational activity in less than 2 months in first 6 months	951	25.4	0.49	
Engaged in educational activity in 2 or more months in first 6 months	104	24.7	1.45	

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: Statistical significance levels are indicated as \*\*\*=1 percent, \*\*=5 percent, and \*=10 percent\*\*\* .

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 3A**

**Number and Length of Employment Spells Over the 50-Month Period**

---

	<u>Mean</u>	
Number of Employment Spells	1.80	
Distribution of Number of Spells	<u>Freq.</u>	<u>Percent</u>
None	77	7.3
1	428	40.6
2	375	35.5
3 or more	<u>175</u>	<u>16.6</u>
Total Number of Youth	1,055	100.0
	<u>Mean</u>	
Number of Months Employed Per Spell	15.2	
Distribution of Spell Length	<u>Freq.</u>	<u>Percent</u>
1-6 months	659	37.4
7-12	370	21.0
13-24	335	19.0
25-36	198	11.2.
37-48	128	7.3
49-50	<u>74</u>	<u>4.2</u>
Total Number of Spells	1,764	100.0

---

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

## The Characteristics of Career Paths among Out-of-School Youth

### Table 3B

#### Number and Length of Employment Spells Over the 50-Month Period By Subgroup

	Freq.	Mean	Std. Err.
<b>Number of Employment Spells (unit=person)</b>			
Male	357	1.728	0.045 *
Female	547	1.843	0.039
High School/GED graduates	395	1.711	0.045 **
Dropouts	479	1.864	0.040
16-18 Years Old	283	1.795	0.053
19-22 Years Old	622	1.797	0.036
Worked less than 4 months in first 6 months	752	1.778	0.031 ***
Worked 4 or more months in first 6 months	226	1.889	0.067
Engaged in training activity in less than 4 months in first 6 months	850	1.792	0.031
Engaged in training activity in 2 or more months in first 6 months	128	1.883	0.075
Engaged in educational activity in less than 4 months in first 6 months	878	1.795	0.030
Engaged in educational activity in 2 or more months in first 6 months	100	1.880	0.079
<b>Spell Length (unit=spell)</b>			
Male	617	16.86	0.61 ***
Female	1008	14.10	0.41
High School/GED graduates	676	17.54	0.58 ***
Dropouts	893	13.28	0.43
16-18 Years Old	508	14.52	0.60
19-22 Years Old	1118	15.43	0.42
Worked less than 4 months in first 6 months	1337	13.17	0.33 ***
Worked 4 or more months in first 6 months	427	21.41	0.85
Engaged in training activity in less than 4 months in first 6 months	1523	15.09	0.36
Engaged in training activity in 2 or more months in first 6 months	241	15.68	0.92
Engaged in educational activity in less than 4 months in first 6 months	1576	15.34	0.35
Engaged in educational activity in 2 or more months in first 6 months	188	13.69	0.96

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: Statistical significance levels are indicated as \*\*\*=1 percent, \*\*=5 percent, and \*=10 percent\*\*\*.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 4**

**Transition in Employment Status**

---

	Number of Months Employed in Last 20 Months			
	<u>0-4 months</u>	<u>5-16 months</u>	<u>17-20 months</u>	<u>Total</u>
<b>Frequency</b>				
Num of Months Employed in First 30 Months				
0-6 months	147	143	90	380
7-24 months	66	164	237	467
25-30 months	9	51	148	208
Total	222	358	475	1,055
<b>Row Percentage</b>				
Num of Months Employed in First 30 Months				
0-6 months	38.7	37.6	23.7	100.0
7-24 months	14.1	35.1	50.8	100.0
25-30 months	<u>4.3</u>	<u>24.5</u>	<u>71.2</u>	<u>100.0</u>
Total	21.0	33.9	45.0	100.0
<b>Column Percentage</b>				
Num of Months Employed in First 30 Months				
0-6 months	66.2	39.9	19.0	36.0
7-24 months	29.7	45.8	49.9	44.3
25-30 months	<u>4.1</u>	<u>14.3</u>	<u>31.2</u>	<u>19.7</u>
Total	100.0	100.0	100.0	100.0

---

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

## The Characteristics of Career Paths among Out-of-School Youth

**Table 5**

### Career Path Type

	Frequency	Percent
High-employment stayers	148	14.0
Middle-range stayers	215	20.4
Upward movers	470	44.6
Downward movers	75	7.1
Low-employment stayers	<u>147</u>	<u>3.9</u>
Total	1,055	100.0

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: High-employment stayers is defined as those who worked more than 80 percent time in terms of the number of months in the first 30 and second 20 months. Middle range stayers are those who worked 20-80 percent time in both periods and those who worked more than 80 percent time in the first 30 months but worked 20-80 percent in the last 20 months. Upward movers are those who worked less than 20 percent in the first 30 months and 20 or more percent in the last 20 months and those who worked 20-80 percent time in the first 30 months and more than 80 percent in the last 20 months. Downward movers are those who worked more than 80 percent in the first 30 months and less than 20 percent in the last 20 months and those who worked 20-80 percent time in the first 30 months and less than 20 percent in the last 20 months. Low-employment stayers is defined as those who worked less than 20 percent time in the first 30 and second 20 months.

## The Characteristics of Career Paths among Out-of-School Youth

**Table 6**

### Demographic Profiles of Career Path Types

	Subgroup Distribution by Career Path Type (%)					
	High-Emp Stayers	Mid Range Stayers	Upward Movers	Downward Movers	Low-Emp Stayers	Total
<b><i>Gender</i></b>						
Male	48.9	36.5	39.2	36.9	37.2	39.6
Female	<u>51.1</u>	<u>63.5</u>	<u>60.8</u>	<u>63.1</u>	<u>62.8</u>	<u>60.4</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b><i>Age</i></b>						
16-18 Years Old	24.4	37.5	30.9	23.1	30.7	30.7
19-22 Years Old	<u>75.6</u>	<u>62.5</u>	<u>69.1</u>	<u>76.9</u>	<u>69.3</u>	<u>69.3</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b><i>Race/Ethnicity</i></b>						
African American	44.0	60.3	47.5	60.0	59.1	52.0
Hispanic	48.5	34.4	44.8	36.9	32.6	41.1
Others	<u>7.5</u>	<u>5.3</u>	<u>7.7</u>	<u>3.1</u>	<u>8.3</u>	<u>7.0</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b><i>Education</i></b>						
High school /GED graduates	58.3	45.7	43.9	40.3	32.1	44.3
High school dropout	<u>41.7</u>	<u>54.3</u>	<u>56.1</u>	<u>59.7</u>	<u>67.9</u>	<u>55.7</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b><i>Limited English Proficiency</i></b>						
LEP	12.6	12.7	11.5	8.6	15.5	12.3
Non-LEP	<u>87.4</u>	<u>87.3</u>	<u>88.5</u>	<u>91.4</u>	<u>84.6</u>	<u>87.8</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b><i>Welfare</i></b>						
Non Recipients	84.0	72.6	73.5	81.8	68.3	74.6
Recipients	<u>16.0</u>	<u>27.4</u>	<u>26.5</u>	<u>18.2</u>	<u>31.7</u>	<u>25.4</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: See Table 5 for the definitions of career path types.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 7**

**Distribution of Career Path Types by Demographic Profiles**

	Percent of Subgroups					Total
	High-Emp Stayers	Mid Range Stayers	Upward Movers	Downward Movers	Low-Emp Stayers	
<b><i>Gender</i></b>						
Male	13.2	45.3	6.2	18.1	17.1	100.0
Female	14.6	46.0	7.0	20.7	11.7	100.0
<b><i>Age</i></b>						
16-18 Years Old	14.0	46.0	5.0	24.0	11.0	100.0
19-22 Years Old	14.1	45.7	7.4	17.8	15.1	100.0
<b><i>Race/Ethnicity</i></b>						
African American	15.6	42.1	7.8	22.8	11.8	100.0
Hispanic	10.9	50.3	6.1	16.4	16.4	100.0
Others	16.4	50.8	3.0	14.9	14.9	100.0
<b><i>Education</i></b>						
High school /GED graduates	10.3	45.7	6.0	20.3	17.7	100.0
High school dropout	17.3	46.4	7.0	19.2	10.1	100.0
<b><i>Limited English Proficiency</i></b>						
LEP	17.3	43.6	4.6	20.0	14.6	100.0
Non-LEP	13.2	46.8	6.7	19.2	14.1	100.0
<b><i>Welfare</i></b>						
Non Recipients	12.7	45.4	6.8	19.2	15.9	100.0
Recipients	17.3	48.0	4.4	21.3	8.9	100.0

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: See Table 5 for the definitions of career path types.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 8**

**Dominant Industry of Employment in Waves 1 and 2 for  
Program and Control Groups**

Wave 1 Dominant Industry of Employment	Percentage Total
Construction	5.0
Manufacturing	11.6
Transportation	6.6
Wholesale Trade	1.8
Retail Trade	20.3
Repair and Maintenance	16.5
Personal Services	5.4
Entertainment	2.4
Professional Services	8.4
Agriculture	1.7
Government	1.3
Military	0.5
Eat and Drink Establishments	8.6
Health	9.6
Missing	0.5
Total Number	847

Wave 2 Dominant Industry of Employment	Percentage Total
Construction	4.7
Manufacturing	10.1
Transportation	8.6
Wholesale Trade	1.6
Retail Trade	14.1
Repair and Maintenance	16.0
Personal Services	6.2
Entertainment	2.6
Professional Services	9.4
Agriculture	0.9
Government	2.0
Military	0.9
Eat and Drink Establishments	8.5
Health	13.2
Missing	1.2
Total Number	858

---

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: The dominant industry of employment is defined as the industry for the job in which the youth was employed the longest. The sample only includes youth who were employed in each wave.



**The Characteristics of Career Paths among Out-of-School Youth**

**Table 9a**

**Industry Stability for CET Youth  
For Waves 1 and 2  
Program and Control Groups**

	Percentage Total
Stayed in Same Industry in Waves 1 and 2	35.8
Worked in Different Industry in Waves 1 and 2	64.2
Total Number	770

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: The sample size only includes youth who were employed in each wave and for whom the dominant industry of employment information was non-missing.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 9b**

**Industry Stability for CET Youth by Wave 1 Industry of Employment**

Wave 1 Dominant Industry of Employment	Worked in Different Industry in Waves 1 and 2	Worked in Same Industry in Both Waves	Percentage Total
Construction	57.5	42.5	100.0
Manufacturing	59.3	40.7	100.0
Transportation	61.7	38.3	100.0
Wholesale Trade	78.6	21.4	100.0
Retail Trade	68.3	31.7	100.0
Repair and Maintenance	62.0	38.0	100.0
Personal Services	84.4	15.6	100.0
Entertainment	73.3	26.7	100.0
Professional Services	53.2	46.8	100.0
Agriculture	83.3	16.7	100.0
Government	75.0	25.0	100.0
Military	25.0	75.0	100.0
Eat and Drink Establishments	67.7	32.3	100.0
Health	44.7	55.3	100.0
Total	62.94	37.06	100.0
Total Number	769		

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 10**

**Average Number of Jobs Held in Each Month of Waves 1 and 2  
For CET Youth Who Were Employed**

Wave 1 Dominant Industry of Employment	1	2 or more	Percentage Total
Construction	94.9	5.1	100.0
Manufacturing	95.8	4.2	100.0
Transportation	96.1	3.9	100.0
Wholesale Trade	92.9	7.1	100.0
Retail Trade	96.3	3.7	100.0
Repair and Maintenance	93.2	6.8	100.0
Personal Services	95.6	4.4	100.0
Entertainment	90.0	10.0	100.0
Professional Services	88.4	11.6	100.0
Agriculture	92.3	7.7	100.0
Government	100.0	0.0	100.0
Military	100.0	0.0	100.0
Eat and Drink Establishments	93.2	6.9	100.0
Health Services	97.5	2.5	100.0
Total	94.6	5.4	
Total Number	811		

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: This sample only includes CET youth who worked at least one job in wave 1, but who did not, on average, work more than one job at a time.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 11**

**Total Number of Jobs Held in Each Wave**

---

Total Number of Jobs Held	<u>Wave 1</u>	<u>Wave 2</u>
1	44.4	49.5
2	32.3	30.0
3 or more	23.2	19.2
Total	100	100
Total Number	814	806

---

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: This sample only includes youth who, on average, held one job in each month.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 12a**

**Number of Jobs Held Per Employment Spell**

---

Number of Jobs Per Employment Spell	Percentage
1	73.35
2	19.02
3 or more	7.63
Total	100
Total Number of Employment Spells	1,625

---

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 12b**

**Number of Jobs Held Per Employment Spell  
By the Total Number of Employment Spells  
Cell Percentages**

---

	<u>One Job Per Employment Spell</u>	<u>Two Jobs Per Employment Spell</u>	<u>Three Jobs Per Employment Spell</u>	<u>Row Total</u>
Total Number of Employment Spells				
1	33.8	6.8	2.4	42.9
2	35.6	2.7	0.4	38.7
3 or More	18.3	0.1	0	18.4
Column Total	87.7	9.5	2.9	
Total Number	933			

---

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: This sample contains all individuals who had at least one employment spell in the sample period.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 13**

**Earnings and Wages by the Employment Patterns**

	Total Earnings Over 50 Months		Wages in First 6 Months		Wages in Last 6 Months	
	n	mean (\$)	n	mean (\$)	n	mean (\$)
<b>Total Number of Months Employed</b>						
0	77	0	0		0	
1-6	69	3,080	4	4.56	23	7.38
7-12	104	8,689	13	6.48	48	7.81
13-24	267	23,419	41	6.94	196	9.65
25-36	248	38,767	71	7.72	205	9.63
37-48	209	60,029	120	7.07	190	10.75
49-50	81	76,965	75	7.6	74	11.21
<b>Number of Employment Spells</b>						
0	77	0	0		0	
1	428	44,832	129	7.67	303	10.74
2	375	31,385	108	6.98	288	9.51
3 or more	175	27,462	87	7.03	145	8.88
<b>Length of Employment Spell</b>						
1-6	659	20,896	218	6.89	475	8.93
7-12	370	25,482	119	6.9	265	9.16
13-24	335	36,178	93	7.27	280	9.67
25-36	198	46,868	81	7.39	163	10.16
37-48	128	64,633	61	7.2	117	11.24
49-50	74	77,793	69	7.68	67	11.22
<b>Career Path Type</b>						
High-Employment Stayers	148	71,954	138	7.5	140	11.05
Middle Range Stayers	215	33,249	91	7.41	153	9.28
Upward Mover	470	35,167	57	6.68	407	9.78
Downward Mover	75	16,030	33	7.3	15	11.76
Low-Employment Stayers	147	1,598	5	4.68	21	7.49

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: Wages are computed for the employed months only.

**The Characteristics of Career Paths among Out-of-School Youth**

**Table 14**

**OLS Estimation of Hourly Pays in the Last Six Months of the Follow-Up Period  
Dependent Variable: Log Hourly Wages**

	(1) Fixed Effects Model			(2) Random Effects Model			(3) Random Effects Model		
	Coef.	Std. Err.	P-Value	Coef.	Std. Err.	P-Value	Coef.	Std. Err.	P-Value
Nun of Employed Months at Month 45	0.0069	0.0015	0.000***	0.0066	0.0014	0.000***	0.0065	0.0015	0.000*
Num of Employment Spells at Month 45	-0.0329	0.0214	0.126	-0.0070	0.0199	0.726	-0.0053	0.0203	0.794
Num of Months with Educational Activity at Month 45	0.0002	0.0021	0.937	0.0009	0.0020	0.661	0.0002	0.0020	0.918
Num of Months with Training Activity at Month 45	0.0043	0.0030	0.156	0.0019	0.0028	0.485	0.0017	0.0028	0.546
Number of Jobs Held in First 30 Months	0.0008	0.0155	0.958	-0.0083	0.0145	0.568	-0.0054	0.0146	0.714
Number of Jobs Held in Last 20 Months	-0.0401	0.0154	0.010**	-0.0254	0.0144	0.078*	-0.0246	0.0143	0.087***
Staying in the Same Industry	0.0748	0.0345	0.031**	0.0421	0.0321	0.189	0.0453	0.0334	0.175
Female	--	--		-0.0689	0.0313	0.028**	-0.0569	0.0327	0.082*
Age at random assignment	--	--		-0.0035	0.0121	0.773	-0.0070	0.0120	0.558
Black	--	--		0.1015	0.0607	0.095*	0.0977	0.0612	0.111
Hispanic	--	--		0.1734	0.0614	0.005***	0.1638	0.0618	0.008***
Receipt of High School Diploma/GED at Month 45	--	--		0.0826	0.0332	0.013**	0.0848	0.0331	0.011**
Receipt of Training Certificate at Month 45	--	--		0.0857	0.0302	0.005***	0.0655	0.0307	0.033**
Constant	2.1292	0.0582	0.000***	1.9897	0.2377	0.000***	2.0782	0.2403	0.000***
Industry Type Dummy Variables	No			No			Yes		
Number of Obs	630			568			568		

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

NOTE: The hourly wages are calculated by dividing total earnings during Months 45 through 50 after random assignment by total hours during the same period.

Statistical significance levels are indicated as \*\*\*=1 percent, \*\*=5 percent, and \*=10 percent\*\*\*. For (3), we found all industry type were statistically insignificant, except for eating and drinking establishments which are found negatively significant at the 1 percent level



**The Characteristics of Career Paths among Out-of-School Youth**

**Table 15**

**Fixed and Random Effects Estimations  
Dependent Variable: Log Hourly Wages**

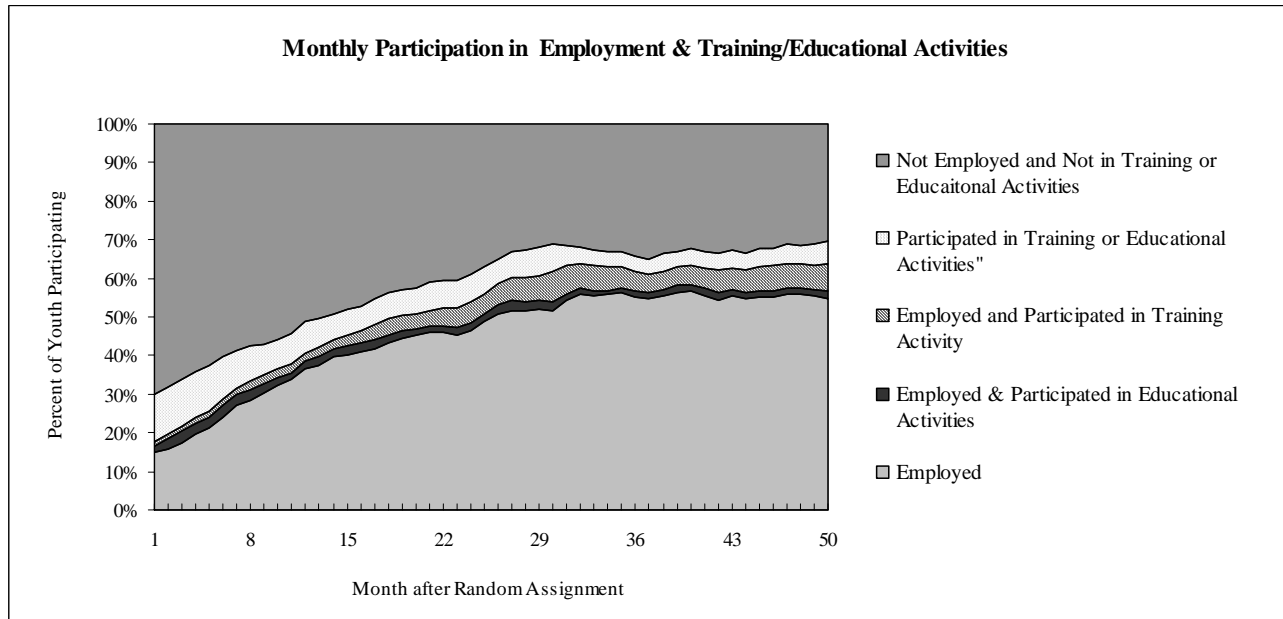
	(1)			(2)			(3)		
	Fixed Effects Model			Random Effects Model			Random Effects Model		
	Coef.	Std. Err.	P-Value	Coef.	Std. Err.	P-Value	Coef.	Std. Err.	P-Value
Nun of Months with Employment	0.0022	0.0008	0.006***	0.0038	0.0006	0.000***	0.0021	0.0013	0.099*
Num of Employment Spells	-0.0400	0.0064	0.000***	-0.0329	0.0056	0.000***	0.0064	0.0101	0.523
Num of Months with Educational Activity	0.0027	0.0007	0.000***	0.0026	0.0007	0.000***	-0.0001	0.0012	0.961
Num of Months with Training Activity	0.0114	0.0011	0.000***	0.0088	0.0010	0.000***	0.0092	0.0019	0.000***
Receipt of High School Diploma/GED	0.0447	0.0143	0.002***	0.0427	0.0122	0.000***	0.0604	0.0197	0.002***
Receipt of Training Certificate	0.0257	0.0103	0.013**	0.0338	0.0095	0.000***	0.0370	0.0159	0.020**
Time Trend Variable (Month Counter)	0.0079	0.0008	0.000***	0.0065	0.0006	0.000***	0.0041	0.0013	0.002***
Number of Jobs Held in First 30 Months	--	--		--	--		-0.0152	0.0128	0.237
Constant	1.7928	0.0105	0.000***	1.7776	0.0148	0.000***	1.7428	0.0660	0.000***
Industry Type Dummy Variables	No			No			Yes		
Number of Obs	23,666			23,666			10,424		
Number of Individuals	908			908			747		

SOURCE: BPA calculations from CET enrollment form and 30- and 54-month follow-up surveys.

Note: Statistical significance levels are indicated as \*\*\*=1 percent, \*\*=5 percent, and \*=10 percent\*\*\*. For the Models (1) and (2), the data for the 50-month follow-up period are used. For Model (3), the sample period is limited to the last 20 months. For (3), we found the following industries have statistically significant positive coefficients (at 1 or 5 percent ): construction; manufacturing; transportation; wholesale trade; retail trade; business and repair; professional services; agriculture; and health industry.

## The Characteristics of Career Paths among Out-of-School Youth

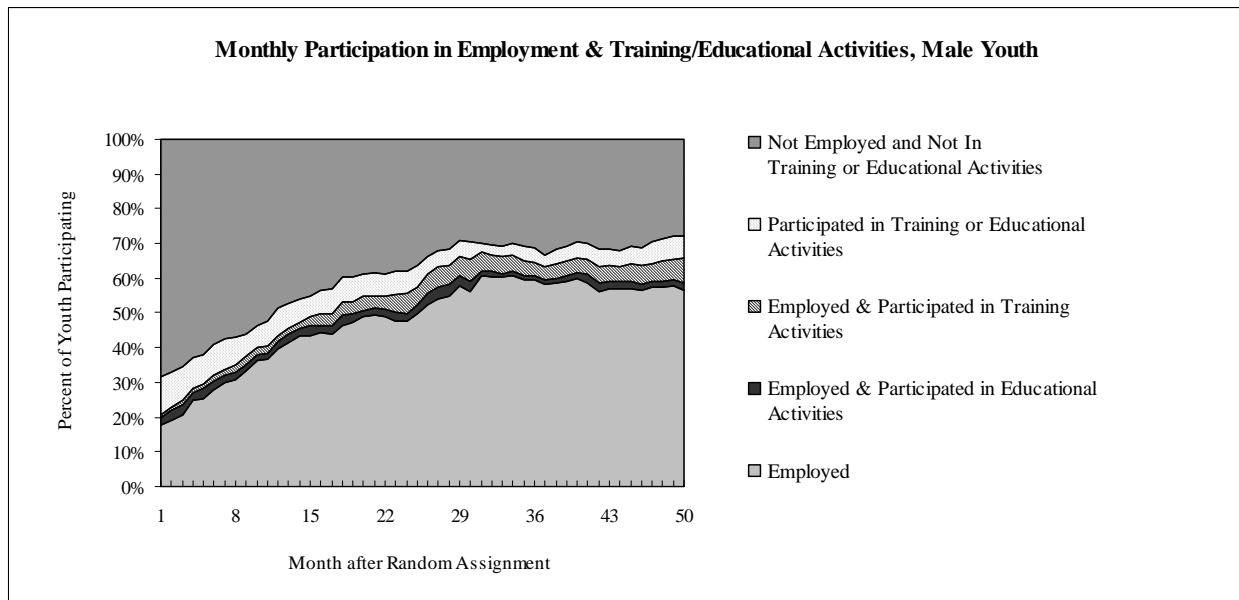
Figure 1



(n=1,118)

## The Characteristics of Career Paths among Out-of-School Youth

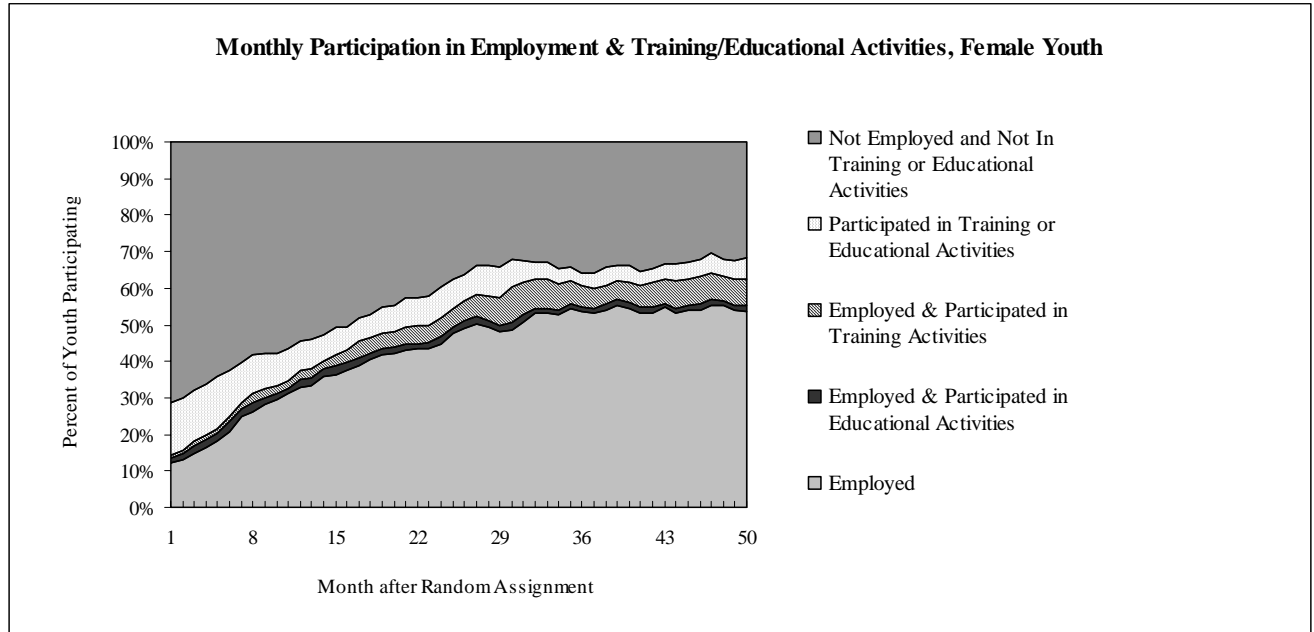
Figure 2



(n=409)

## The Characteristics of Career Paths among Out-of-School Youth

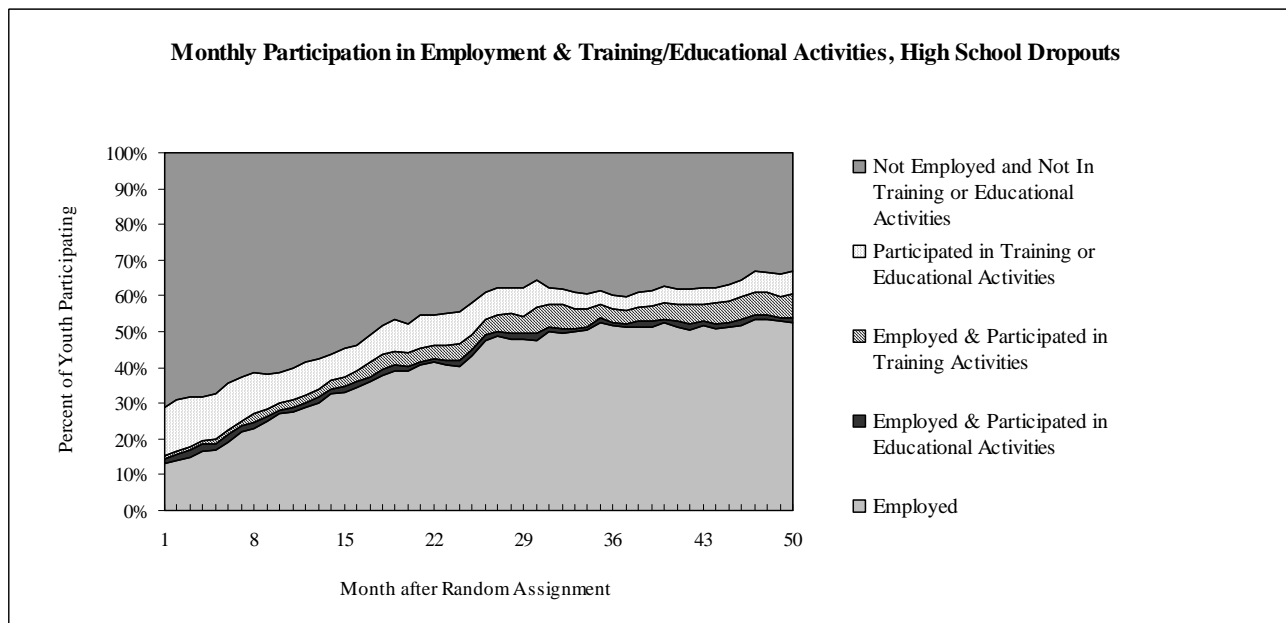
Figure 3



(n=623)

## The Characteristics of Career Paths among Out-of-School Youth

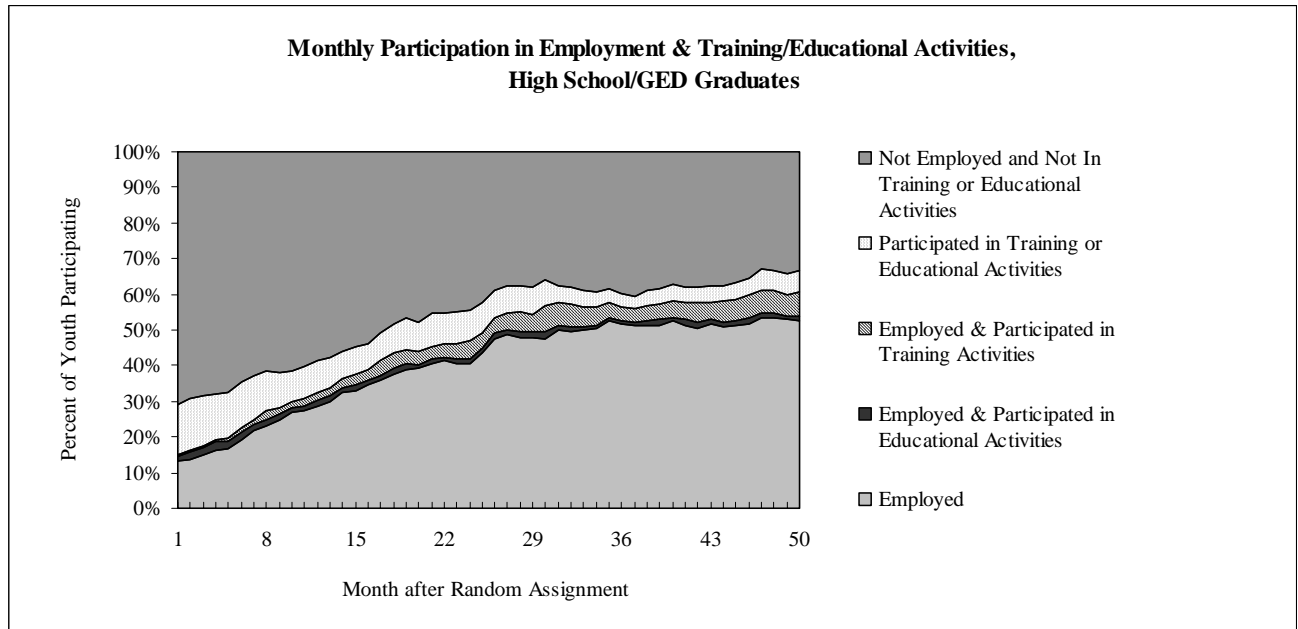
Figure 4



(n=564)

## The Characteristics of Career Paths among Out-of-School Youth

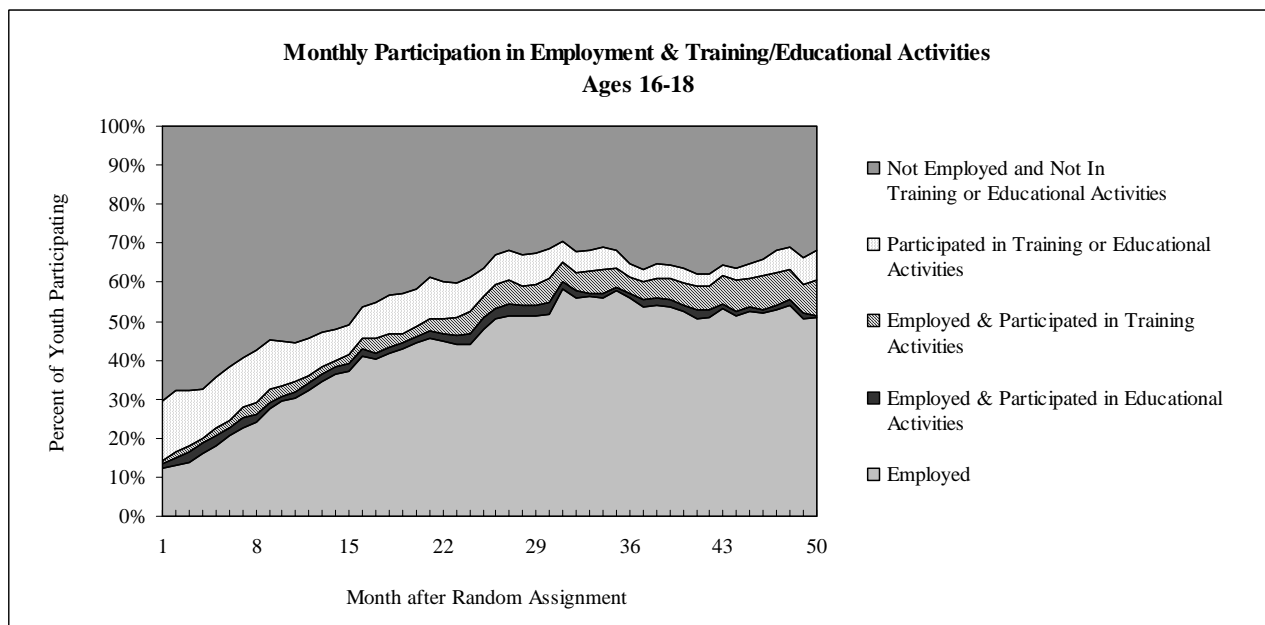
Figure 5



(n=438)

## The Characteristics of Career Paths among Out-of-School Youth

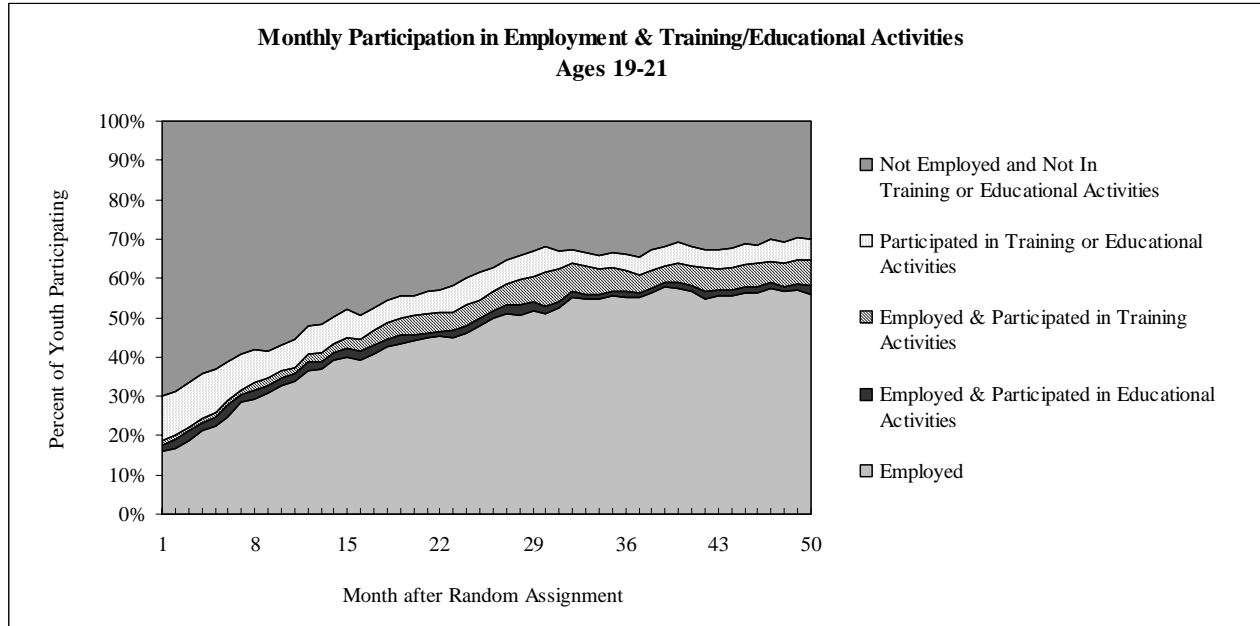
Figure 6



(n=300)

## The Characteristics of Career Paths among Out-of-School Youth

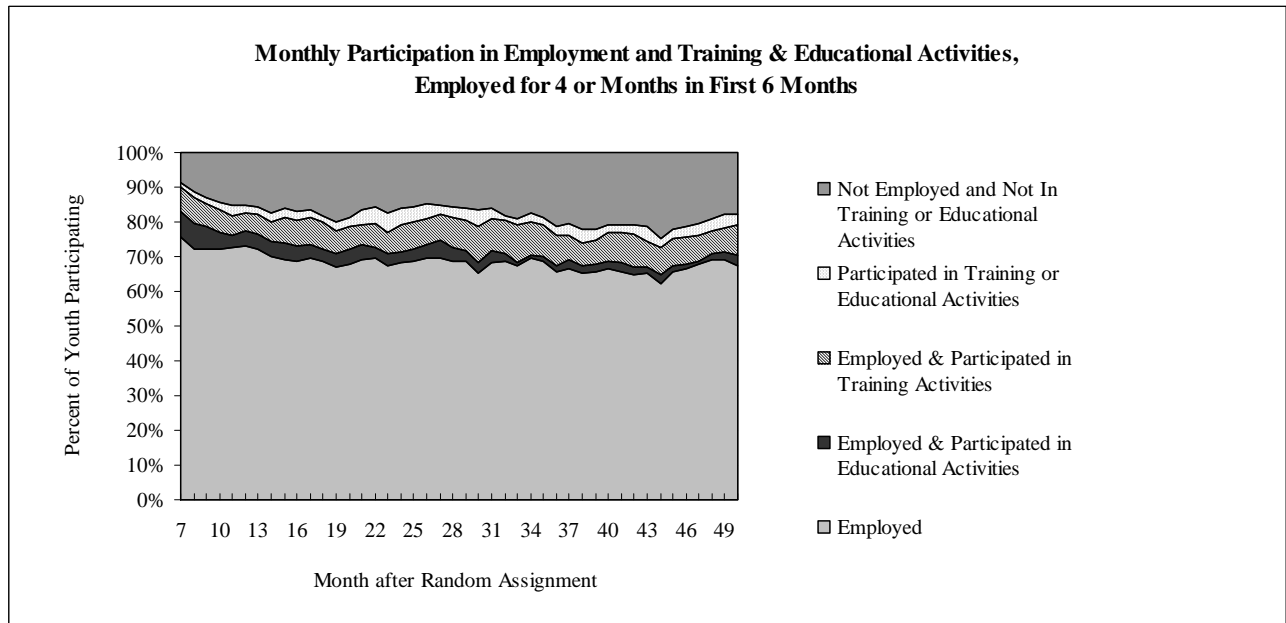
Figure 7



(n=676)

## The Characteristics of Career Paths among Out-of-School Youth

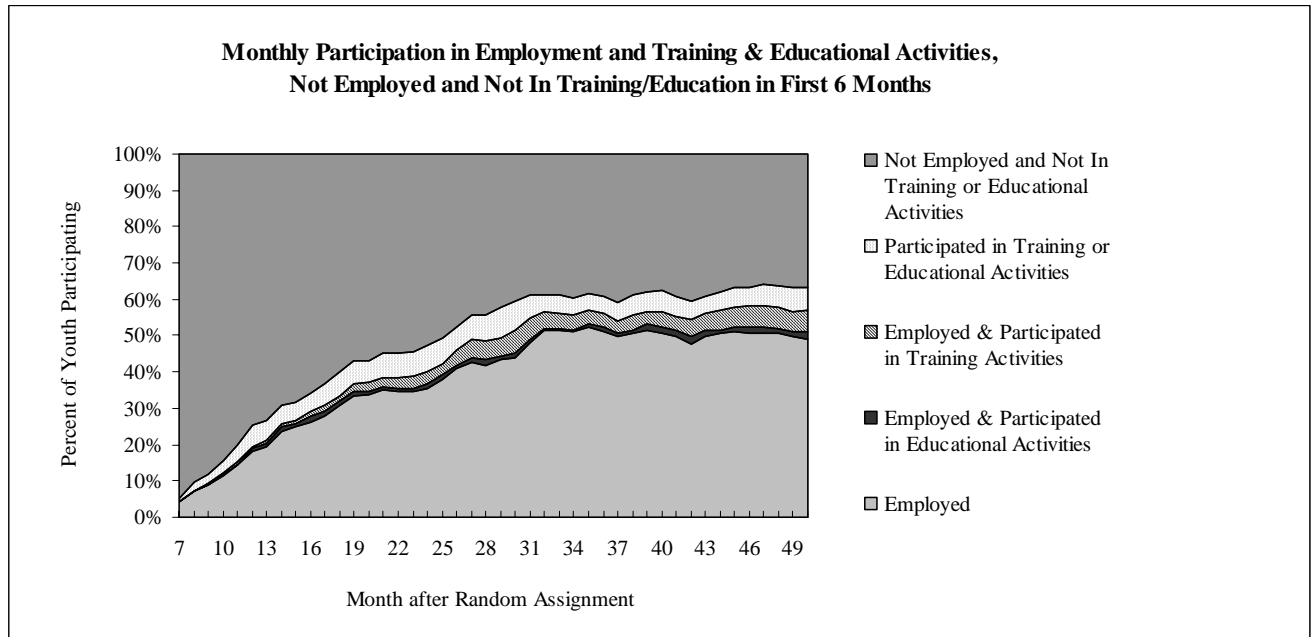
Figure 8



(n=230)

## The Characteristics of Career Paths among Out-of-School Youth

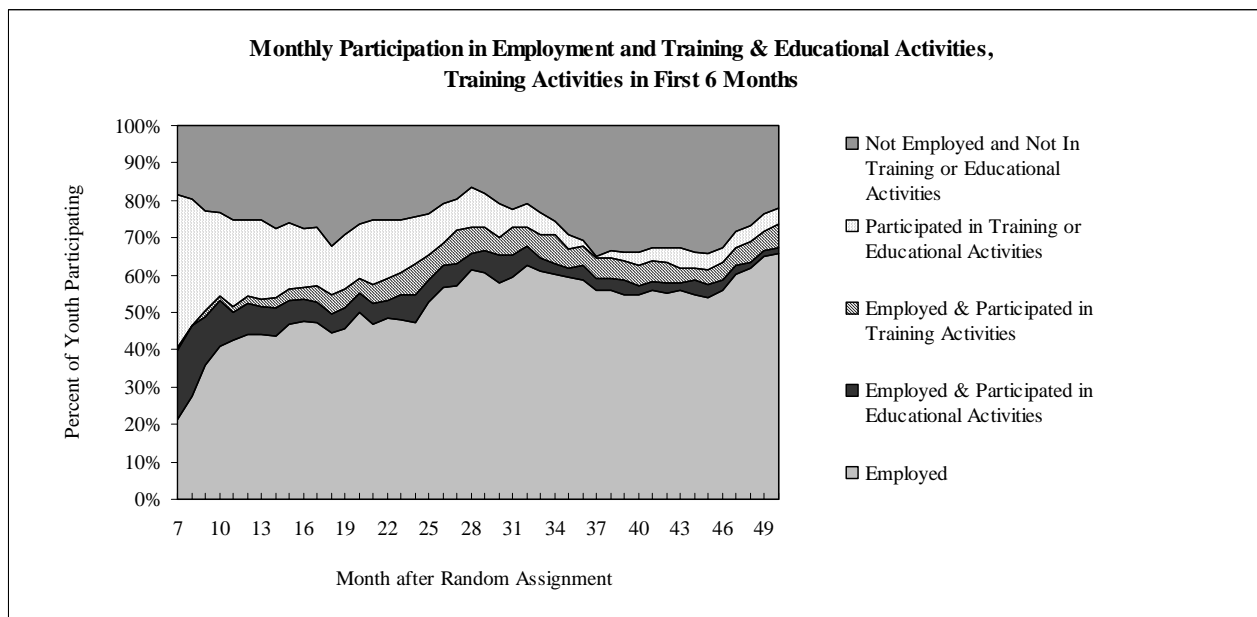
Figure 9



(n=579)

## The Characteristics of Career Paths among Out-of-School Youth

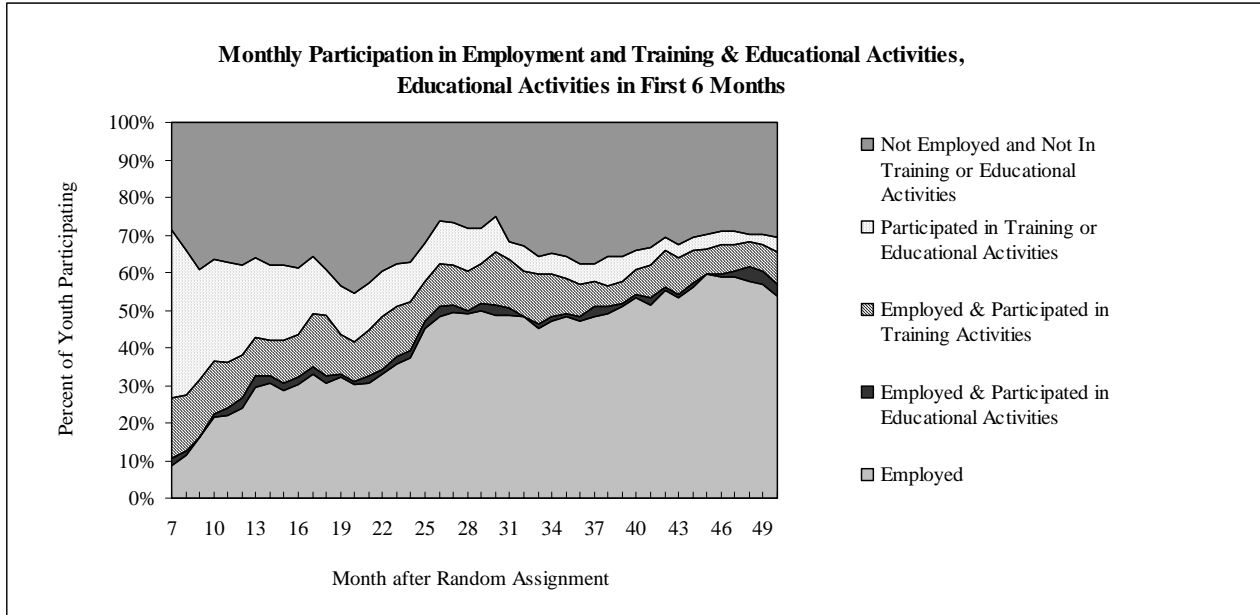
Figure 10



(n=135)

## The Characteristics of Career Paths among Out-of-School Youth

Figure 11

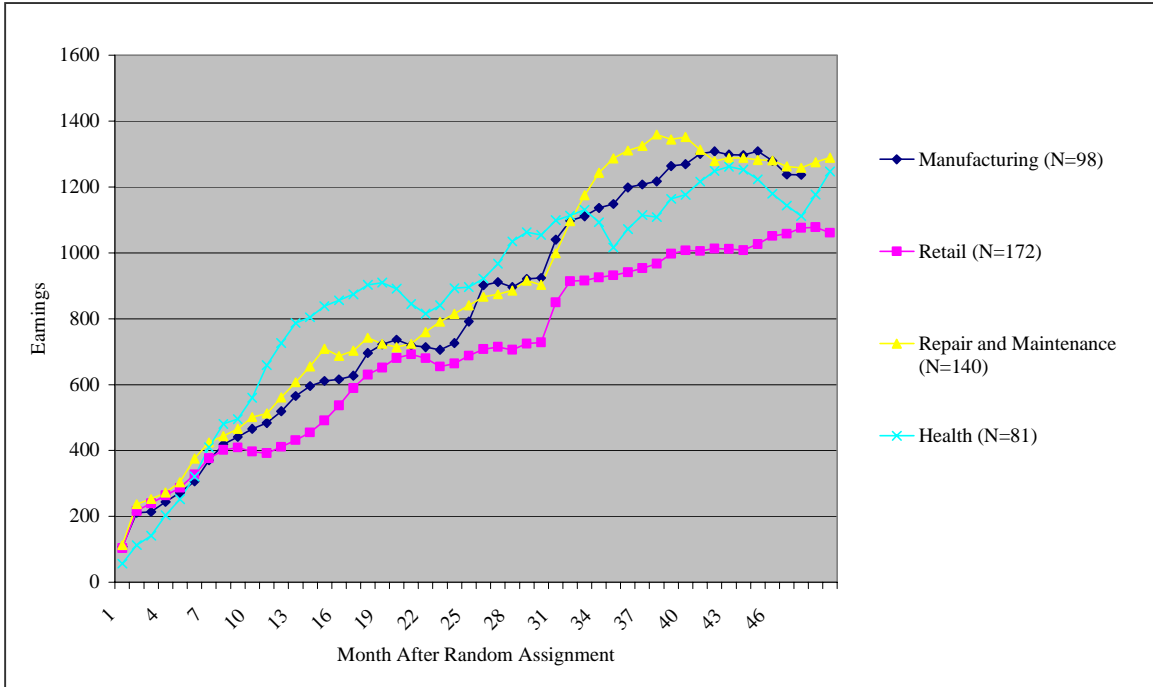


(n=107)

# The Characteristics of Career Paths among Out-of-School Youth

## Figure 12

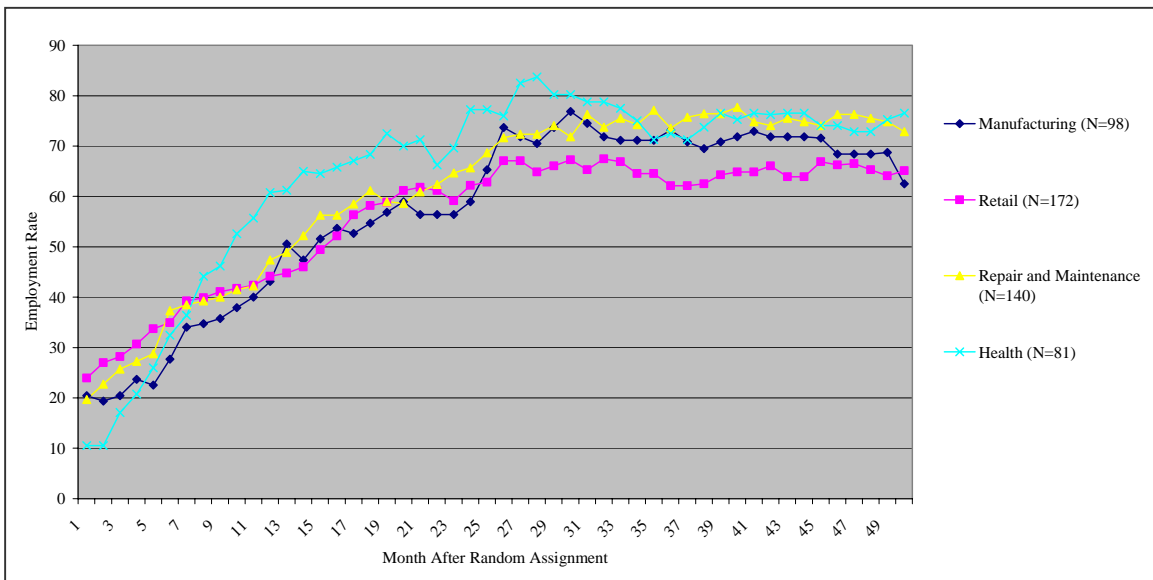
### Monthly Earnings for Select Employment Industries in Wave 1



# The Characteristics of Career Paths among Out-of-School Youth

## Figure 13

### Monthly Employment Rates for Select Employment Industries in Wave 1

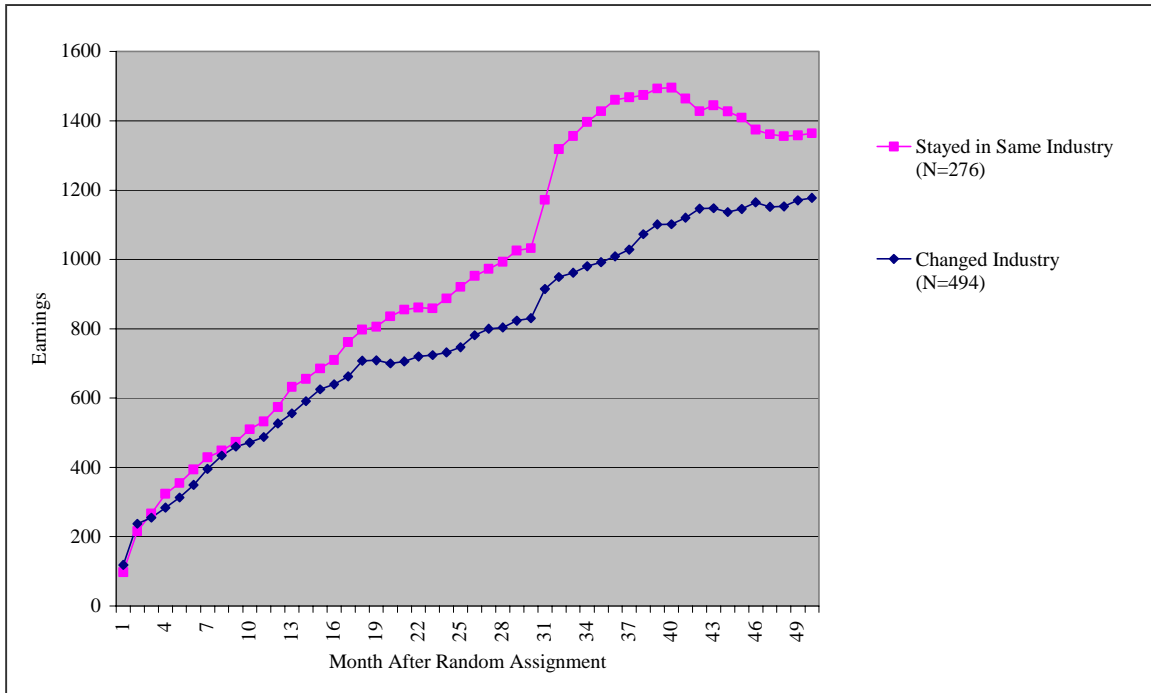




## The Characteristics of Career Paths among Out-of-School Youth

### Figure 14

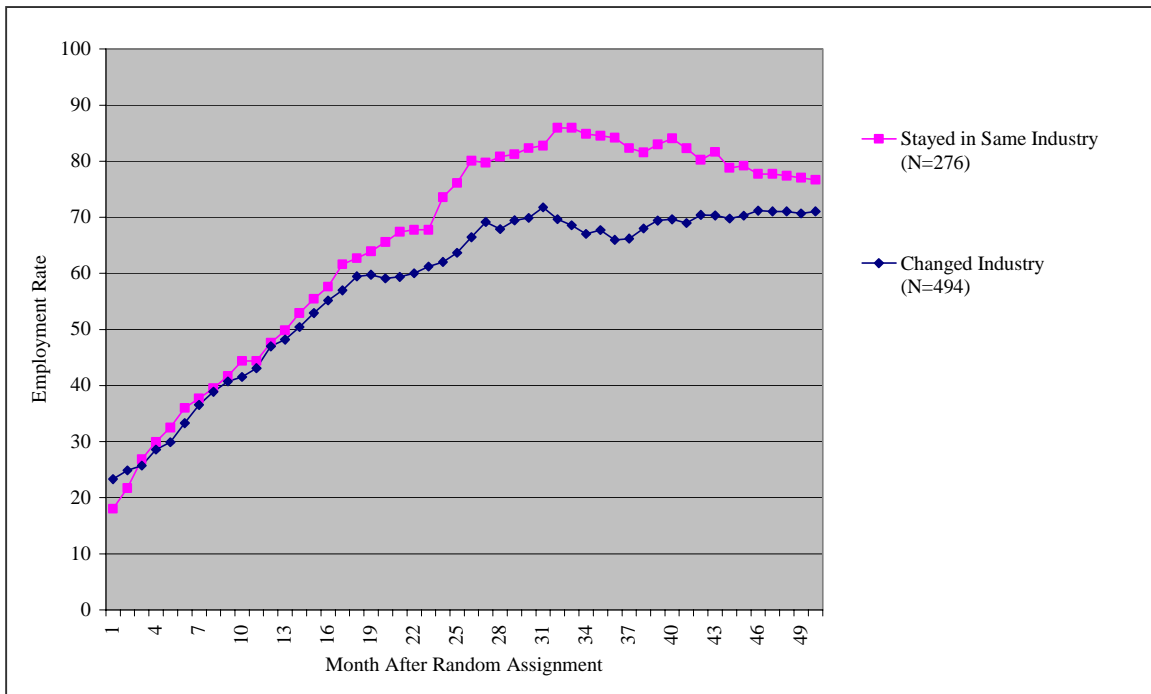
#### Monthly Earnings by Industry Stability Across Waves



## The Characteristics of Career Paths among Out-of-School Youth

### Figure 15

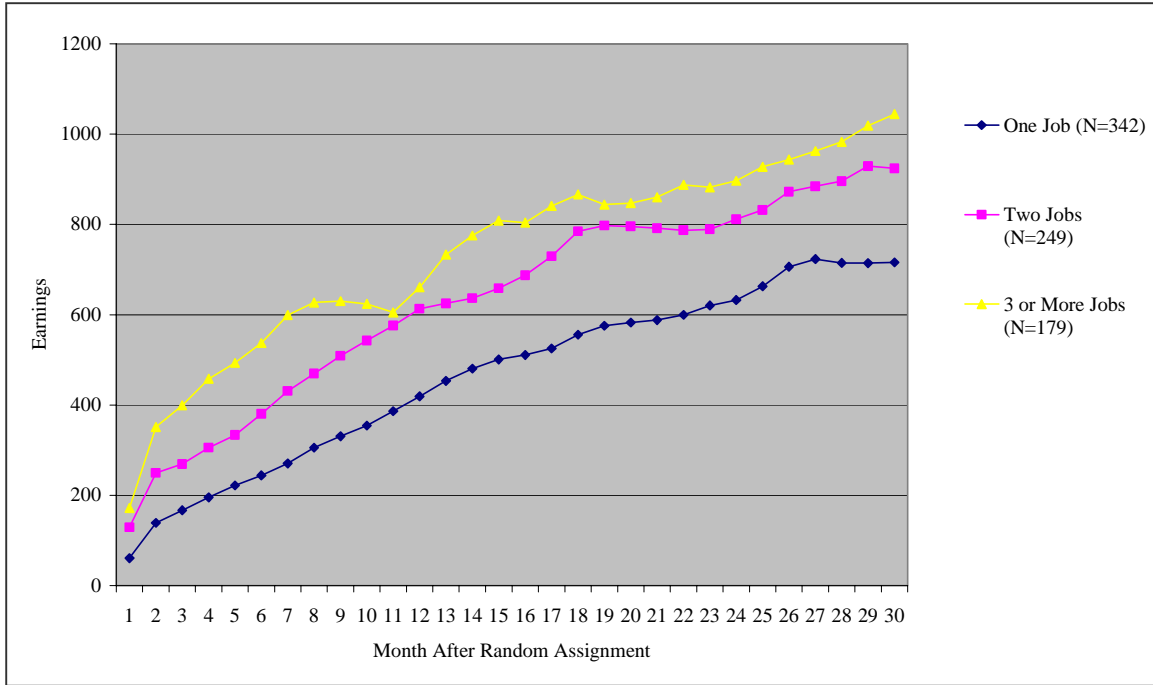
#### Monthly Employment by Industry Stability Across Waves



The Characteristics of Career Paths among Out-of-School Youth

Figure 16

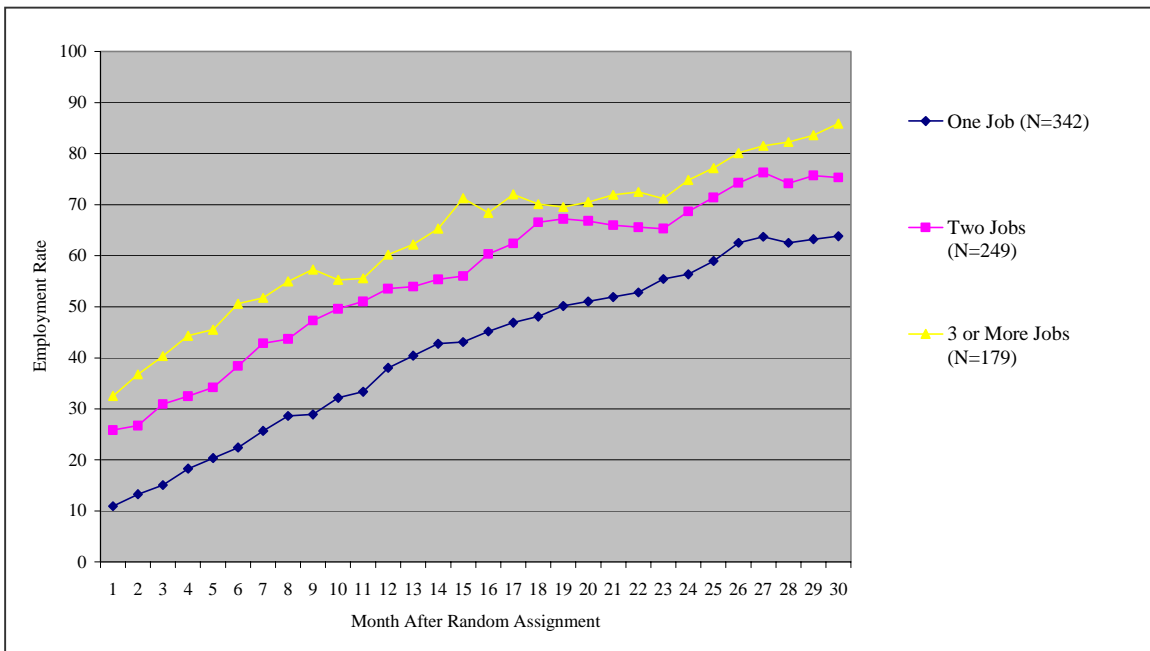
Monthly Earnings by Total Number of Jobs Held in Wave 1



The Characteristics of Career Paths among Out-of-School Youth

Figure 17

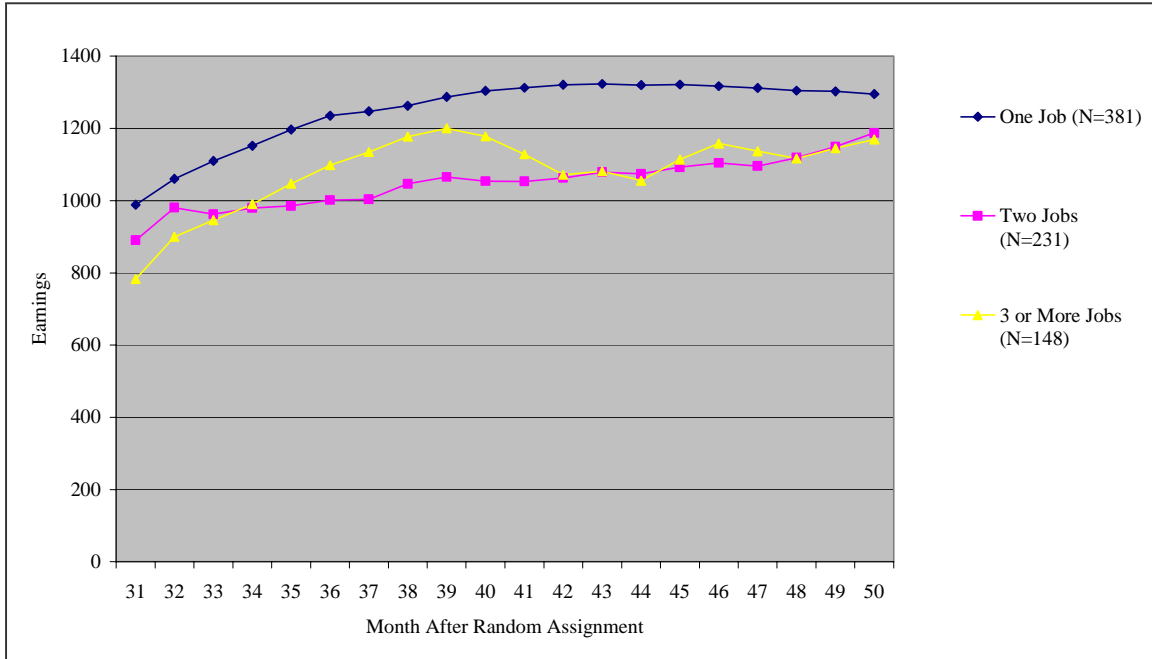
Monthly Employment Rates by the Total Number of Jobs Held in Wave 1



The Characteristics of Career Paths among Out-of-School Youth

Figure 18

Monthly Earnings by the Total Number of Jobs Held in Wave 2



The Characteristics of Career Paths among Out-of-School Youth

Figure 19

Monthly Employment Rates by the Total Number of Jobs Held in Wave 2

