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ABSTRACT

This study investigated the adult adjustment of students with mental disabilities in high-school graduating classes of 1984 and 1985, 1 and 3 years after they exited high school. Two hundred sixty students from the class of 1984 were interviewed 1 year out of high school; 166 from this same class were interviewed 3 years out of school. Three hundred twenty-two students from the class of 1985 were interviewed 1 year out of high school and again 3 years out of high school. Results are reported in terms of: (1) general status information, such as marital status and living arrangements; (2) information about those competitively employed versus working in sheltered workshops (wages earned, hours worked per week, fringe benefits received); (3) "successful" adjustment relative to specific criteria; and (4) a comparison across graduating classes and between years 1 and 3. Data are presented for the total group, by gender, and by program model (resource program, special class with either much or little integration, and self-contained special class). Among many findings were the following: after 3 years, 18.5 percent met the low criteria for success and only 3.9 percent met the high standard; there were only minor differences between males and females; and students from resource programs were more successful than those from more restrictive programs. (Author/DB)

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# Iowa Statewide Follow-up Study

## Changes in the Adult Adjustment of Graduates with Mental Disabilities One vs. Three Years Out of School



1991

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**Iowa Statewide Follow-up Study:  
Changes in the Adult Adjustment of Graduates with Mental Disabilities  
One vs. Three Years Out of School**

**Patricia L. Sitlington  
Iowa Department of Education  
Des Moines, Iowa**

**Alan R. Frank  
The University of Iowa  
Iowa City, IA**

**Rori Carson  
Eastern Illinois University  
Charleston, IL**

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**IOWA STATEWIDE FOLLOW-UP STUDY  
TASK FORCE MEMBERS**

**John McClure, Supervisor  
Keystone AEA 1**

**Irene Koster, Supervisor  
Northern Trails AEA 2**

**Dixey Morrison  
Special Education Director  
Lakeland AEA 3**

**Dianne Bierma  
WEC/Consultant  
Area Education Agency 4**

**Beverly Fisher, Supervisor  
Arrowhead AEA 5**

**Harold Eiten, WEC  
Area Education Agency 6**

**Suz Gronewold, Supervisor  
Area Education Agency 7**

**Jim Kay, Asst. Director  
Mississippi Bend AEA 9**

**Paula Vincenti, Supervisor  
Grant Wood AEA 10**

**Jim Kline, WEC/Consultant  
Heartland AEA 11**

**Joe Lux, Asst. Director  
Western Hills AEA 12**

**Cal Sinn, Supervisor  
Loess Hills AEA 13**

**Brad Riley, WEC  
Green Valley AEA 14**

**Bill Marks, Asst. Director  
Southern Prairie AEA 15**

**Ed Longanecker, Supervisor  
Great River AEA 16**

**Tom Jeschke  
Special Education Director  
Des Moines Public Schools**

**Dennis Thurman, Superintendent  
Iowa Braille and Sight Saving  
School**

## Preface

This monograph is one product of the Iowa Statewide Follow-up Study. Monographs have been developed, or are currently being completed, on the other major disability groups. An Action Group of the Iowa Statewide Follow-up Study Task Force also has been formed to draft specific programming recommendations based upon the data collected.

The follow-up study is a five-year project funded by the Iowa Department of Education, Bureau of Special Education, using EHA Part B discretionary funds. The purpose of this project is to determine the adult adjustment of special education graduates and dropouts (of all disabilities and program models) throughout the state of Iowa. The Iowa Statewide Follow-up Study is a joint effort of the Bureau of Special Education, Iowa Department of Education; the 15 Area Education Agencies in Iowa; Des Moines Public Schools; Iowa Braille and Sight Saving School; and the Division of Special Education, University of Iowa.

We gratefully acknowledge Merry Maitre, who originated the Iowa Statewide Follow-up Study; Dr. Timothy Z. Keith, who helped refine the data gathering procedures; Valerie Cool and Linda Cooper, who served as research associates for the project; and the Special Education Directors, Task Force members, and interviewers, who made the project a success. We also thank the individuals with disabilities who generously shared their stories and experiences with us.

For more information on the Iowa Statewide Follow-up Study, contact:

Dr. Patricia L. Sitlington, Project Director  
Bureau of Special Education  
Iowa Department of Education  
Grimes State Office Building  
Des Moines, IA 50319-0146  
(515)281-3176

## Abstract

This study investigated the adult adjustment of randomly selected students with mental disabilities in the Classes of 1984 and 1985 one and three years after they exited high school. Two hundred sixty students (93% of those selected) from the Class of 1984 were interviewed one year out of high school; 166 from this same class were interviewed three years out of school. Three hundred twenty-two students (85% of those selected) from the Class of 1985 were interviewed one year out of high school; this same number were interviewed again three years out of high school. Results are reported in terms of: (a) general status information, such as marital status, living arrangements; (b) information about those competitively employed vs. working in sheltered workshops (wages earned, hours worked per week, fringe benefits received); (c) "successful" adult adjustment relative to criteria presented in this monograph; and (d) a comparison across graduating classes and between Years 1 and 3. Data are presented for the total group, by gender, and by program model.

**Iowa Statewide Follow-up Study:**  
**Changes in the Adult Adjustment of Graduates with Mental Disabilities**  
**One vs. Three Years Out of School**

A number of studies have been conducted on individuals with mental disabilities in terms of their adjustment as adults (e.g., Frank, Sitlington, Cooper, & Cool, 1990; Hasazi, Gordon, Roe, Hull, Finck, & Salembier, 1985). This population also has been included in studies investigating the adult adjustment of individuals with mild handicaps (Clark, Hayden, & Lezzer, 1987; Edgar, 1987; Halpern, 1990; Halpern & Benz, 1987; Hasazi, Gordon, & Roe, 1985; Mithaug, Horiuchi, & Fanning, 1985).

These studies indicate that between one-third and one-half of the individuals with mental disabilities (MD) were employed full time, with females working fewer hours per week than males (Frank et al., 1990; Hasazi, Gordon, Roe, Hull, Finck, & Salembier, 1985). Most individuals in these studies worked in low status occupations as service workers or laborers. Hasazi, Gordon, Roe, Hull, Finck, and Salembier (1985) found a marginal association between vocational education and employment status, whereas Frank et al. (1990) found little support for vocational education as a predictor variable, although it should be noted that almost all individuals had some type of vocational training in high school and the content and amount of training was not known. Hasazi, Gordon, Roe, Hull, Finck, and Salembier (1985) reported higher employment rates among those who had paid jobs while in high school; Frank et al. (1990) found no such association between high school employment and

current employment status. Neither study found a statistically significant association between participation in high school work experience programs and current employment status.

Most of the aforementioned studies, however, report information on the adjustment of individuals with disabilities who have been out of school for varying amounts of time (or the amount of time between exiting high school and obtaining the follow-up data wasn't explicitly stated). The present study was a subcomponent of the Iowa Statewide Follow-up Study, which was a five-year project designed to study a random sample of special education graduates and dropouts (of all disabilities and program models) throughout the state of Iowa. This subcomponent was designed to investigate the adult adjustment of graduates with mental disabilities who had been out of school for three years. The adult adjustment of these individuals three years out of school is compared to their status one year after graduation. Data on a replication sample also are provided. Variables addressed in this study include: (a) general adult status (e.g., marital status, leisure activities); (b) employment variables (e.g., percent employed, location of jobs, classification of jobs, wages); and (c) successful adult adjustment (composites created by combining several variables).



## METHOD

### Participants

The primary sample for this investigation (referred to in this report as Group 2) was the Class of 1985, surveyed one year (designated G2Y1) and again three years after graduation (designated G2Y3). A replication sample (referred to in this report as Group 1) was the Class of 1984, also surveyed one year (designated G1Y1) and again three years after graduation (designated G1Y3). Each of the 15 Area Education Agencies (AEAs) (12 AEAs participated in G1Y1) in the state of Iowa prepared a list of special education students (all exceptionalities) who were graduated from, or "aged out" of, high school at the end of each target year. For each AEA, 50% of the students were randomly selected for inclusion in the sample each target year. At Year 3 for each group, interviewers sought to survey the entire 50% random sample selected at Year 1, with the exception of G1Y3, where half of the random sample were sought for interviews due to time constraints in conducting the interviews.

School records of individuals in both groups were examined to obtain relevant information, including each student's primary disability label and program model at the time of exit from school. The numbers of MD graduates

from each group selected and interviewed are presented in Table 1. Eighty-eight percent of the G2Y3 subjects also were interviewed one year after graduation (sixty-three percent of the G1Y3 subjects also were interviewed one year after graduation). Relevant data for the subjects in Group 2 are presented in Table 2. The data show that the subjects in G2Y3 and G2Y1 were very similar on all variables included in Table 2. Iowa Department of Education rules require that students must have an IQ of greater than one standard deviation below the mean on an individually administered intelligence test and exhibit an adaptive behavior deficit in order to be labelled mentally disabled.

Of those MD graduates not interviewed in G2Y3, 2% refused the interview, 5% had moved out of town, less than 1% were in jail ( $n = 1$ ), and no reasons were given for the remaining subjects. Reasons were similar for G2Y1 not interviewed; 3% refused the interview, 5% had moved out of town, 1% were in the military, and no reasons were given for the remaining subjects.

The term program model in Table 2 is used synonymously with type of special education model attended by individuals while in high school. Students attended the model designated resource teaching programs (RTP) for a minimal average of thirty minutes per day; these students attended regular classes for the

Table 1

Numbers of Persons Randomly Selected and Interviewed

Group	Randomly Selected	Interviewed
G1Y1	280	260 (93%)
G1Y3	208	166 (80%)
G2Y1	381	322 (85%)
G2Y3	379	322 (85%)



Table 2

## Selected Characteristics of Group 2 Prior to Graduation

Variable	Total Group	Program Model			
		RTP	SCIN	SCIN-L	SSC
<b>G288</b>					
Gender	(n = 318)	(n = 75)	(n = 148)	(n = 74)	(n = 21)
% Male	55	49	53	60	67
% Female	45	51	47	40	33
Full Scale IQ	(n = 304)	(n = 71)	(n = 144)	(n = 68)	(n = 21)
M	70.59	78.72	72.79	65.02	46.05
SD	13.04	8.51	8.25	14.08	12.80
Academic Achievement					
Math					
M	(n = 291)	(n = 74)	(n = 147)	(n = 62)	(n = 8)
SD	5.18	6.25	5.36	3.85	2.19
	2.07	1.74	1.74	2.16	1.74
Reading					
M	(n = 296)	(n = 74)	(n = 147)	(n = 62)	(n = 13)
SD	4.88	6.01	4.77	4.30	2.48
	2.13	2.06	1.90	2.19	1.05
<b>G286</b>					
Gender	(n = 318)	(n = 76)	(n = 150)	(n = 70)	(n = 22)
% Male	54	43	55	60	59
% Female	46	57	45	40	41
Full Scale IQ	(n = 306)	(n = 72)	(n = 146)	(n = 66)	(n = 22)
M	70.15	77.75	72.93	63.44	46.96
SD	12.99	5.99	8.38	15.04	13.72
Academic Achievement					
Math					
M	(n = 292)	(n = 76)	(n = 147)	(n = 60)	(n = 9)
SD	5.09	6.16	5.27	3.75	2.14
	2.01	1.67	1.65	2.13	1.62
Reading					
M	(n = 298)	(n = 76)	(n = 147)	(n = 61)	(n = 14)
SD	4.85	5.99	4.77	4.21	2.26
	2.15	2.02	1.93	2.20	0.94

remainder of each school day. In the special class with integration model (SCIN), students attended special classes for the majority of the school day, while participating in the general education curriculum in one or more academic subjects. Students in special classes with little integration (SCIN-L) were integrated into regular classes for limited participation. Students in self-contained special classes (SSC) received all of their instruction from a special education teacher.

### Instrumentation

The survey instrument used in this study was developed by project staff in conjunction with a task force of representatives of the 15 AEAs in the state of Iowa, the largest public school district in the state, and the state schools and correctional facilities. This task force identified the content areas to be covered in the interview form, based on previous follow-up studies conducted in other states and on other categories of information task force members felt would be useful in making programming decisions in their AEAs.

The survey instrument was designed to provide the following types of information: background information about students (e.g., test scores from high school, disability label, instructional program model); information pertaining to their high school programs (e.g., number of regular and special vocational education courses taken, extracurricular activities); evaluations of their school experiences (e.g., "Did your school experiences help you to keep a job?"); information about current life circumstances (e.g., marital status, living arrangements, leisure activities); and information on current employment (e.g., location of current job, salary, hours worked per week).

### Procedure

Interviews were conducted by professionals such as work experience coordinators, consultants, school psychologists, and teachers from each student's school district or AEA. These paid interviewers were trained and supervised by the Task Force member from their respective AEA. In addition, an in-depth interviewer handbook and sample interview forms were developed by project staff, and interviewers also participated in one or several one-hour training sessions on using these documents to insure consistency across interviewers. The project director was also on call to answer any general or specific questions arising from actual interviews.

All survey forms were first returned to the task force member for an initial content and completion check. Next, the forms were submitted to the Iowa Department of Education for a second content and completion check and for removal of any identifying information other than each student's ID number. All survey forms then were forwarded to The University of Iowa for a final content check, coding, computer entry and analysis. Data analyses were completed using routines described in the *SPSS-X User's Guide* (1986).

### RESULTS

The results are reported in three parts: total group, by gender, and by program model. Data reporting focuses on Group 2 three years after graduation (G2Y3). Year 3 data (G2Y3) are compared to Year 1 data (G2Y1) for individual variables only when a difference  $\geq 15\%$  was found (the authors viewed a difference  $\geq 15\%$  as a change worth noting, although the choice of  $\geq 15\%$  was somewhat arbitrary). Thus, if no Year 1 data are reported, it can be inferred

that a substantial change did not occur from Years 1 to 3. Graphs are presented in the Results section for all variables for which a difference  $\geq 15\%$  was found between G2Y3 and G2Y1, and include Years 1 and 3 data for Group 1 as well. Additional information about comparisons between Groups 1 and 2 are included at the end of each part of the Results section.

**Total Group**

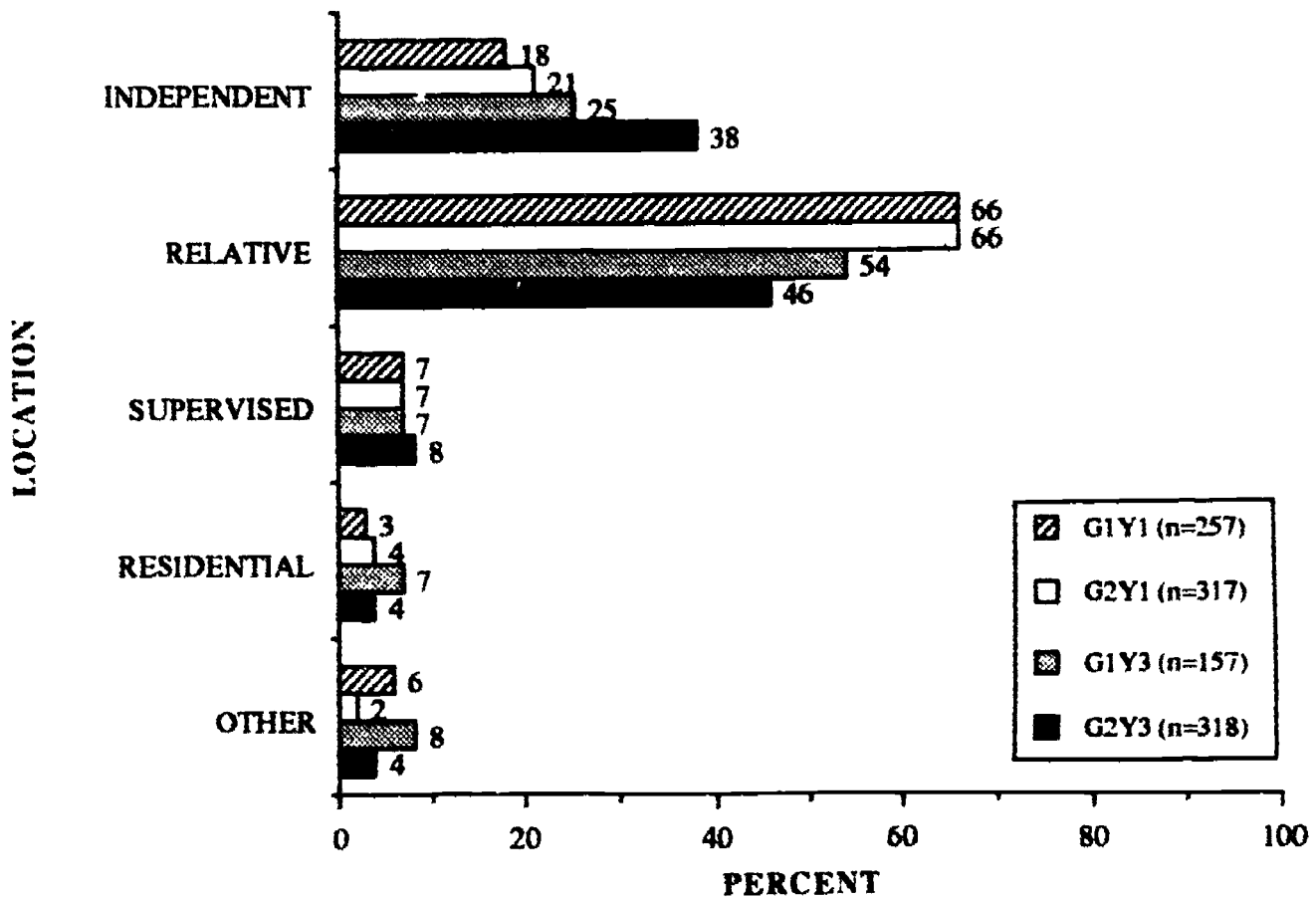
**General Status**

Eighty-one percent of the individuals were single three years after graduating from high school, and 16% were married. Only a small proportion (3%) were divorced, separated, or widowed.

During the interview, respondents were asked about their place of residence. Thirty-eight percent reported they were living independently (i.e., alone, with a friend, or buying a home), up from 21% who said they were living independently one year after exiting high school (see Figure 1). A corresponding drop was found in the proportion of individuals who indicated they were living with relatives (46% at Year 3 compared to 66% at Year 1). The proportion of persons who were living in supervised housing (i.e., supervised apartment or group home) remained constant over the same time interval (8%), as did the proportion (4%) of individuals living in residential centers (i.e., institutions or large community facilities).

The majority of persons (63%)

**Fig. 1 LIVING ARRANGEMENTS**



indicated they participated in from 1-3 leisure activities; another 17% reported they were involved in 4-6 leisure activities. Nine percent said they participated in more than 6 recreational activities, whereas 12% were involved in no leisure activities.

Two questions regarding finances (other than salary, which will be discussed in the next section) were included in the interview. About half (48%) of the respondents reported they were paying some of their living expenses three years after graduating from high school. Thirty percent reported they were paying all of their living expenses, double the percentage from Year 1 (see Figure 2). There was also a corresponding decrease in the proportion of persons paying none of their living expenses, dropping from 40% to 22%. Sources of financial assistance also were examined. About one-third (39%) of the respondents said they re-

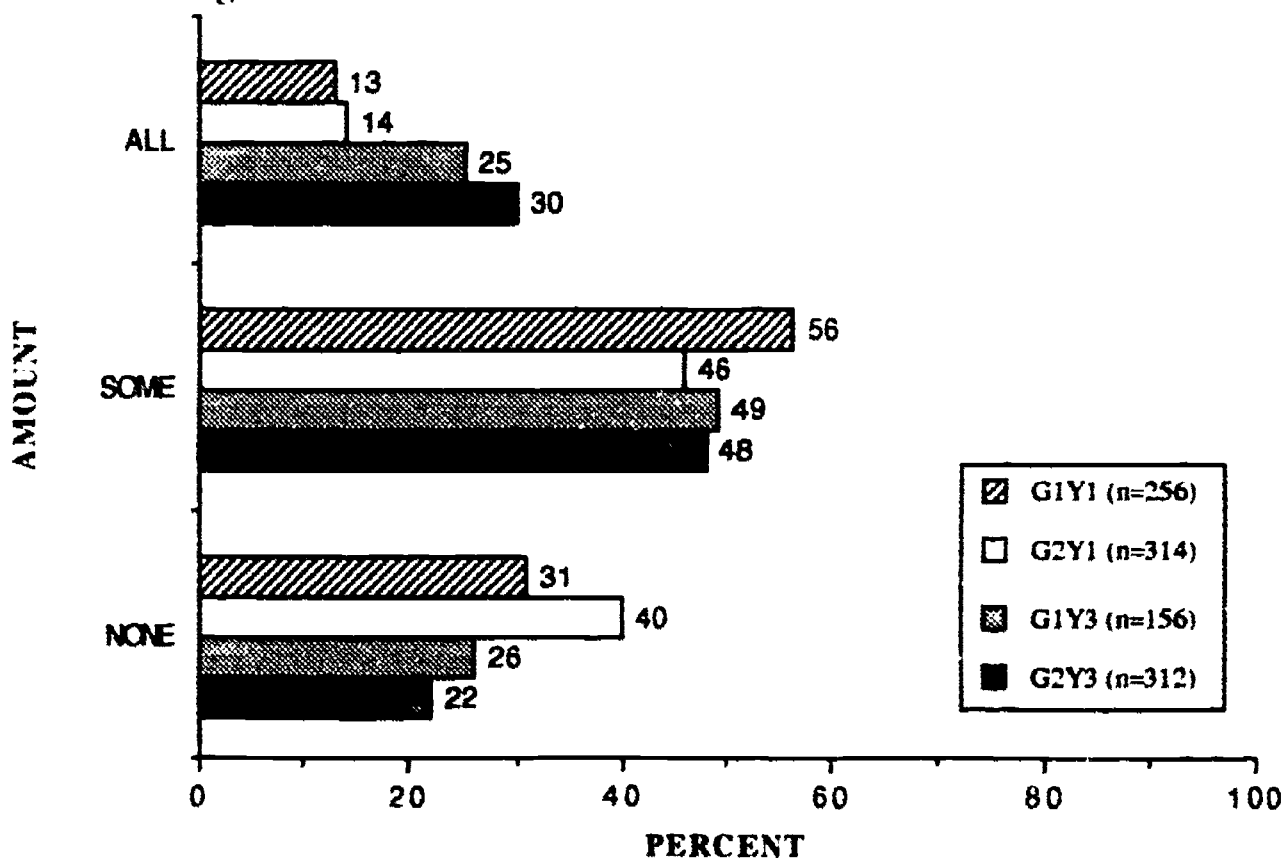
ceived no financial assistance from relatives or social service agencies. Another third (31%) reported getting financial assistance from parents, down from almost half (48%) one year after graduating (see Figure 3).

Individuals were asked about involvement in postsecondary training programs. The majority (66%) said they had no such training. Among those remaining persons who did participate in postsecondary programs, the majority (16%) were involved in community college programs, followed by private programs (10%). Only a very small proportion participated in adult education or apprenticeship programs.

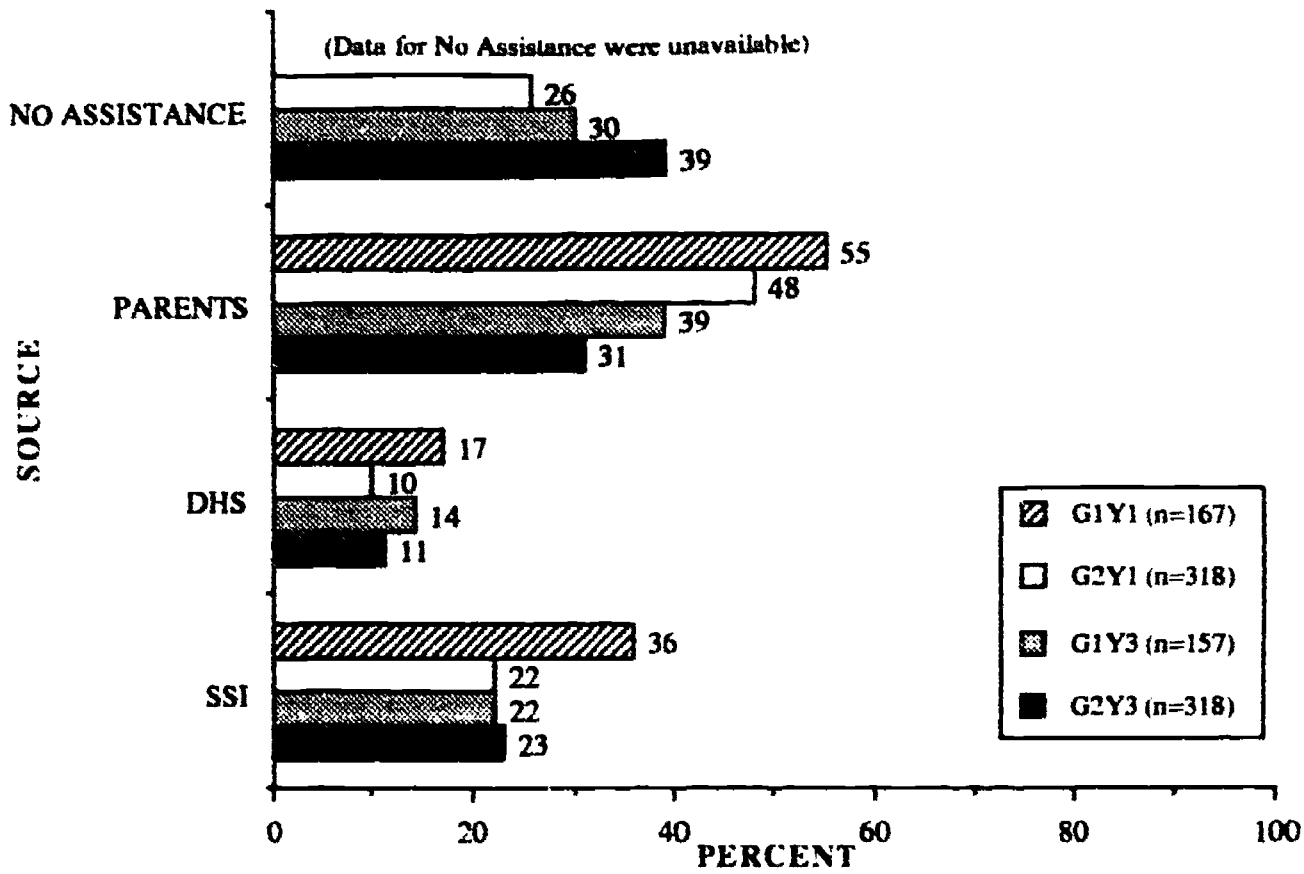
#### Information on Employment

Approximately three-fourths (72%) of the respondents were employed (full- or part-time) three years after exit-

**Fig. 2 PROPORTION OF EXPENSES PERSONS PAY**



**Fig. 3 SOURCES OF FINANCIAL ASSISTANCE**



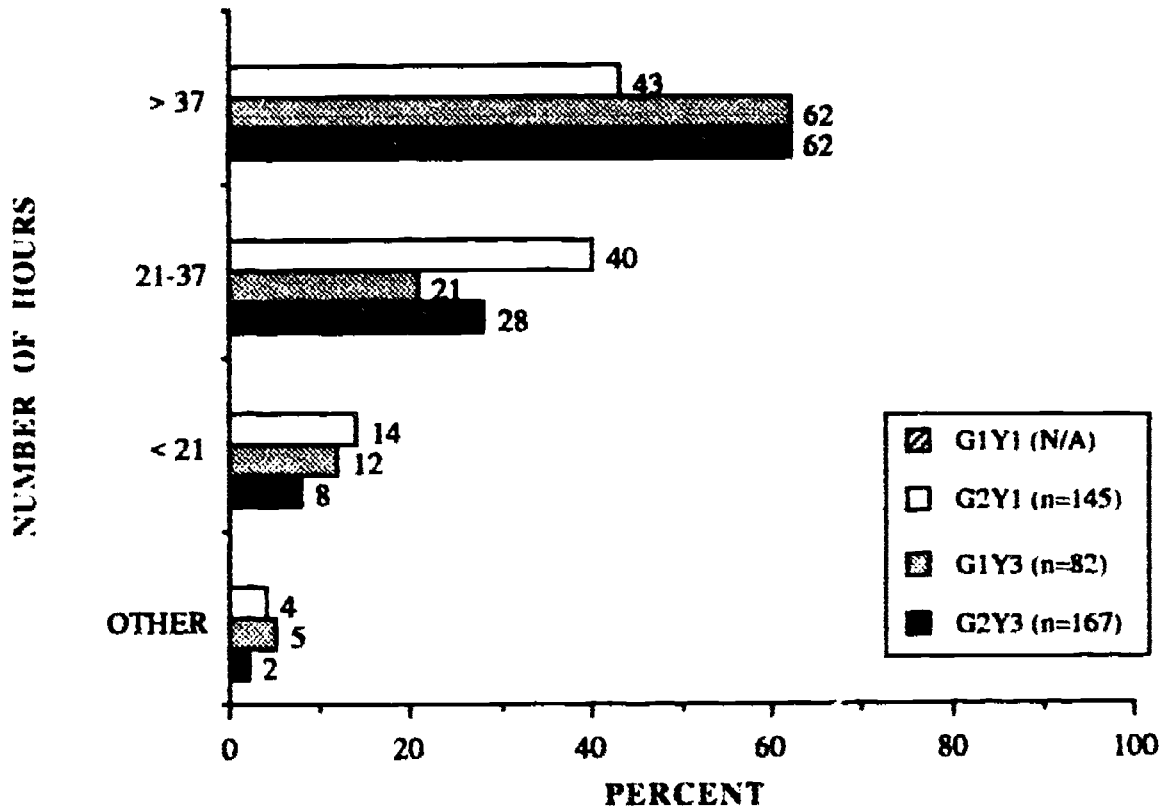
ing high school, and 21% reported they were unemployed. An additional 7% were homemakers, students, or in a job training program. All individuals were asked about the agencies they had contacted about employment opportunities. About one-half (45%) said they had talked to Job Service of Iowa, and about one-fourth reported talking to Job Training Partnership Act agencies (24%), Vocational Rehabilitation (25%), and a workshop (21%).

**Characteristics of Graduates in Competitive Employment.** Approximately three-fourths (73%) of the employed individuals worked in competitive jobs. Among those in such jobs, slightly over half (54%) worked in service occupations, and about half were employed as laborers. An additional 7% held jobs as operatives, and the remaining 13% held higher status jobs. Approximately two-thirds (62%) of those

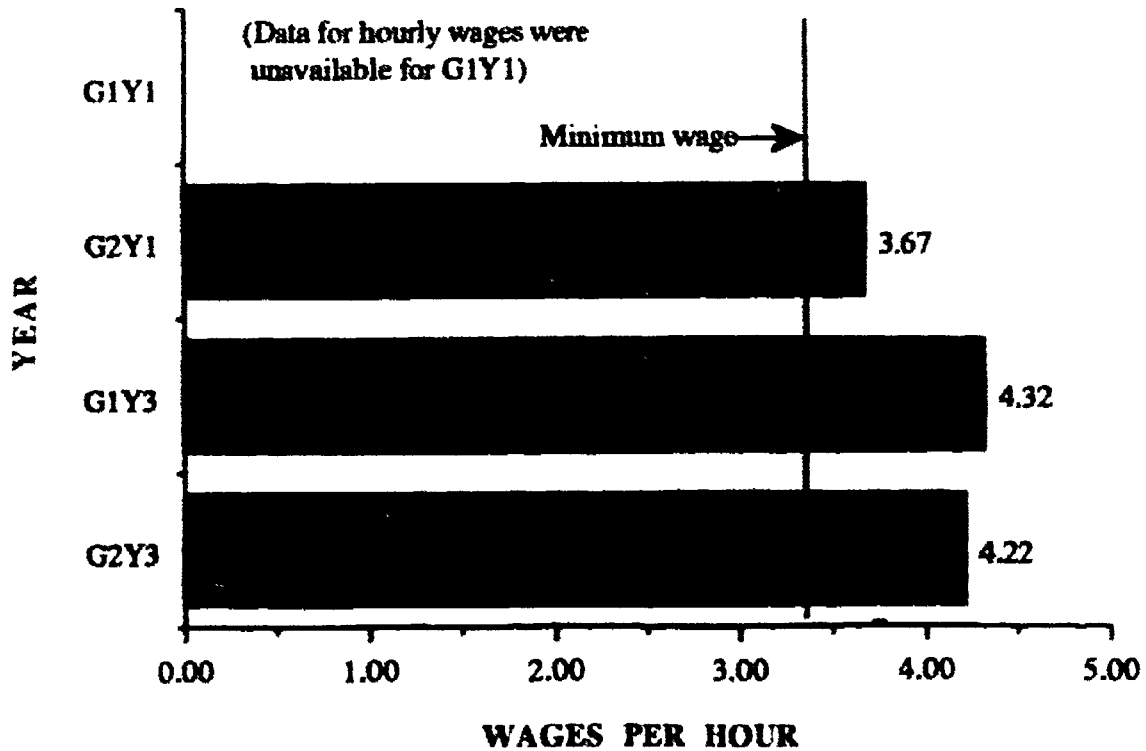
persons with jobs worked full-time, an increase of 19% over G2Y1 (see Figure 4) with workers apparently shifting from the 21-37 hours per week category. Another 28% worked 21-37 hours per week and the remaining 10% worked less than half time or seasonally. The average wage per hour for employed persons was \$4.22, up \$0.55 from an average of \$3.67 per hour for G2Y1 (see Figure 5). The proportions of working persons who were receiving health insurance, vacation, and sick leave benefits were 41%, 52%, and 29%, respectively. These figures represent increases of 20% and 24% for health insurance and vacation time, respectively over G2Y1 (see Figure 6).

**Characteristics of Graduates in Sheltered/Supported Employment.** Twenty-two percent of the employed individuals had jobs in sheltered workshops and 5% were in community jobs

**Fig. 4 NUMBER OF HOURS WORKED PER WEEK IN COMPETITIVE EMPLOYMENT**

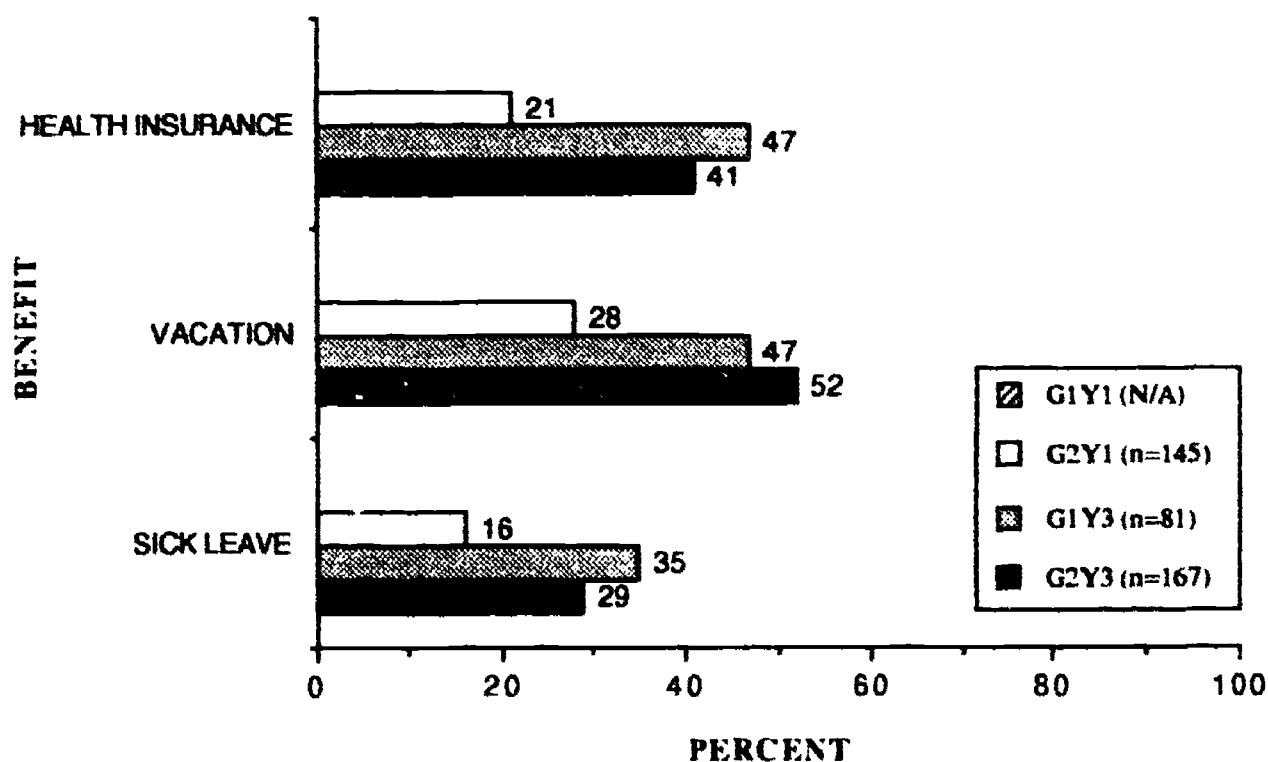


**Fig. 5 WAGES EARNED FROM CURRENT JOB IN COMPETITIVE EMPLOYMENT**





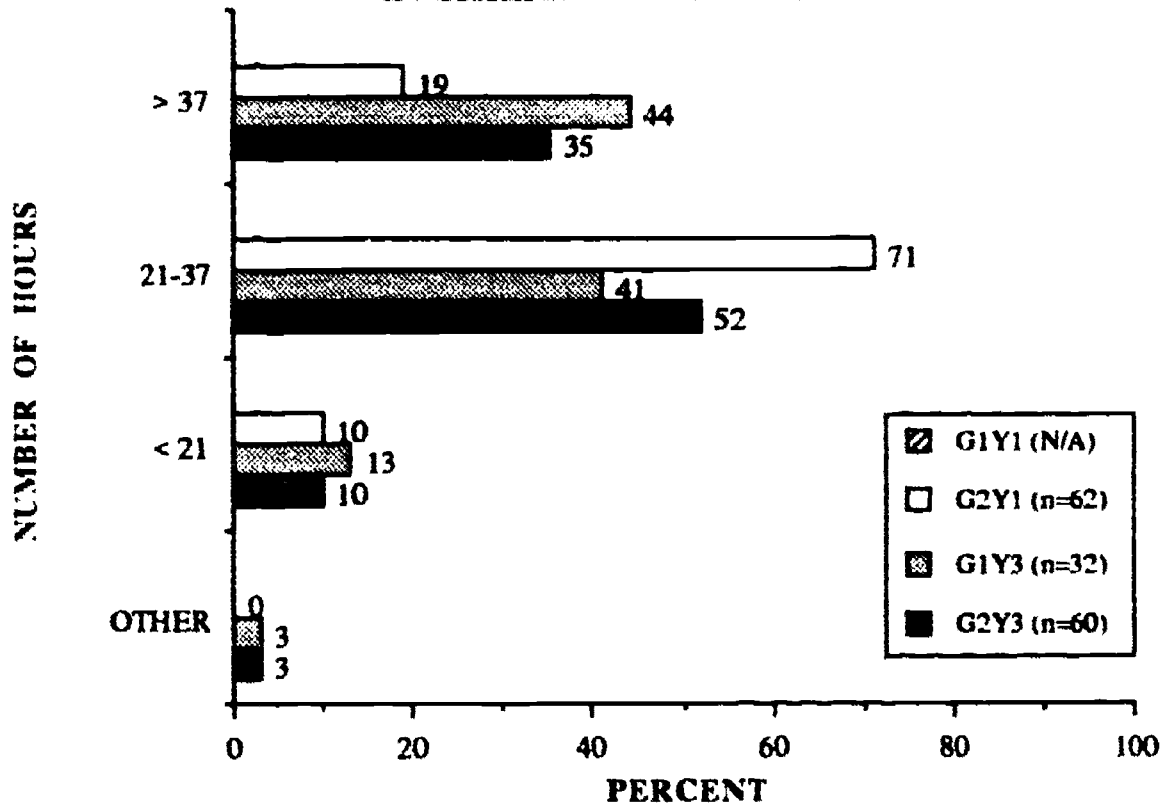
**Fig 6. JOB BENEFITS RECEIVED BY PERSONS IN COMPETITIVE EMPLOYMENT**



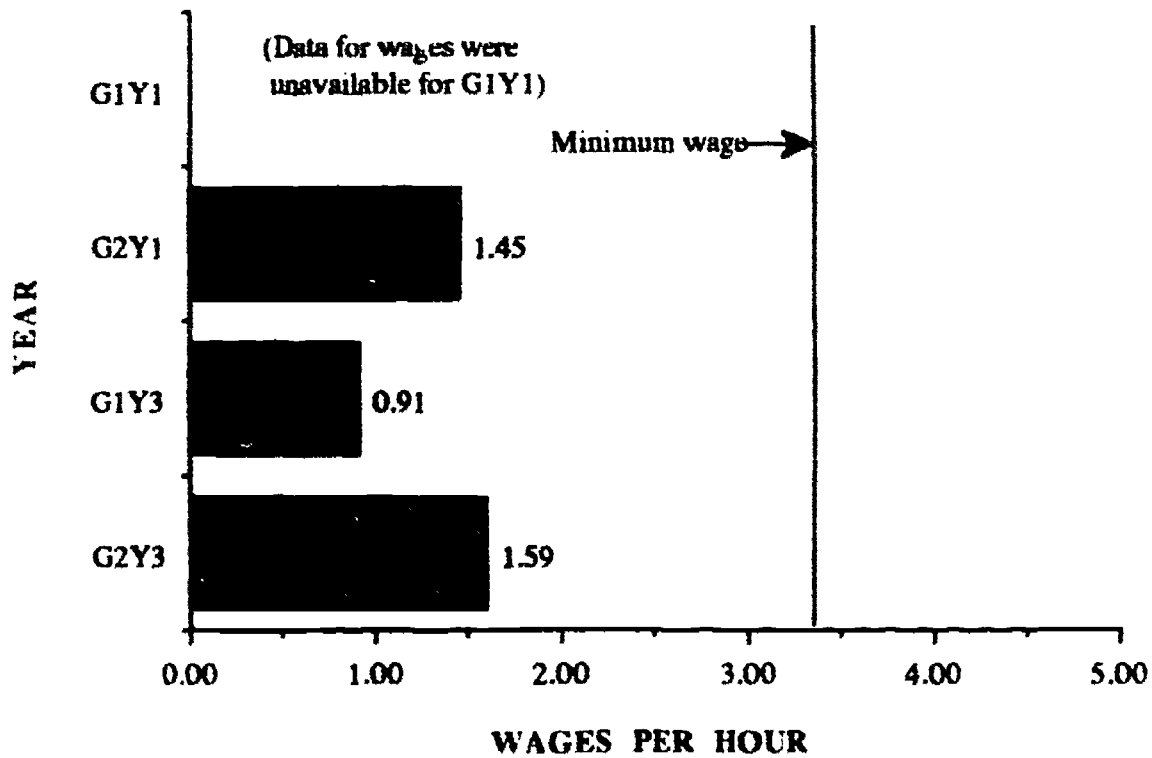
supervised by staff members of sheltered workshops. Over two-thirds (69%) of those individuals working in sheltered employment held jobs classified as laborers. Much smaller proportions had jobs classified as service workers and operatives (13% and 16%, respectively). Thirty-five percent of the employed respondents worked full-time, an increase of 16% over G2Y1 (see Figure 7). A substantial drop in the proportion of persons employed between 21-37 hours per week was observed (from 71% to 52%) with many possibly shifting into the full-time category. The average wage earned per hour was \$1.59, only a slight increase over G2Y1 when the average wage per hour was \$1.45 (see Figure 8). Half (51%) of those persons working in sheltered employment received vacation time as a job benefit, whereas substantially fewer received health insurance benefits (20%) or sick leave (28%).

A chi-square test was conducted to examine the relation between location of job and source of help in finding current job for G2Y3 individuals. Two values were assigned to the location of job variable (one for those who were in competitive employment or in a community-based job which was supervised by rehabilitation professionals, the other for those who were in a sheltered workshop). Two values also were assigned to the source of help variable (one for those who found a job through the self/family/friends network, the other for those who found a job through some public agency, such as a school, vocational rehabilitation, Job Service of Iowa, or a JTPA agency). A significant statistic was obtained,  $X^2 (1, n=208) = 45.54, p < 0.001$ . When the self/family/friends network was used to find a job, 93% of the individuals worked in competitive or community-based employment and 7%

**Fig. 7 NUMBER OF HOURS WORKED PER WEEK IN SHELTERED EMPLOYMENT**



**Fig. 8 WAGES EARNED FROM CURRENT JOB IN SHELTERED EMPLOYMENT**





worked in sheltered employment. When a public agency was used to find work, 53% of the individuals worked in competitive or community-based employment and 47% worked in sheltered employment.

### Successful Graduates

Successful adult adjustment of individual participating in this investigation was determined by first constructing "success" indices for one and three years following graduation. These indices were actually composites of selected variables judged by the authors to be associated with successful adult adjustment. For each follow-up year, high and low levels of success were computed.

The composite of a high level of success for graduates one year after graduation (G2Y1) was composed of the following variables: (a) employment in a community-based job (either a job in competitive employment or in the community where individuals were supervised by staff of a rehabilitation facility); (b) buying a home, living independently, living with a friend, or living in a supervised apartment; (c) paying at least a portion of living expenses; and (d) involved in more than three leisure activities. The use of this set of "high" criteria resulted in the identification of 4.5% ( $n = 11$ ) of the total group as having successfully adjusted to adult life one year after graduation. The composite of a low level of success for graduates one year was made up of the following variables: (a) employment in a community-based job (either a job in competitive employment or in the community where individuals are supervised by staff of a rehabilitation facility); (b) buying a home, living independently, living with a friend, living in a supervised apartment, or living in a group home; (c) not necessarily paying any living expenses; and (d) involved in at least

one leisure activity. Use of this set of "low" criteria yielded an additional 12.2% ( $n = 30$ ) of the graduates.

The composite of a high level of success for graduates three years after graduation (G2Y3) was composed of the following variables: (a) employed in a community-based job (either a job in competitive employment or in the community where individuals were supervised by staff of a rehabilitation facility) full-time ( $> 37$  hours per week) and earning at least \$3.35 per hour (persons not reporting wages were excluded from this analysis); (b) buying a home, living independently, living with a friend, or living in a supervised apartment; (c) paying over half of living expenses, and (d) involved in more than three leisure activities. Three-and-nine-tenth percent ( $n = 10$ ) of the total group were judged to be successful as adults three years after graduation. The composite of a low level of success for graduates three years after graduation was composed of the following variables: (a) employed in a community-based job (either a job in competitive employment or in the community where individuals were supervised by staff of a rehabilitation facility) at least half time ( $> 20$  hours per week) and earning at least \$3.35 per hour (persons not reporting wages were excluded from this analysis); (b) buying a home, living independently, living with a friend, living in a supervised apartment, or living in a group home; (c) paying at least a portion of living expenses; and (d) involved in at least one leisure activity. An additional 18.5% ( $n = 47$ ) were perceived as successful adults three years after graduation using this lower set of expectations.

### Comparison of Groups 1 and 2

Where differences  $\geq 15\%$  were found between G1Y1 and G2Y1, or between G1Y3 and G2Y3, these findings

are reported here; all differences related to salary are reported. Instances where a change from Years 1 to 3 was substantial ( $\geq 15\%$ ) for one group, but not the other, also are reported here. The actual statistics are not reported.

Differences between Groups for the Same Year. There were no substantial differences between G1Y1 and G2Y1, or between G1Y3 and G2Y3 on any of the individual variables discussed in this section, with one exception. A substantially greater proportion of G2Y3 persons in sheltered employment received health insurance compared to G1Y3.

A comparison of wages earned per hour for G1Y1 and G2Y1 was not possible because hourly wage data were not available for G1Y1. The hourly wage earned by G1Y3 and G2Y3 persons in competitive employment were quite comparable. However, a sizable difference was found between G1Y3 and G2Y3 persons in sheltered employment, in favor of the latter.

Differences between Groups in Changes from Years 1 to 3. Groups 1 and 2 did differ on some variables in terms of changes from Year 1 to Year 3. Instances were the change for one group was substantial, but not for the other, are reported below with Group 1 as the reference group. An increase  $\geq 15\%$  was not found for Group 1 concerning independent living; and the proportion of Group 1 individuals living with relatives dropped, but the difference was less than 15%. Although a greater proportion of G1Y3 vs. G1Y1 individuals reported they were paying all of their living expenses, the magnitude of the change was not  $\geq 15\%$ . A downward shift occurred in the proportion of G1Y3 vs. G1Y1 persons who reported paying none of their living expenses, but the magnitude of the change was not  $\geq 15\%$ . Potential differences in changes between Years 1 and 3 for the two groups could not be determined for employment variables (i.e., job

status, hours worked per week, salary per hour, and fringe benefits) since location of job data (sheltered vs. competitive) were not available for G1Y1.

Conclusions regarding Comparison. Twelve variables and 44 categories within variables were involved in this investigation (e.g., Living Expenses Paid, a variable, breaks down into 3 categories, All, Some, and None). For the total group, differences were found for only 11% of the categories. Differences in the proportions of successful G2Y3 vs. G1Y3 graduates were 5% or less (in favor of G2Y3) when the high and low criteria for success were applied.

#### By Gender

##### Males

##### General Status

Ninety percent of the males reported their marital status as single three years after graduation, and an additional 8% were married. The remainder were divorced or separated. Thirty percent of the males were living independently three years after exiting high school. Approximately half (52%) were living with parents or relatives. Substantially smaller proportions were living in supervised settings or in residential centers (8% and 6%, respectively).

Two-thirds (63%) of the males were involved in from 1-3 leisure activities, and an additional 26% participated in more than 3 leisure activities. Eleven percent said they were not involved in any recreational activities.

About one-fourth (28%) of the males were paying all of their living expenses three years after graduating from high school and an additional 48% were paying some of their expenses. There was a substantial downward shift from Years 1 to 3 in the proportion of males who reported paying none of their living expenses (from 39% to 24%, see Figure

9). Slightly over one-third (39%) said they were not receiving financial assistance from other sources, while 33% indicated they receiving financial help from their parents. About one-fourth (24%) received supplemental security income and 7% obtained assistance from the Iowa Department of Human Services.

During the interview, participants were asked about involvement in post-secondary training programs. The majority (64%) had not received any post-secondary training. Among those who did have such training, 14% participated in a community college program, 10% in a private program, and 3% in military service. Only a very small proportion participated in adult education or apprenticeship programs.

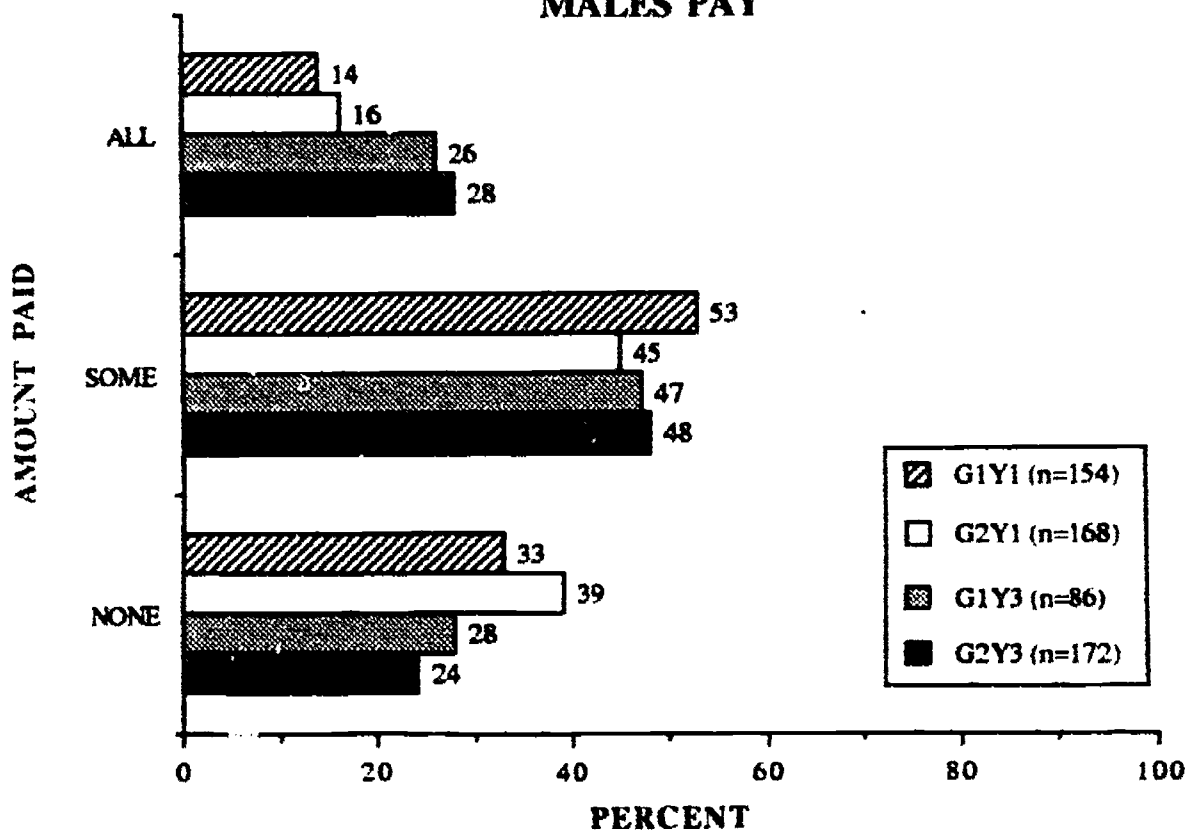
Information on Employment

Approximately three-fourths (76%) of the males were employed, and

23% were unemployed. The remaining individuals were otherwise engaged (i.e., homemaker, student, or in a job training program). All respondents were asked about agencies they had contacted concerning employment opportunities. About one-half (49%) had talked to Job Service of Iowa. Approximately one-fourth reported talking to a Job Training Partnership Act agency (28%), Vocational Rehabilitation (28%), and a workshop (24%).

Characteristics of Graduates in Competitive Employment. Almost three-fourths (73%) of the employed males reported they were working in the competitive employment sector. Among those males who were competitively employed, 38% were laborers and 36% were in service occupations; the remaining males worked in higher status jobs, 10% of which were as operatives. About two-thirds of the males (65%) worked full-time, and approximately one-fourth

Fig. 9 PROPORTION OF EXPENSES MALES PAY



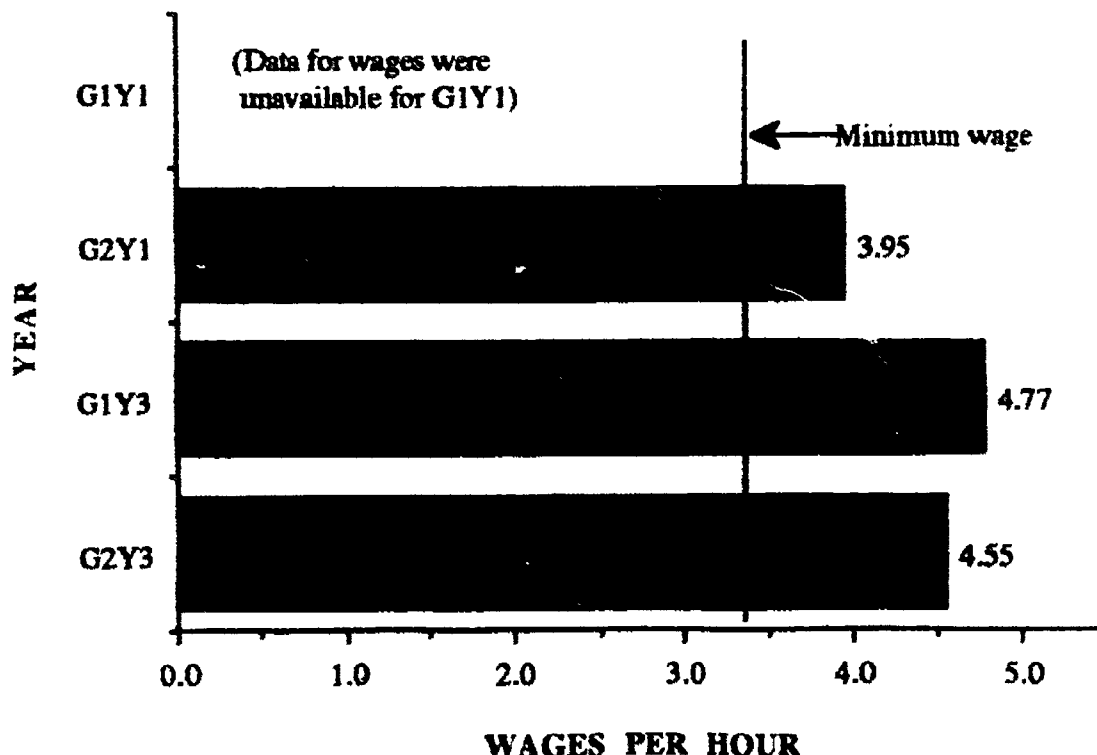
(26%) were employed between 21-37 hours per week. All other males worked less than half-time or seasonally. The mean wage per hour among males in competitive jobs was \$4.55, up \$0.60 from Year 1 when the mean wage per hour was \$3.95 (see Figure 10). The proportion of individuals receiving job benefits increased substantially from Year 1 (see Figure 11). Forty-one percent reported getting health insurance, up from 24%. Half said they were given vacation time by their employers, up from 25%. Thirty-one percent received sick leave, an increase of 15% from Year 1.

Characteristics of Graduates in Sheltered/Supported Employment. Twenty-three percent of the employed males worked in sheltered workshops, and 5% worked in community jobs supervised by staff members of sheltered workshops. Two thirds (67%) of these males were employed as laborers. Only 11% were service workers, down from 27% Year 1

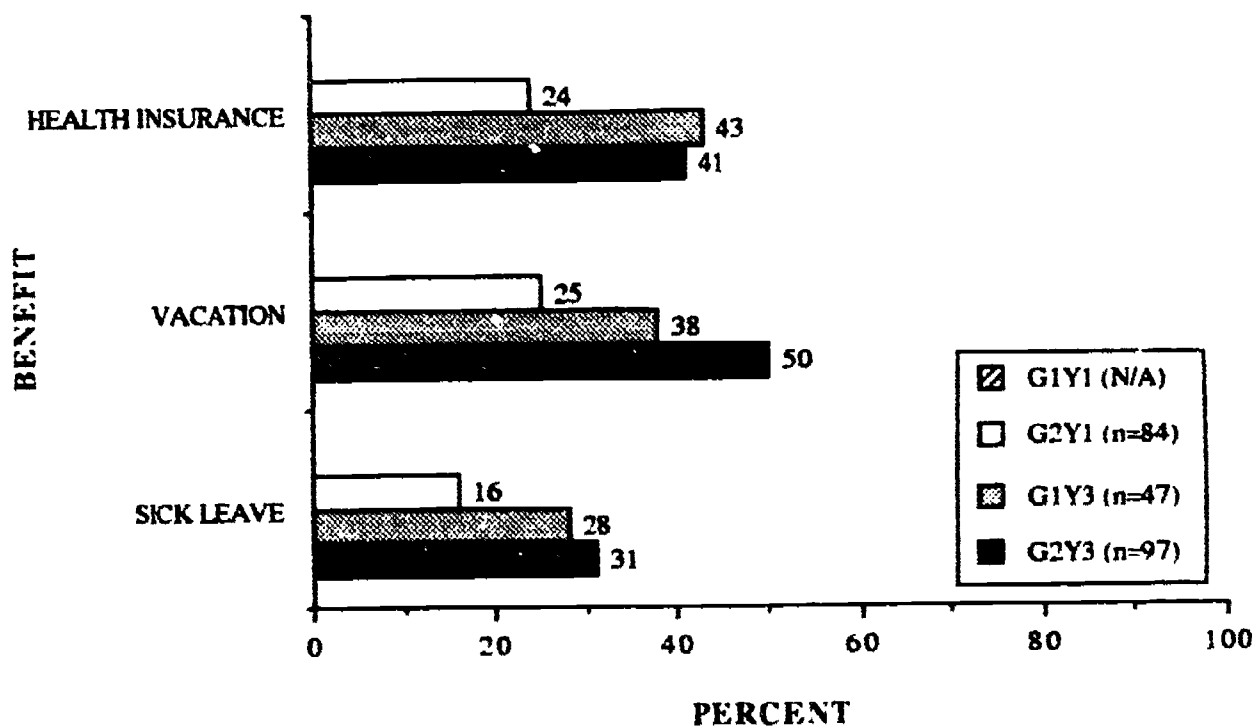
(see Figure 12). An additional 19% were operatives, and only 3% held higher status jobs. The proportion of males in sheltered employment who were working full-time jumped from 21% Year 1 to 40% Year 3 (see Figure 13). A corresponding decrease was found in the proportions who were employed between 21-37 hours per week during Years 1 and 3 (from 74% to 51%). The average wage per hour earned by males in sheltered employment actually dropped slightly from Year 1 to Year 3, from \$1.53 to \$1.49 (see Figure 14). Only 17% reported receiving health insurance from their employer. Fifty-three percent were given vacation time and 36% said sick leave was a part of their fringe benefits.

A chi-square test was conducted to examine the relation between location of job and source of help in finding current job for G2Y3 individuals. Two values were assigned to the location of job variable (one for those who were in com

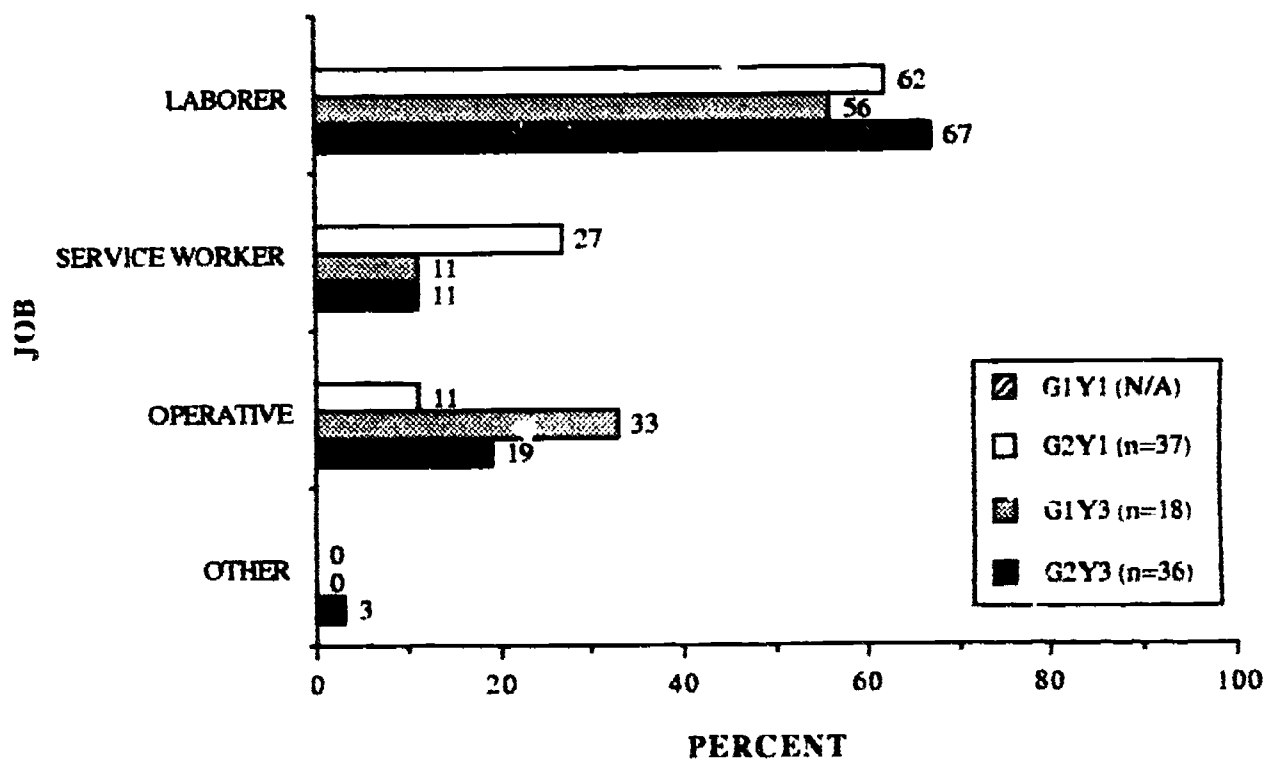
**Fig. 10 WAGES EARNED BY MALES FROM CURRENT JOB IN COMPETITIVE EMPLOYMENT**



**Fig. 11 JOB BENEFITS RECEIVED BY MALES IN COMPETITIVE EMPLOYMENT**

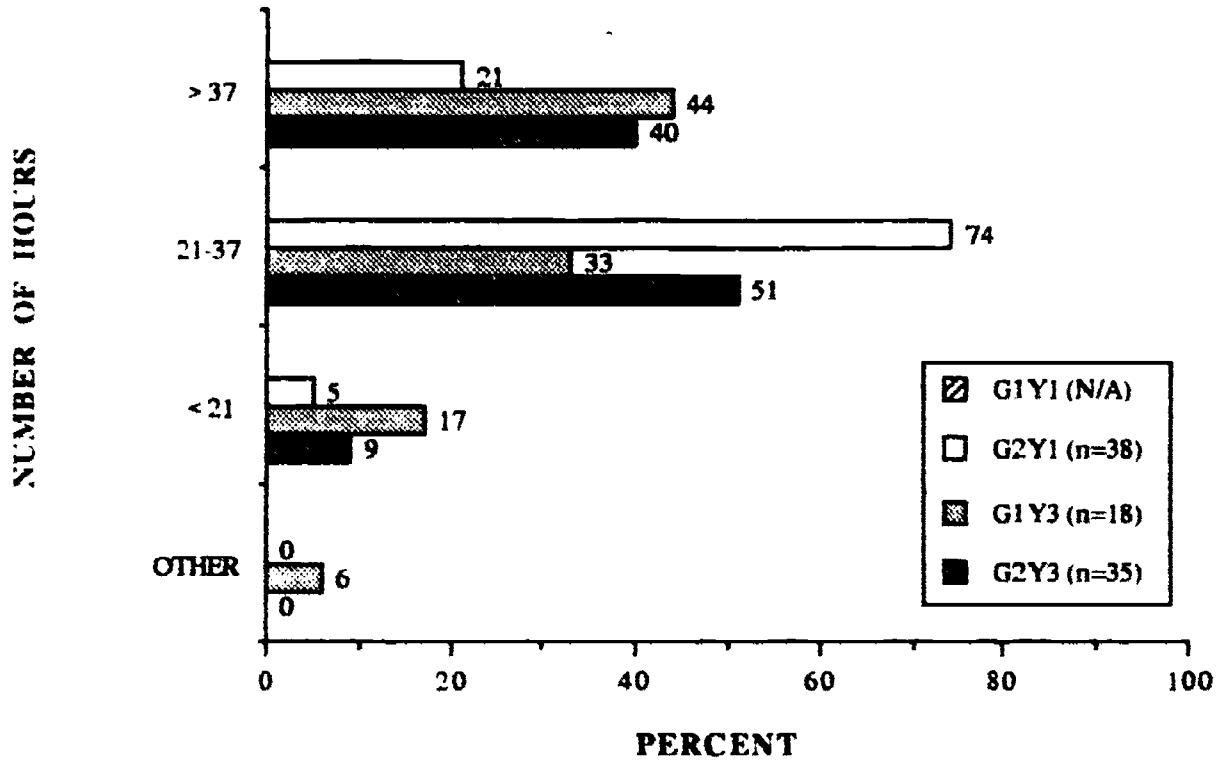


**Fig. 12 CURRENT JOB CLASSIFICATION OF MALES IN SHELTERED EMPLOYMENT**

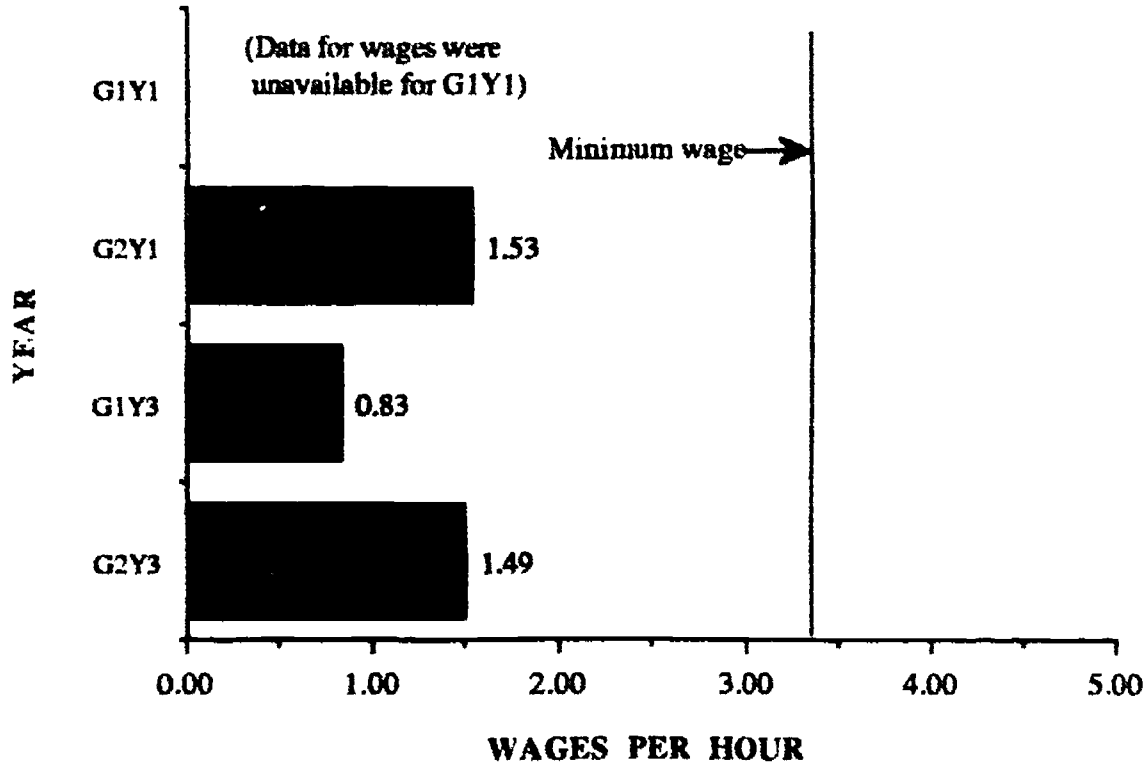




**Fig. 13 NUMBER OF HOURS MALES WORKED PER WEEK IN SHELTERED EMPLOYMENT**



**Fig. 14 WAGES EARNED BY MALES FROM CURRENT JOB IN SHELTERED EMPLOYMENT**



petitive employment or in a community-based job which was supervised by rehabilitation professionals, the other for those who were in a sheltered workshop). Two values also were assigned to the source of help variable (one for those who found a job through the self/family/friends network, the other for those who found a job through some public agency, such as the school, vocational rehabilitation, Job Service of Iowa, or a JTPA agency). A significant statistic was obtained,  $X^2(1, n=119) = 19.70, p < 0.001$ . When the self/family/friends network was used to find a job, 92% of the individuals worked in competitive or community-based employment and 8% worked in sheltered employment. When a public agency was used to find work, 57% of the individuals worked in competitive or community-based employment and 43% worked in sheltered employment.

### Successful Graduates

Composites used to judge successful adult adjustment for the total group also were applied to males. The application of the "high" criteria resulted in the identification of 5.2% ( $n = 7$ ) of the males as having successfully adjusted to adult life one year after graduation. When the lower criteria were utilized to determine adult adjustment one year after exiting high school, an additional 12.6% ( $n = 17$ ) of the males were viewed as successful.

Three years after graduation, 4.1% ( $n = 6$ ) of the males were seen as having achieved a high level of adult adjustment. When the lower standards were applied, an additional 15.5% ( $n = 23$ ) of the males were considered to have made a successful adjustment to adult life.

### Comparison of Groups 1 and 2

Where differences  $\geq 15\%$  were found between G1Y1 and G2Y1, or between G1Y3 and G2Y3, these findings are reported here; all differences related to salary are reported. Instances where a change from Years 1 to 3 was substantial ( $\geq 15\%$ ) for one group, but not the other, also are reported here. The actual statistics are not reported.

Differences between Groups for the Same Year. Some differences were found between groups for the same year. More G2Y3 males were living independently, compared to G1Y3 males. A larger proportion of the G1Y3 competitively employed males were laborers compared to G2Y3 males. Approximately one-half of the G2Y3 males in sheltered employment were working between 21-37 hours per week, compared to one-third of the G1Y3 males.

A comparison of wages earned per hour for G1Y1 and G2Y1 was not possible because hourly wage data were not available for G1Y1. The average wage per hour earned by G1Y3 males in competitive jobs was higher than that by G2Y3 males; the converse was true concerning males in sheltered employment. The G2Y3 males in sheltered employment also received higher fringe benefits in two areas compared to G1Y3 males: vacation time and sick leave. Year 1 comparisons could not be made because salary per hour data were not available for G1Y1.

Differences between Groups in Changes from Years 1 to 3. A few differences also were observed between Groups 1 and 2 relative to changes from Years 1 to 3. Instances where the change for one group was substantial, but not for the other, are reported below with Group 1 as the reference group. There was not a substantial change from Years 1 to 3 for

Group 1 males who were paying none of their living expenses. However, there was a substantial drop between Years 1 and 3 in the proportion of Group 1 males who were receiving financial assistance from parents. Potential differences in changes between Years 1 and 3 for the two groups could not be determined for employment variables (i.e., job status, hours worked per week, salary per hour, and fringe benefits) since location of job data (sheltered vs. competitive) were not available for G1Y1.

Conclusions regarding Comparison. Twelve variables and 44 categories within variables were involved in this investigation (e.g., Living Expenses Paid, a variable, breaks down into 3 categories, All, Some, and None). For males, differences were found for only 16% of the categories. Differences in the proportions of successful G2Y3 vs. G1Y3 graduates were 6% or less (in

favor of G2Y3) when the high and low criteria for success were applied.

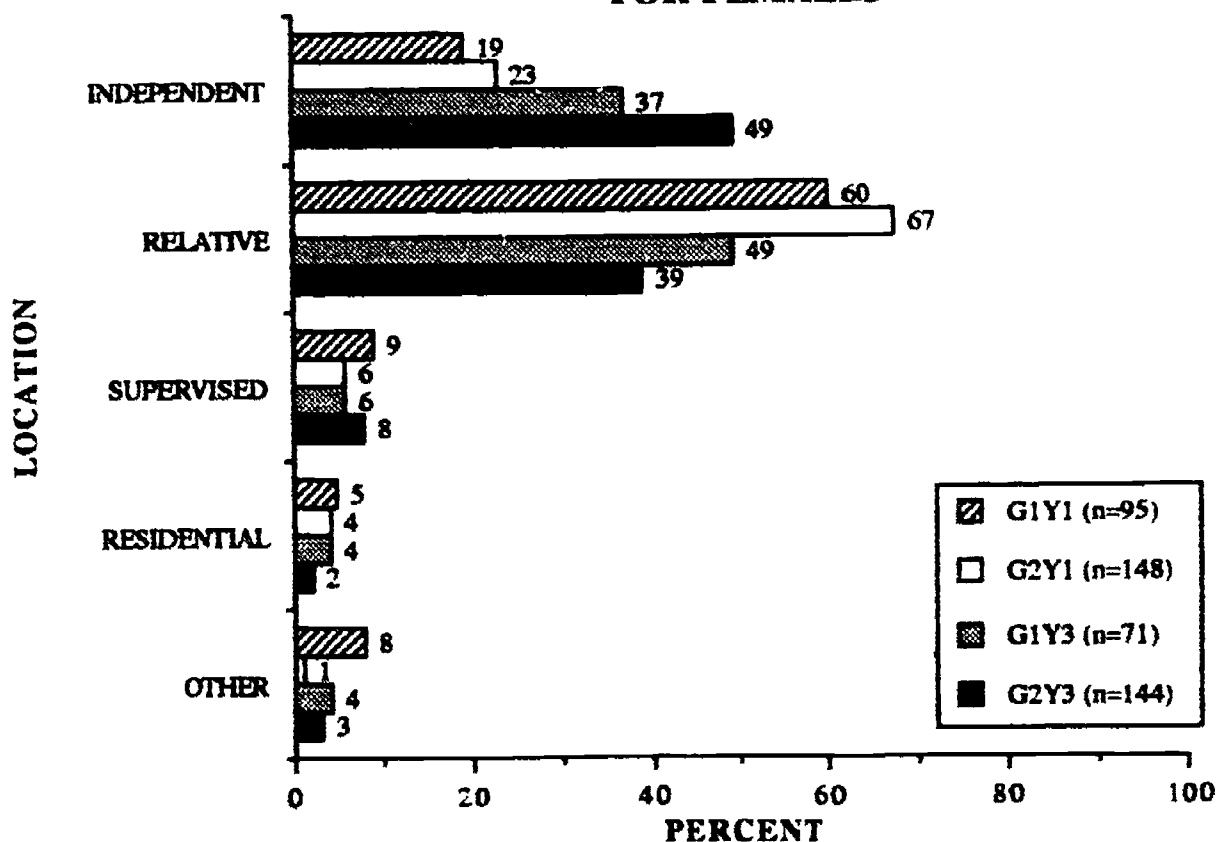
### Females

#### General Status

Seventy percent of the females were single three years after graduating from high school, and 27% said they were married. The remaining females were divorced or separated. There was a substantial increase in the proportion of young women who were living independently (from 23% Year 1 to 49% Year 3) (see Figure 15). A corresponding drop was found among females who were living with parents or relatives (from 67% to 39%).

The majority of females (62%) participated in from 1-3 leisure activities; an additional 30% participated in a greater number. Only 13% indicated they were

Fig. 15 LIVING ARRANGEMENTS FOR FEMALES





not involved in any recreational activities.

A substantially larger proportion of females (33%) reported they were responsible for all of their living expenses compared to Year 1 (12%) (see Figure 16). Only 18% said they did not pay any of their living expenses, down from 40% at Year 1. Females also were asked about other sources of financial assistance. Thirty-nine percent said they had no other sources of income, up substantially from Year 1 (24%) (see Figure 17). Among those who did report additional sources of financial support, 29% said they received help from parents (compared to 48% Year 1), 22% received supplemental security income, and 17% received aid from the Iowa Department of Human Services.

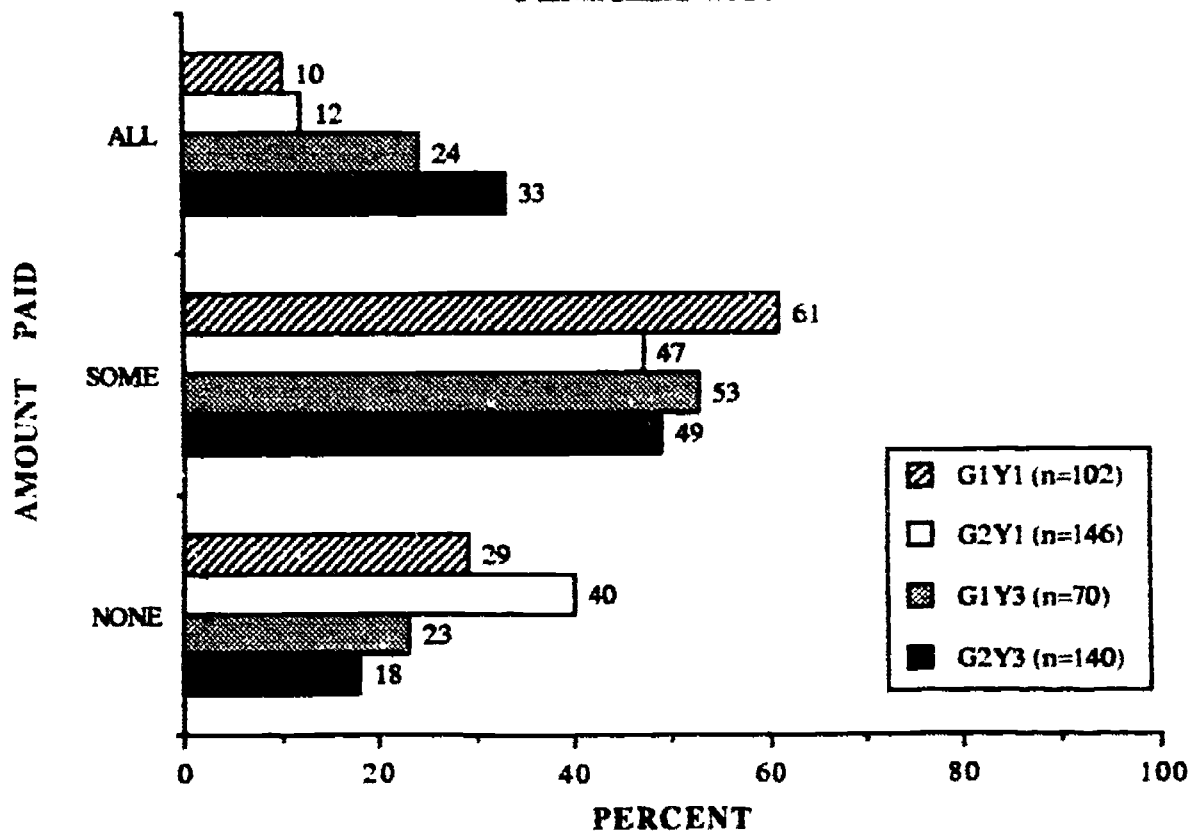
Individuals were asked about postsecondary training during the interview. About two-thirds (67%) reported

receiving no such training. Of the remaining persons, 19% participated in a community college program and 10% were involved in a private training program. No females served in the military. Only a very small proportion participated in adult education or apprenticeship programs.

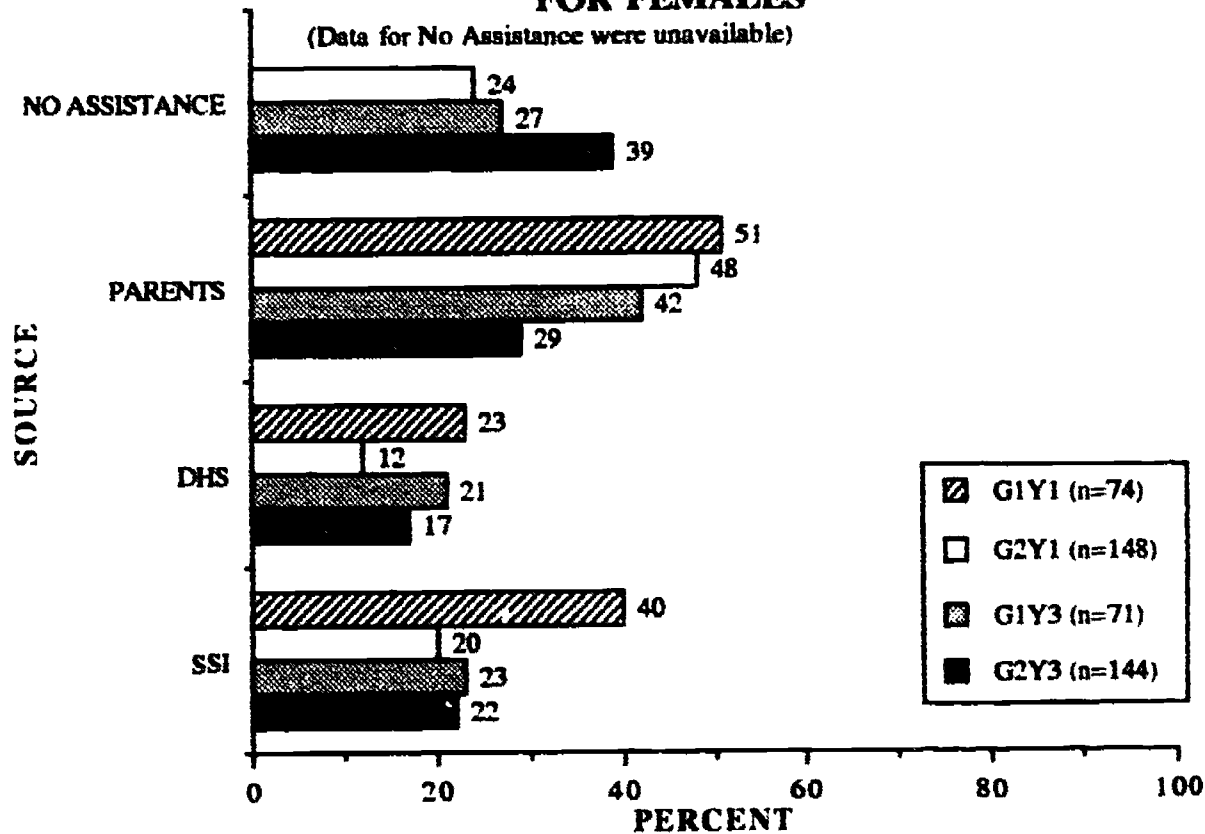
#### Information on Employment

Two-thirds (66%) of the respondents said they were employed, 19% reported their status as unemployed. The remaining 15% were otherwise engaged as homemakers, students, or in job training programs. All females were asked about the types of agencies they had contacted about obtaining employment. Forty percent said they had contacted Job Service of Iowa. Other agencies were contacted less frequently; Job Training Partnership Act agencies were

Fig. 16 PROPORTION OF EXPENSES FEMALES PAY



**Fig. 17 SOURCES OF FINANCIAL ASSISTANCE FOR FEMALES**



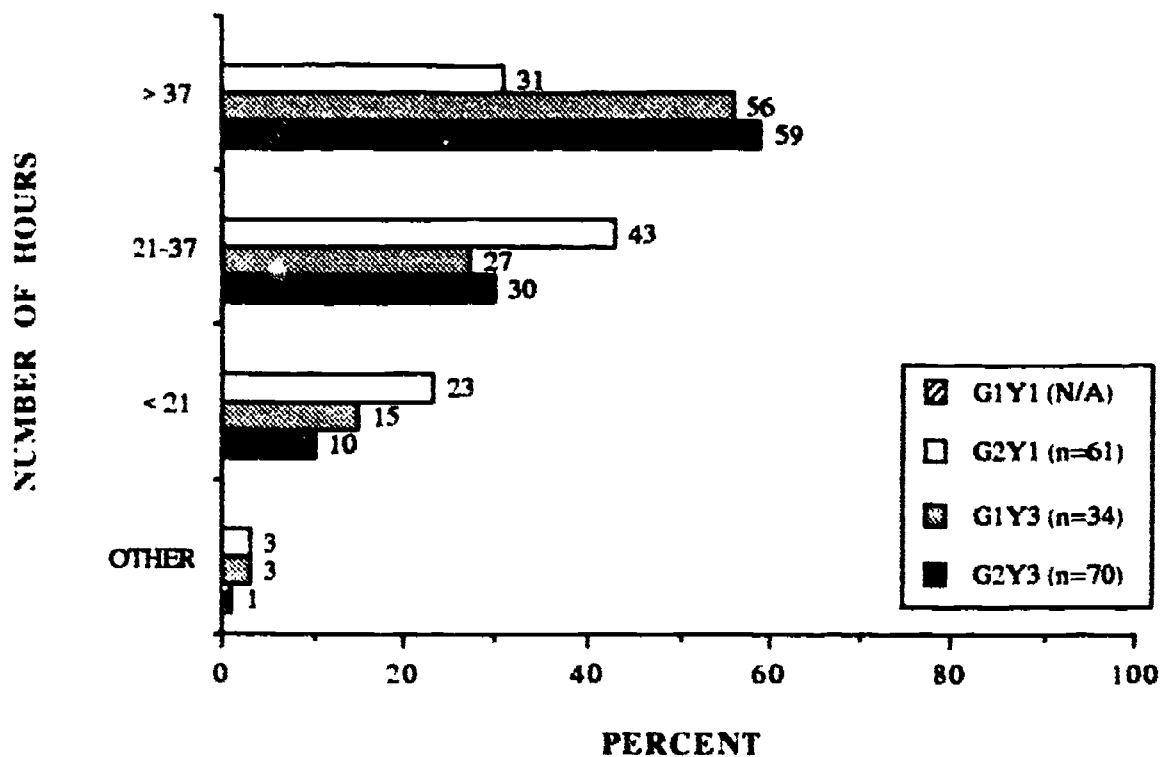
contacted by 18%, Vocational Rehabilitation by 22%, and workshops by 16%.

**Characteristics of Graduates in Competitive Employment.** Seventy-four percent of the employed females worked in competitive jobs. Among these females, 79% were service workers and 10% were laborers. The remaining individuals worked as operatives (3%) and/or in higher status jobs (9%). A major shift upward occurred regarding the proportion of females working full-time (from 31% Year 1 to 59% Year 3) (see Figure 18). About one-third (30%) were employed between 21-37 hours per week. The remaining persons worked less than half-time or only seasonally. The average wage per hour among competitively employed females was \$3.76, up \$0.45 from \$3.31 for G2Y1 (see Figure 19). Larger proportions of females were receiving fringe benefits in two areas compared to Year 1, health insurance (41%

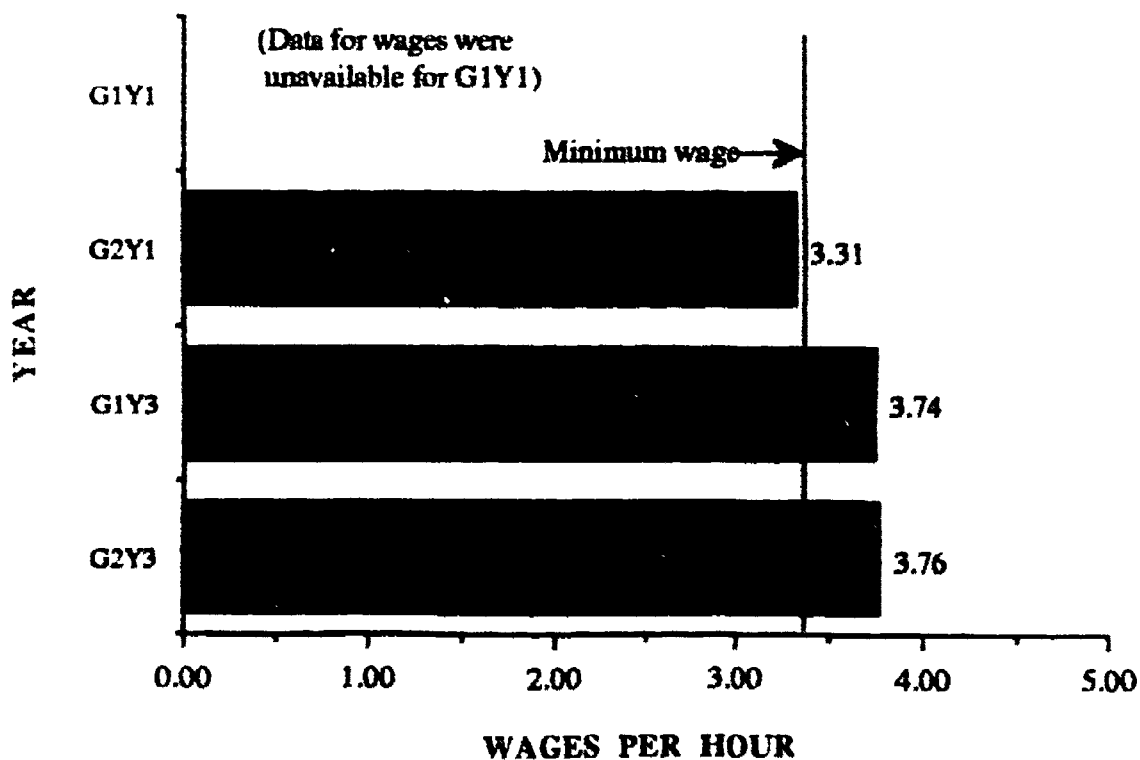
vs. 16%) and vacation time (54% vs. 33%) (see Figure 20). Twenty-seven percent reported getting sick leave from their employer.

**Characteristics of Graduates in Sheltered/Supported Employment.** Twenty-one percent of the employed females worked in sheltered workshops, and 5% were in community jobs supervised by staff members of sheltered workshops. Of those female who were in sheltered employment, 72% were laborers and 16% were service workers. An additional 12% of the females worked as operatives. Twenty-eight percent worked full-time, whereas 52% worked between 21-37 hours per week (a decrease from G2Y1 when 67% worked between 21-37 hours per week) (see Figure 21). The remaining 20% worked less than half time. Females earned an average of \$1.72 per hour, up \$0.38 from G2Y1, when the average wage per hour was

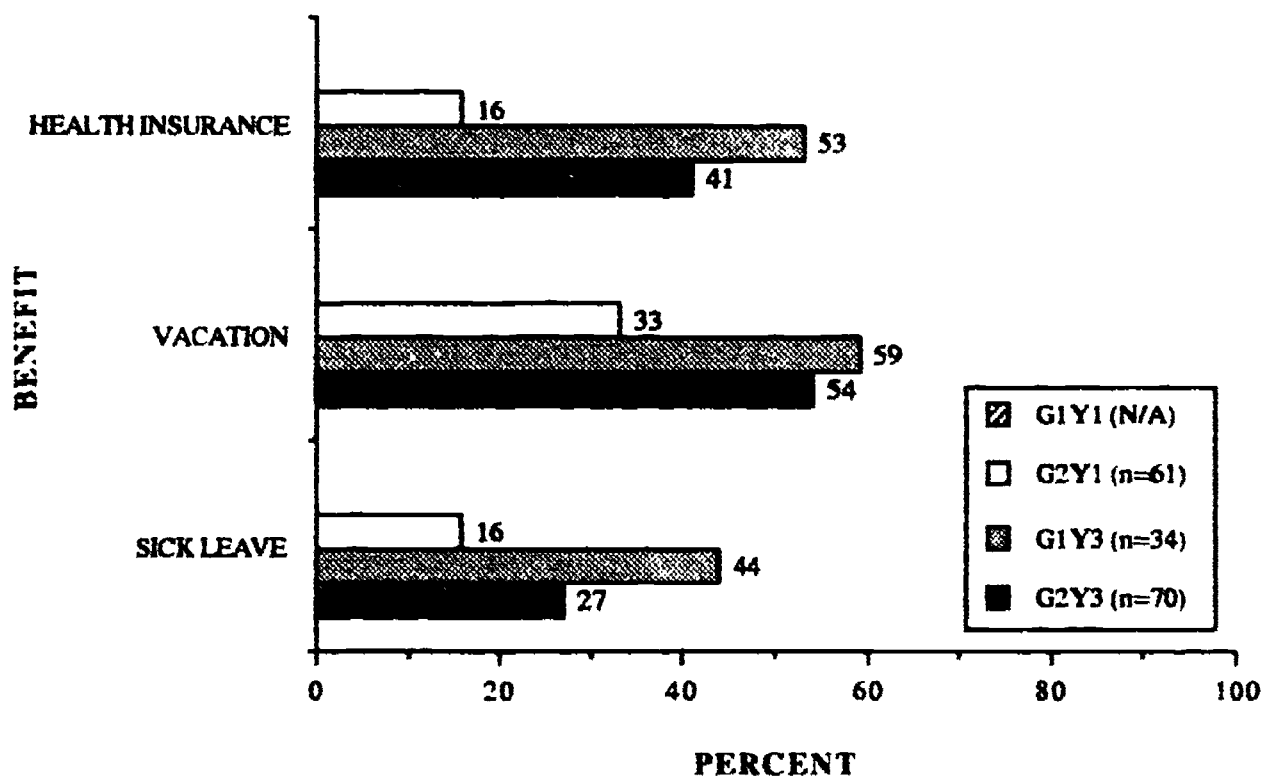
**Fig. 18 NUMBER OF HOURS FEMALES WORKED PER WEEK IN COMPETITIVE EMPLOYMENT**



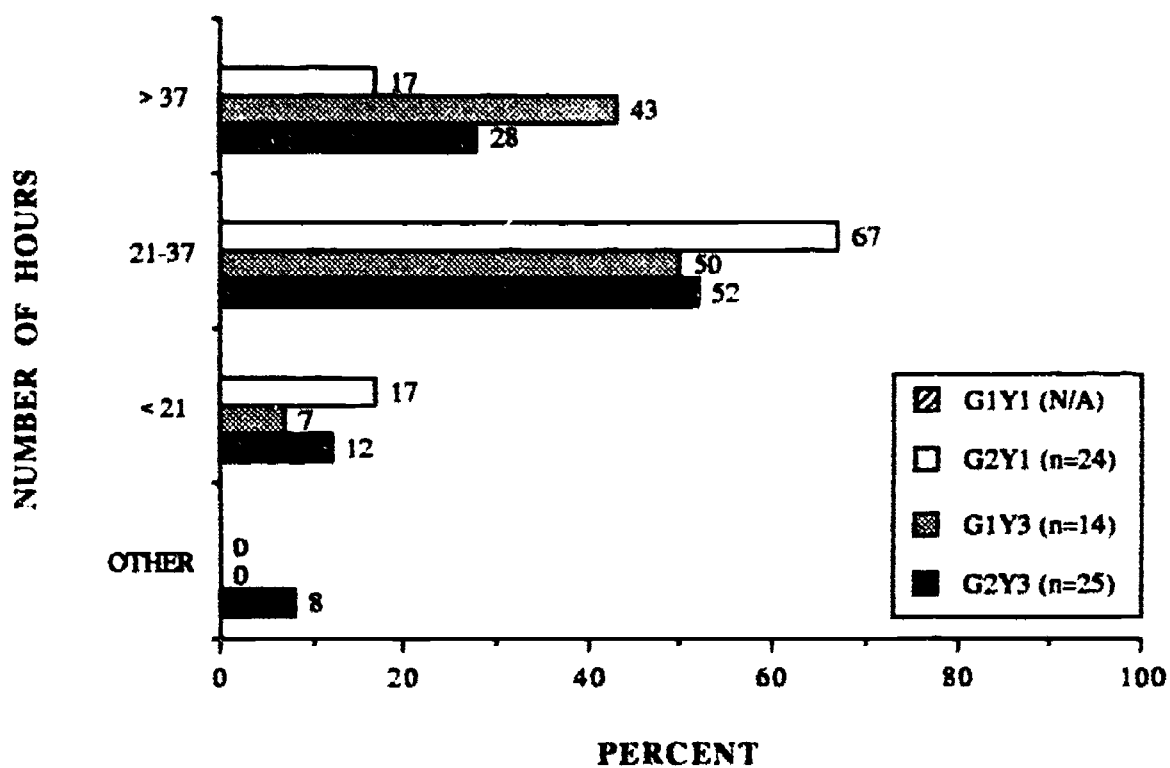
**Fig. 19 WAGES EARNED BY FEMALES FROM CURRENT JOB IN COMPETITIVE EMPLOYMENT**



**Fig. 20 JOB BENEFITS RECEIVED BY FEMALES IN COMPETITIVE EMPLOYMENT**



**Fig. 21 NUMBER OF HOURS FEMALES WORKED PER WEEK IN SHELTERED EMPLOYMENT**



\$1.34 (see Figure 22). Improvement in job benefits was observed in only one area, health insurance, where the proportions increased from 4% for G2Y1 to 24% for G2Y3 (see Figure 23). About half (48%) received vacation time, and only 16% reported getting sick leave as part of their job benefits.

A chi-square test was conducted to examine the relation between location of job and source of help in finding current job for G2Y3 individuals. Two values were assigned to the location of job variable (one for those who were in competitive employment or in a community-based job which was supervised by rehabilitation professionals, the other for those who were in a sheltered workshop). Two values also were assigned to the source of help variable (one for those who found a job through the self/family/friends network, the other for those who found a job through some public agency, such as a school, vocational rehabilitation, Job Service of Iowa, or a JTPA agency). A significant statistic was obtained,  $X^2(1, n=89) = 27.61, p < 0.001$ . When the self/family/friends network was used to find a job, 96% of the individuals worked in competitive or community-based employment and 4% worked in sheltered employment. When a public agency was used to find work, 48% of the individuals worked in competitive or community-based employment and 52% worked in sheltered employment.

### Successful Graduates

Composites used to judge successful adult adjustment for the total group also were applied to females. The application of the "high" criteria resulted in the identification of 3.6% ( $n = 4$ ) of the females as having successfully adjusted to adult life one year after graduation. When the lower criteria were utilized to

determine adult adjustment one year after exiting high school, an additional 11.8% ( $n = 13$ ) of the females were viewed as successful.

Three years after graduation, 3.8% ( $n = 4$ ) of the females were seen as having achieved a high level of adult adjustment. When the lower standards were applied, an additional 22.6% ( $n = 24$ ) of the females were considered to have made a successful adjustment to adult life.

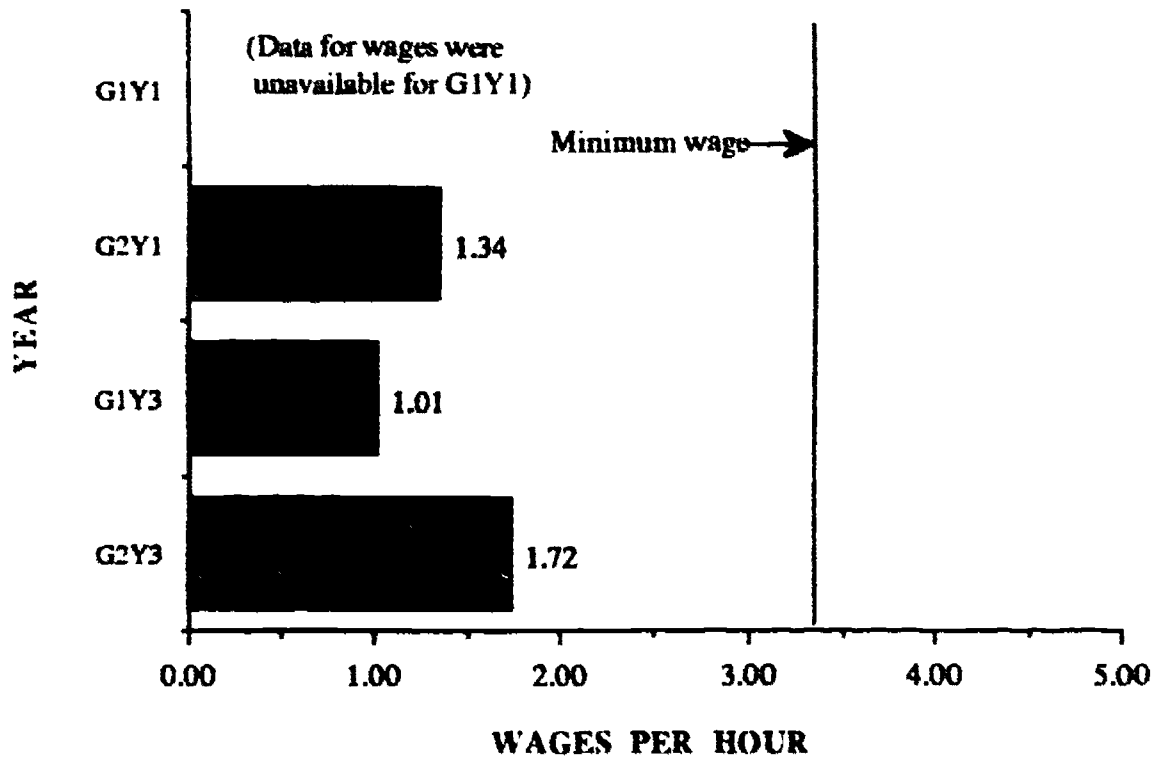
### Comparison of Groups 1 and 2

Where differences  $\geq 15\%$  were found between G1Y1 and G2Y1, or between G1Y3 and G2Y3, these findings are reported here; all differences related to salary are reported. Instances where a change from Years 1 to 3 was substantial ( $\geq 15\%$ ) for one group, but not the other, also are reported here. The actual statistics are not reported.

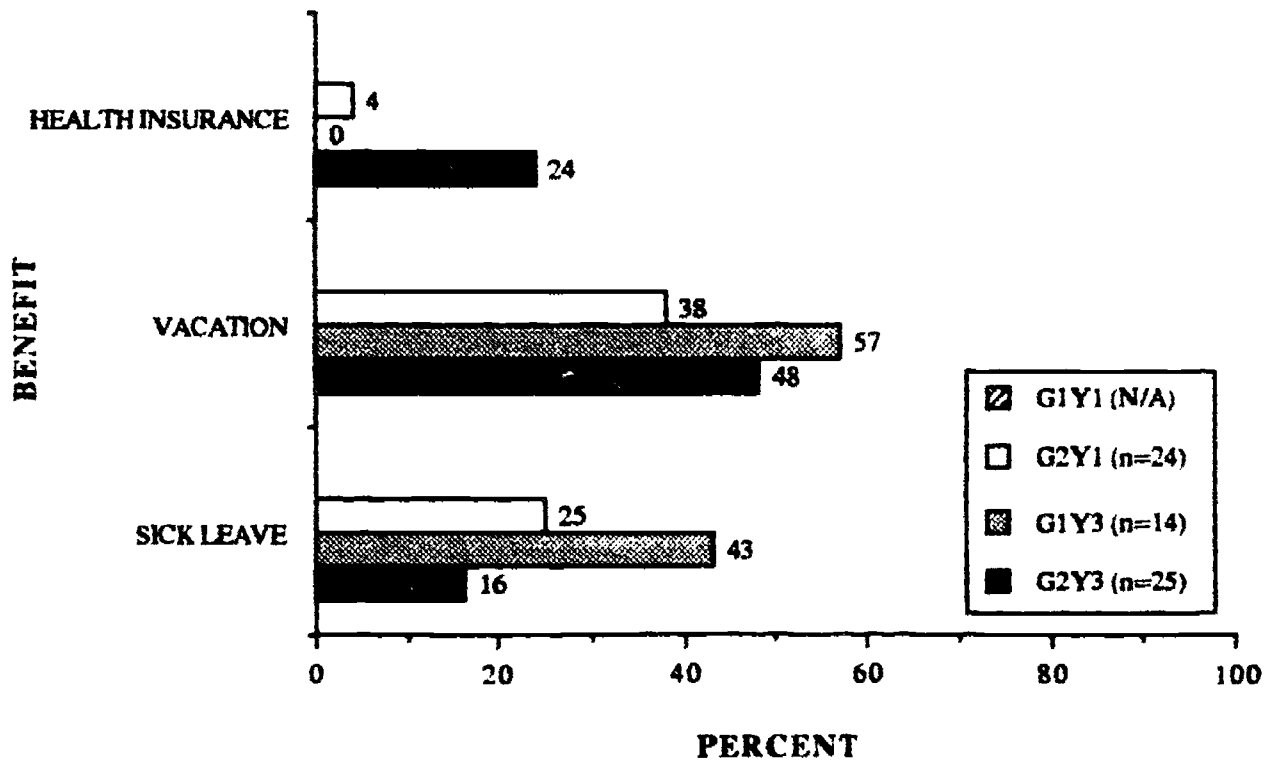
Differences between Groups for the Same Year. Some differences were found between groups for the same year. Substantially more of the Group 1 females were receiving supplemental security income Year 1 than were Group 2 females. A smaller proportion of G1Y3 compared to G2Y3 females in sheltered employment were laborers. Among these same groups of females in sheltered employment, a higher proportion of G1Y3 females were working full-time.

A comparison of wages earned per hour for G1Y1 and G2Y1 was not possible because hourly wage data were not available for G1Y1. A substantial difference was found between the mean wage per hour earned by G1Y3 and G2Y3 females who were in sheltered employment. Regarding job benefits received by females in competitive jobs, a larger proportion of G1Y3 persons were provided with sick leave than were G2Y3 persons. Some differences also were

**Fig. 22 WAGES EARNED BY FEMALES FROM CURRENT JOB IN SHELTERED EMPLOYMENT**



**Fig. 23 JOB BENEFITS RECEIVED BY FEMALES IN SHELTERED EMPLOYMENT**





found among females in sheltered employment, where more of the G1Y3 individuals received sick leave than did the G2Y3 individuals. Conversely, the G2Y3 females were doing better concerning health insurance when compared to G1Y3.

Differences between Groups in Changes from Years 1 to 3. A few differences also were observed between Groups 1 and 2 relative to changes from Years 1 to 3. Instances where the change for one group was substantial, but not for the other, are reported below with Group 1 as the reference group. There was a drop of 15% in the proportion of Group 1 females who were single. The proportion of Group 1 females living with relatives dropped substantially between Years 1 and 3. Group 1 did not experience a substantial increase in the proportion of persons who paid all their living expenses between Years 1 and 3; nor did they experience a substantial drop over the same time span in the proportion of persons paying none of their living expenses. Between Years 1 and 3 a substantial downward shift did not occur in the proportion of Group 1 females who were receiving financial assistance from their parents. However, Group 1 did experience a substantial drop between Years 1 and 3 in the proportion of females receiving supplemental securing income. Potential differences in changes between Years 1 and 3 for the two groups could not be determined for employment variables (i.e., job status, hours worked per week, salary per hour, and fringe benefits) since location of job data (sheltered vs. competitive) were not available for G1Y1.

Conclusions regarding Comparison. Twelve variables and 44 categories within variables were involved in this investigation (e.g., Living Expenses Paid, a variable, breaks down into 3 categories, All, Some, and None). For

females, differences were found for 23% of the categories. Differences in the proportions of successful G2Y3 vs. G1Y3 graduates were 4% or less (in favor of G2Y3) when the high and low criteria for success were applied.

### By Program Model

#### Resource Teaching Program

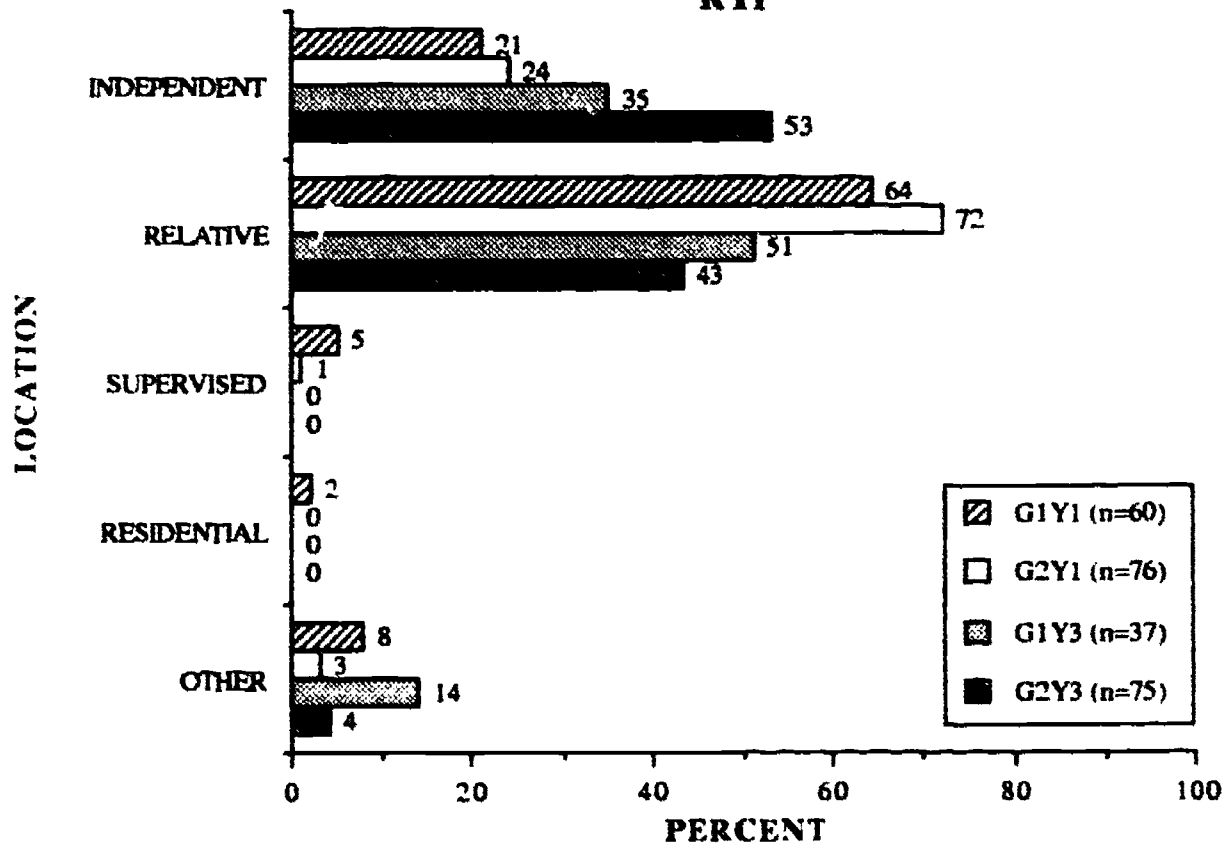
##### General Status

Over three-fourths (79%) of the graduates of RTP programs were single at the time of the Year 3 interview. An additional 21% reported they were married, while 5% said they were divorced. About half (53%) were living independently (i.e., buying a home, living with a friend, or living alone), which is a substantial increase over Year 1 when 24% were living independently (see Figure 24). A drop of the same magnitude (from 72% to 43%) occurred among individuals living with relatives. No persons were living in supervised or residential settings.

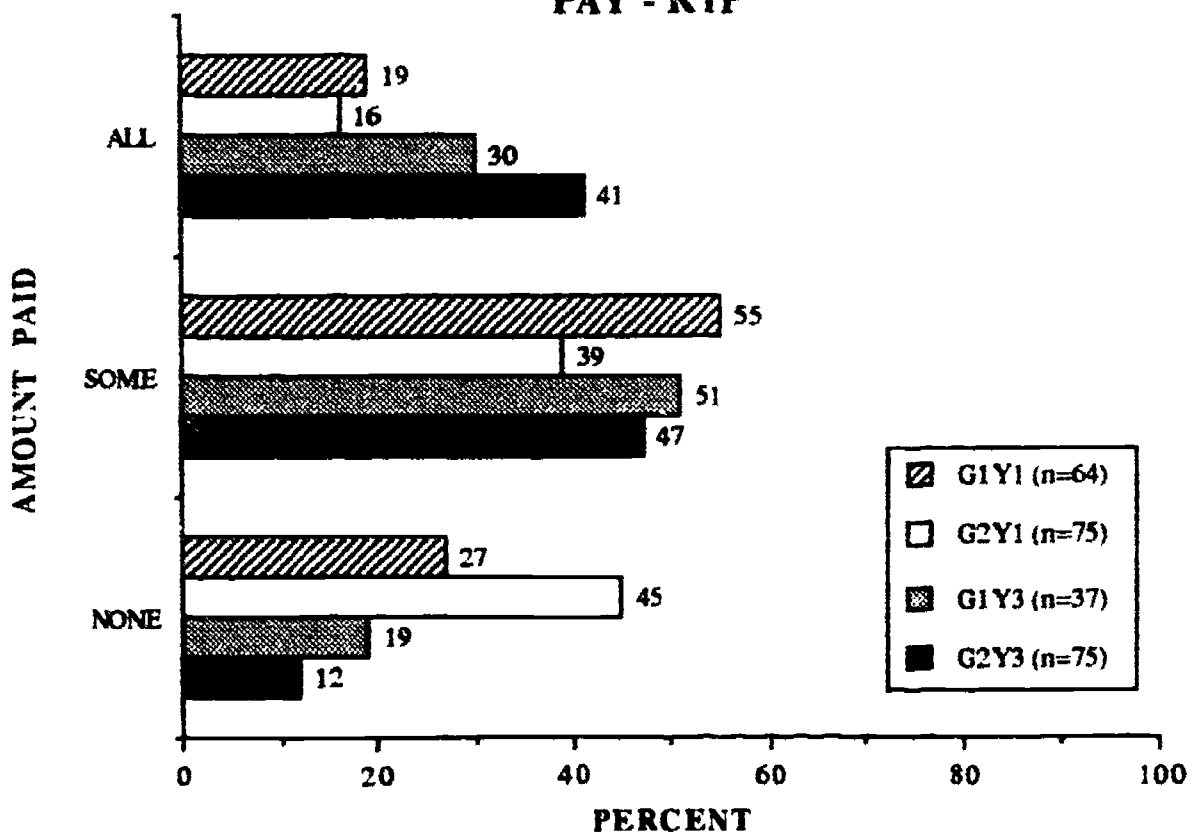
Over half (55%) of the RTP respondents said they were involved in from 1-3 leisure activities. An additional 35% participated in more than 3 activities. Only 11% said they were not involved in any recreational activities.

A substantial proportion (41%) of MD individuals who had attended RTP programs were paying all of their living expenses three years after graduation, an increase of 25% over Year 1 (see Figure 25). A large drop occurred among those persons who reported they were paying none of their living expenses (from 45% to 12%). A related topic, sources of financial assistance, also was discussed during the interview. Approximately one-half (51%) of the respondents said they received no financial assistance; this is substantially more than the proportion

**Fig. 24 LIVING ARRANGEMENTS  
RTP**



**Fig. 25 PROPORTION OF EXPENSES PERSONS  
PAY - RTP**





of G2Y1 individuals (29%) who received no financial assistance (see Figure 26). Associated with this change, 28% indicated they received financial aid from parents, compared to 55% at Year 1 who said their parents provided financial assistance.

Involvement in postsecondary training was discussed during the interview. Sixty-four percent had no such training. Among those persons who did partake of postsecondary training, 25% were involved in a community college program, and 4% each in a private program and the military. Only a very small proportion participated in adult education or apprenticeship programs.

#### Information on Employment

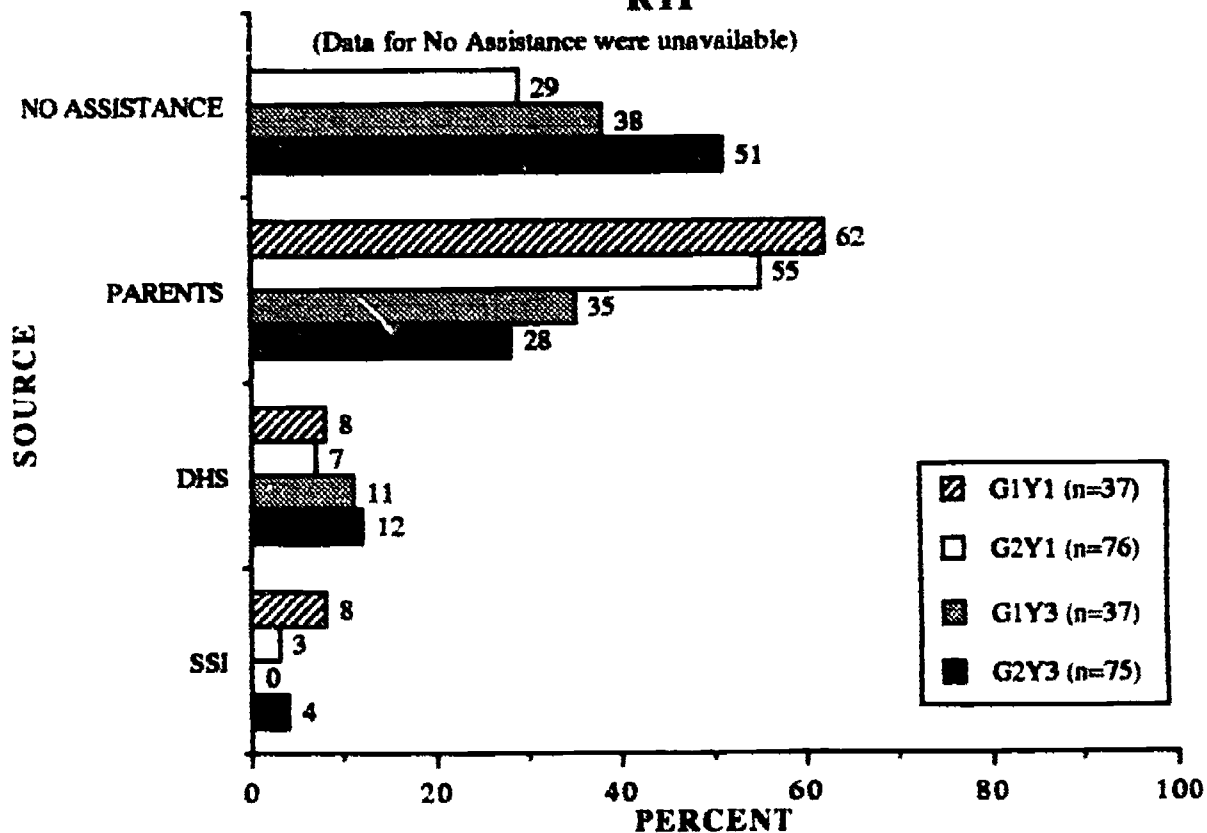
Seventy-two percent of RTP graduates were employed, and 16% were unemployed. Another twelve percent

were otherwise engaged as homemakers, students, or in a job training program. All persons were asked about agencies they had talked to while seeking employment. Over one-half (56%) reported talking to Job Service of Iowa. About one-fourth (21%) of the individuals had contacted a Job Training Partnership Act agency, and 17% had talked to Vocational Rehabilitation. Only a few (3%) said they had contacted a workshop about employment.

Characteristics of Graduates in Competitive Employment. All of the employed MD graduates of RTP programs worked in competitive jobs. The largest proportion of persons (41%) were employed as service workers, and another 30% were laborers. About one-fourth (22%) were employed in higher status occupations. Only a small percentage (7%) worked as operatives.

A major increase was found in the

**Fig. 26 SOURCES OF FINANCIAL ASSISTANCE RTP**



proportion of RTP graduates working full-time (from 58% to 80%) (see Figure 27). There was also a substantial increase in the mean hourly wage earned by competitively employed individuals (from \$3.81 per hour Year 1 to \$4.51 per hour Year 3) (see Figure 28).

Substantial improvements in job benefits also were found between Years 1 and 3. Half of the respondents were getting health insurance benefits (up from 31%), two-thirds were receiving vacation time from their employer (up from 31%), and one-third were getting sick leave (up from 13%) (see Figure 29).

### Successful Graduates

Composites used to judge successful adult adjustment for the total group also were applied to graduates of RTP programs. When the high criteria were applied to the G2Y1 graduates of RTP programs, 1.8% ( $n = 1$ ) of the in-

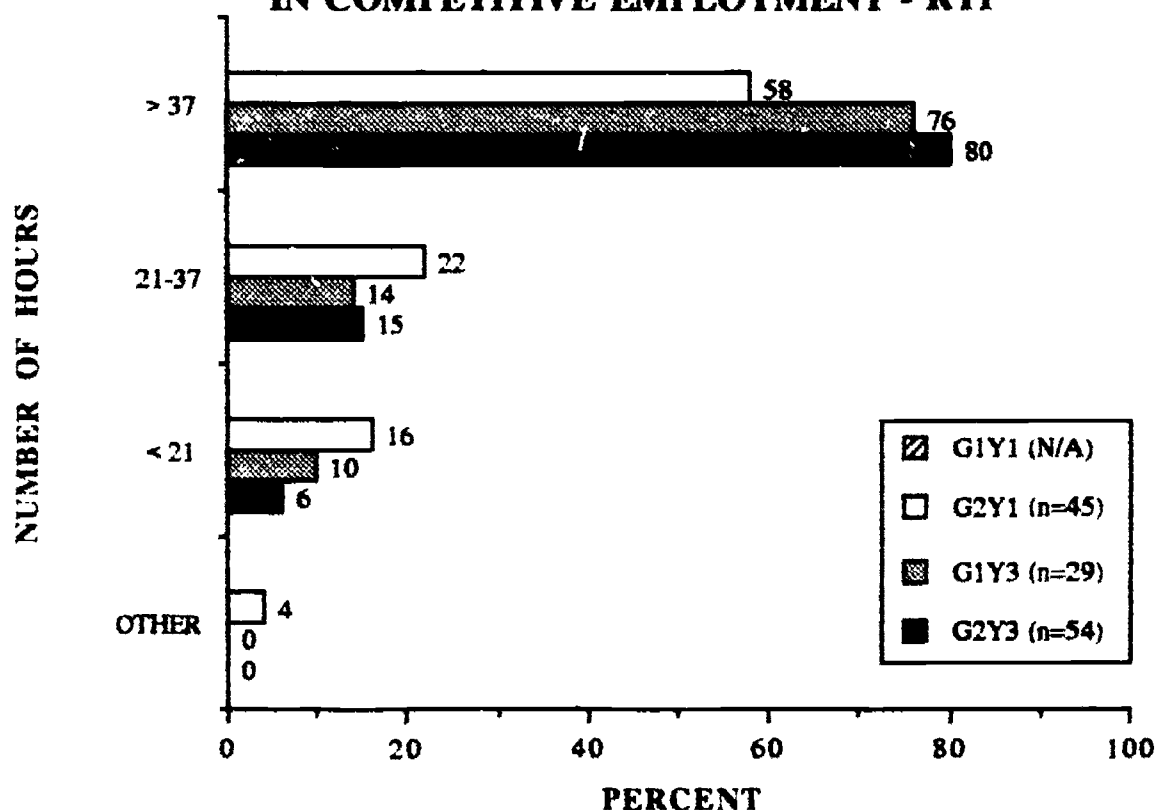
dividuals were determined to be successful. The application of the lower criteria resulted in the identification of an additional 18.2% ( $n = 10$ ) of the RTP graduates as successful.

Three years after graduation, 9.2% ( $n = 6$ ) of the RTP graduates were considered to be successful as young adults. When the lower standards were applied, an additional 24.6% ( $n = 16$ ) were viewed as successful.

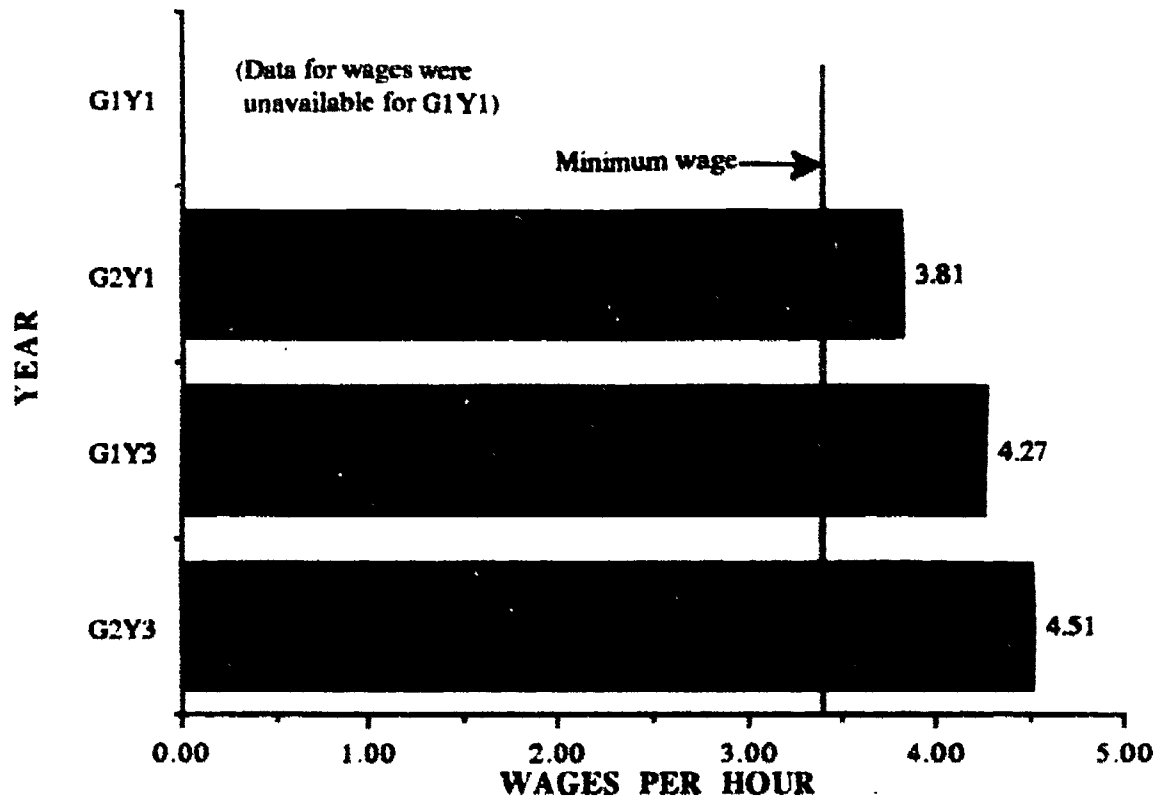
### Comparison of Groups 1 and 2

Where differences  $\geq 15\%$  were found between G1Y1 and G2Y1, or between G1Y3 and G2Y3, these findings are reported here; all differences related to salary are reported. Instances where a change from Years 1 to 3 was substantial ( $\geq 15\%$ ) for one group, but not the other, also are reported here. The actual statistics are not reported.

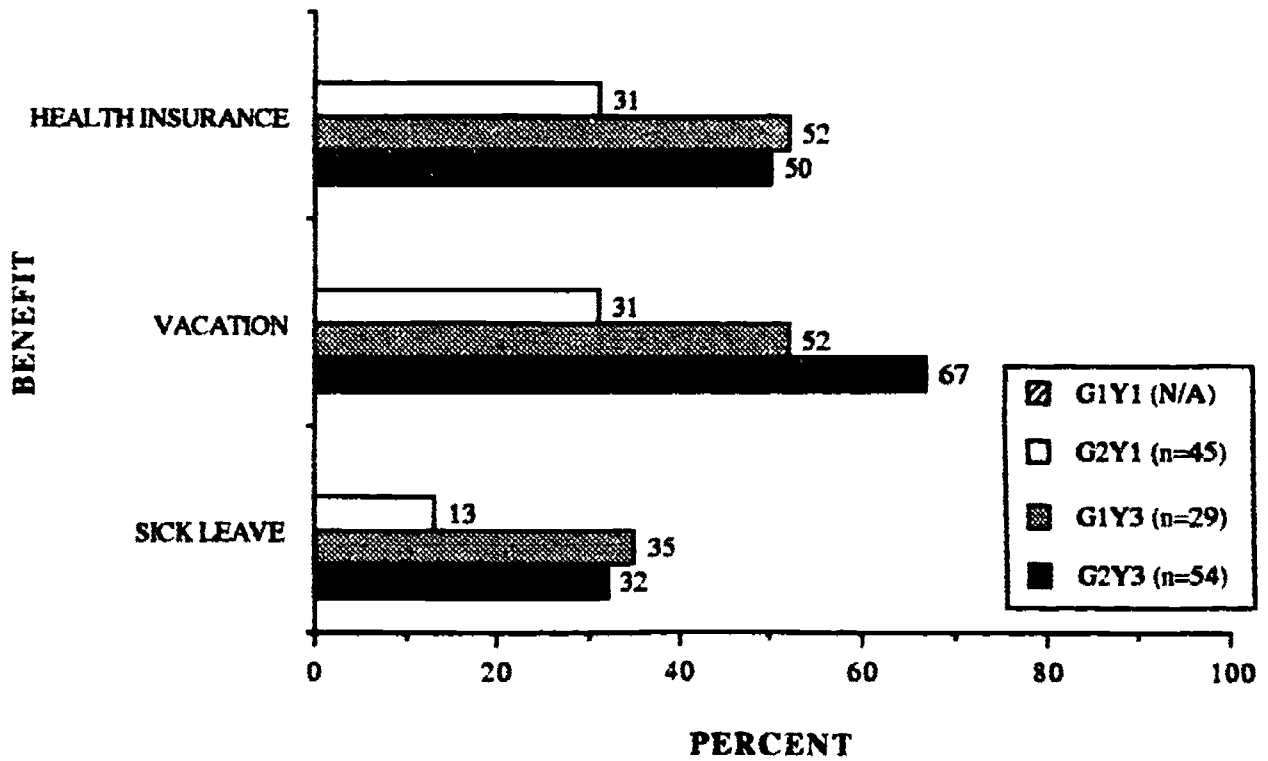
Fig. 27 NUMBER OF HOURS WORKED PER WEEK IN COMPETITIVE EMPLOYMENT - RTP



**Fig. 28 WAGES EARNED FROM CURRENT JOB IN COMPETITIVE EMPLOYMENT - RTP**



**Fig. 29 JOB BENEFITS RECEIVED IN COMPETITIVE EMPLOYMENT - RTP**



Differences between Groups for the Same Year. Some differences were found between groups for the same year. Substantially more G2Y3 persons were living independently compared to G1Y3 individuals. Fewer G2Y3 than G1Y3 individuals had contacted Job Training Partnership Act agencies about employment. Concerning the proportion of living expenses paid, more G1Y1 persons paid some of their expenses compared to G2Y1, and fewer G1Y1 paid none of their living expenses compared to G2Y1. A larger proportion of G2Y3 than G1Y3 persons were receiving vacation time from their employer.

A comparison of wages earned per hour for G1Y1 and G2Y1 was not possible because hourly wage data were not available for G1Y1. The hourly wage earned by G2Y3 persons was somewhat higher than that for G1Y3.

Differences between Groups in Changes from Years 1 to 3. A few differences also were observed between Groups 1 and 2 relative to changes from Years 1 to 3. Instances where the change for one group was substantial, but not for the other, are reported below with Group 1 as the reference group. A substantial change occurred among Group 1 individuals concerning marital status, where there was a drop between Years 1 and 3 in the proportion of persons who reported their marital status as single. Substantial changes were not found concerning the proportions of Group 1 individuals who reported they were living independently or living with relatives. Concerning the proportion of living expenses paid, there were no substantial changes between Years 1 and 3 for Group 1. Potential differences in changes between Years 1 and 3 for the two groups could not be determined for employment variables (i.e., job status, hours worked per week, salary per hour, and fringe benefits) since loca-

tion of job data (sheltered vs. competitive) were not available for G1Y1.

Conclusions regarding Comparison. Twelve variables and 44 categories within variables were involved in this investigation (e.g., Living Expenses Paid, a variable, breaks down into 3 categories, All, Some, and None). For the RTP group, differences were found for only 16% of the categories. Differences in the proportions of successful G2Y3 vs. G1Y3 graduates were 8% or less (in favor of G2Y3) when the high and low criteria for success were applied.

### Special Class with Integration

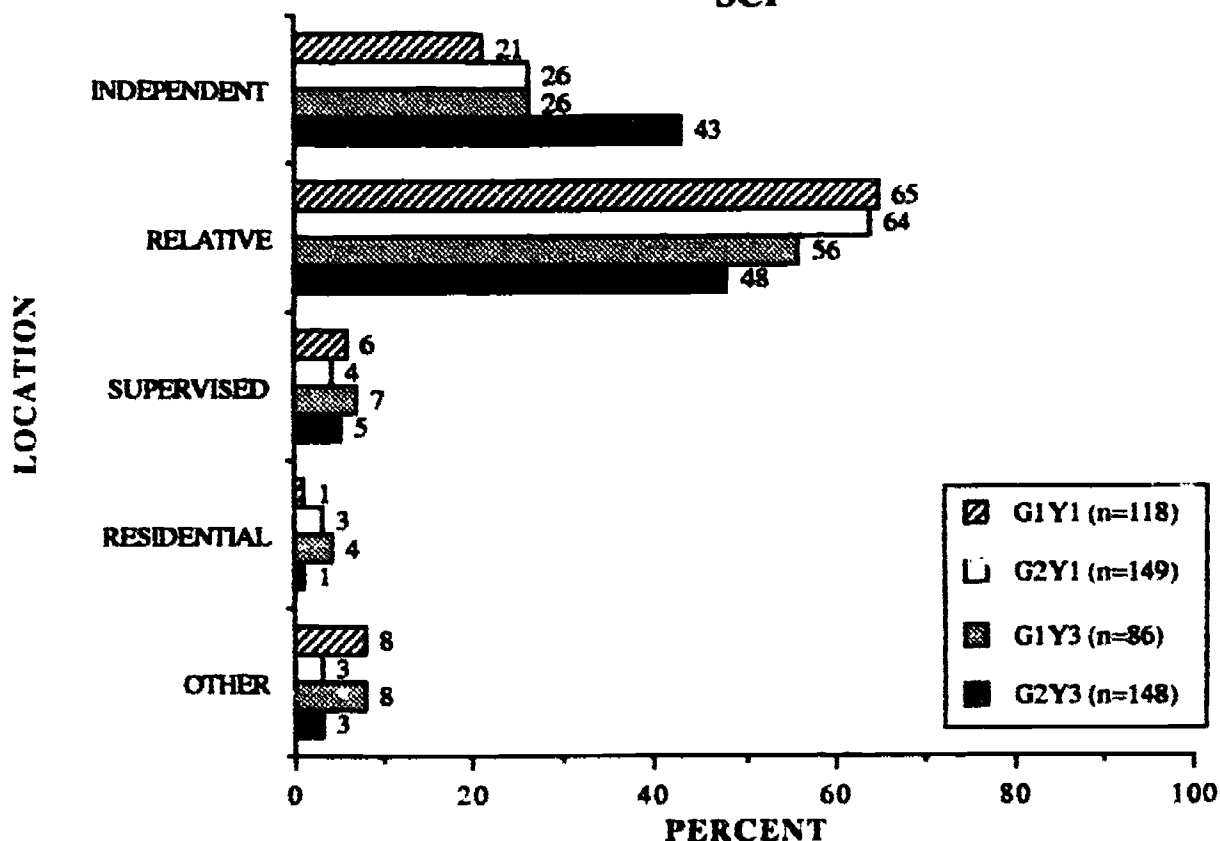
#### General Status

About three-fourths (76%) of the graduates of Special Class with integration programs reported their marital status as single three years after exiting high school, and twenty-one percent said they were married. The remainder were either divorced or separated. The proportion of persons who were living independently (living alone, with a friend, or buying a home) rose from 26% at Year 1 to 43% at Year 3 (see Figure 30). A corresponding decline was observed in the proportion of individuals who were living with relatives (64% for G2Y1 vs. 48% for G2Y3). Six percent were living in supervised housing (supervised apartment or group home), and only 1% lived in residential care centers or institutions.

Somewhat less than two-thirds (62%) of the SCI graduates were involved in from 1-3 leisure activities three years after leaving high school. An additional 25% participated in more than three recreational activities, and 14% said they had no leisure involvement.

A substantial increase was observed in the percentage of individuals who reported they were paying all of their living expenses (from 18% for G2Y1 to

**Fig. 30 LIVING ARRANGEMENTS  
SCI**



34% for G2Y3) (see Figure 31). Forty-three percent said they were paying some of their living expenses, whereas 23% were paying none of their living expenses. Among SCI graduates, 43% said they were not receiving financial assistance from other sources. Of those who did get help, 31% identified their parents as the source, 9% got assistance from the Iowa Department of Human Services, and 12% received supplementary security income.

Involvement in postsecondary training was discussed during the interview. Slightly less than two-thirds (62%) reported no involvement in postsecondary training programs. Among those persons who did participate in such programs, most (18%) were involved in a community college program, 12% were in private programs, and 1% were in the military. Only a very small proportion

participated in adult education or apprenticeship programs.

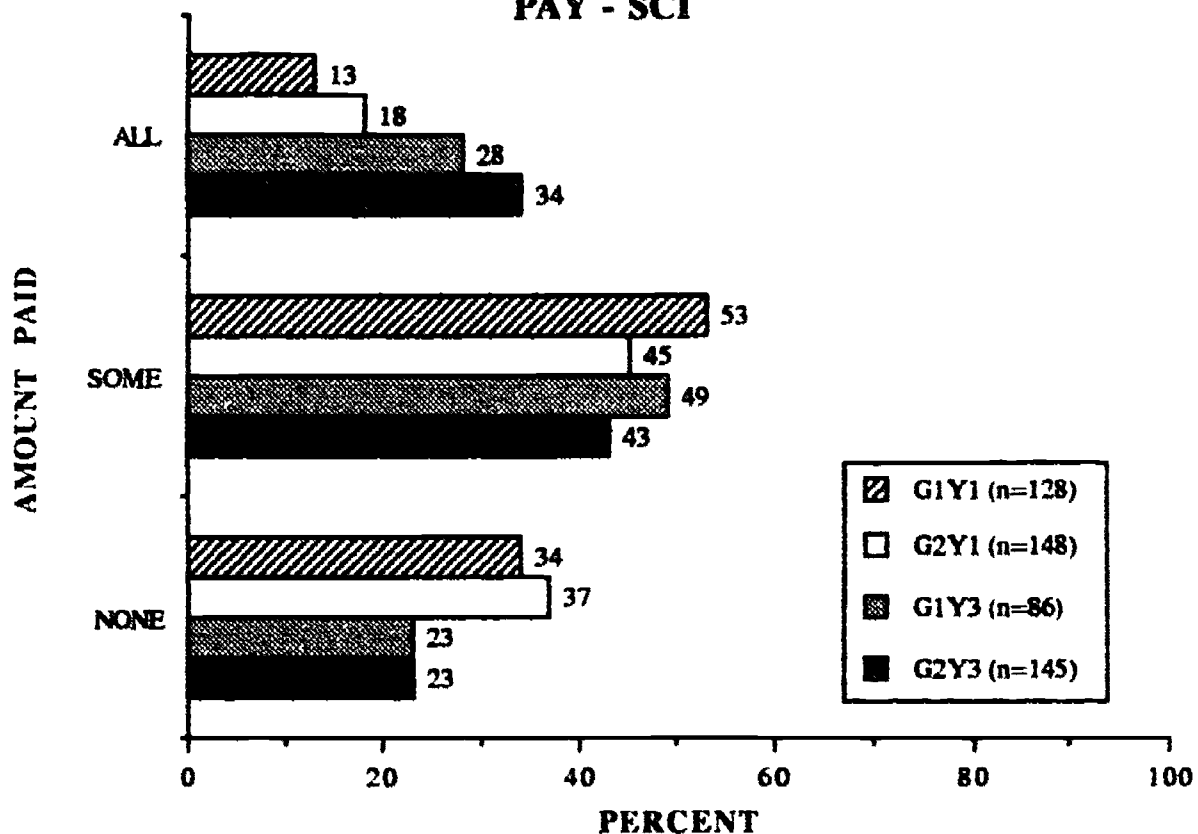
#### Information on Employment

Over two-thirds (70%) of the SCI graduates were employed, either full- or part-time. A small proportion (6%) were otherwise engaged as homemakers, students, or in job training programs. The remaining 24% were unemployed. All individuals were asked what agencies they had contacted concerning employment. Slightly over one-half (53%) had talked to Job Service of Iowa. Twenty-eight percent said they had contacted a Job Training Partnership Act agency, and 30% had talked to Vocational Rehabilitation. Sixteen percent contacted a workshop about a job.

Characteristics of Graduates in Competitive Employment. The majority (87%) of employed graduates of SCI



**Fig. 31 PROPORTION OF EXPENSES PERSONS PAY - SCI**



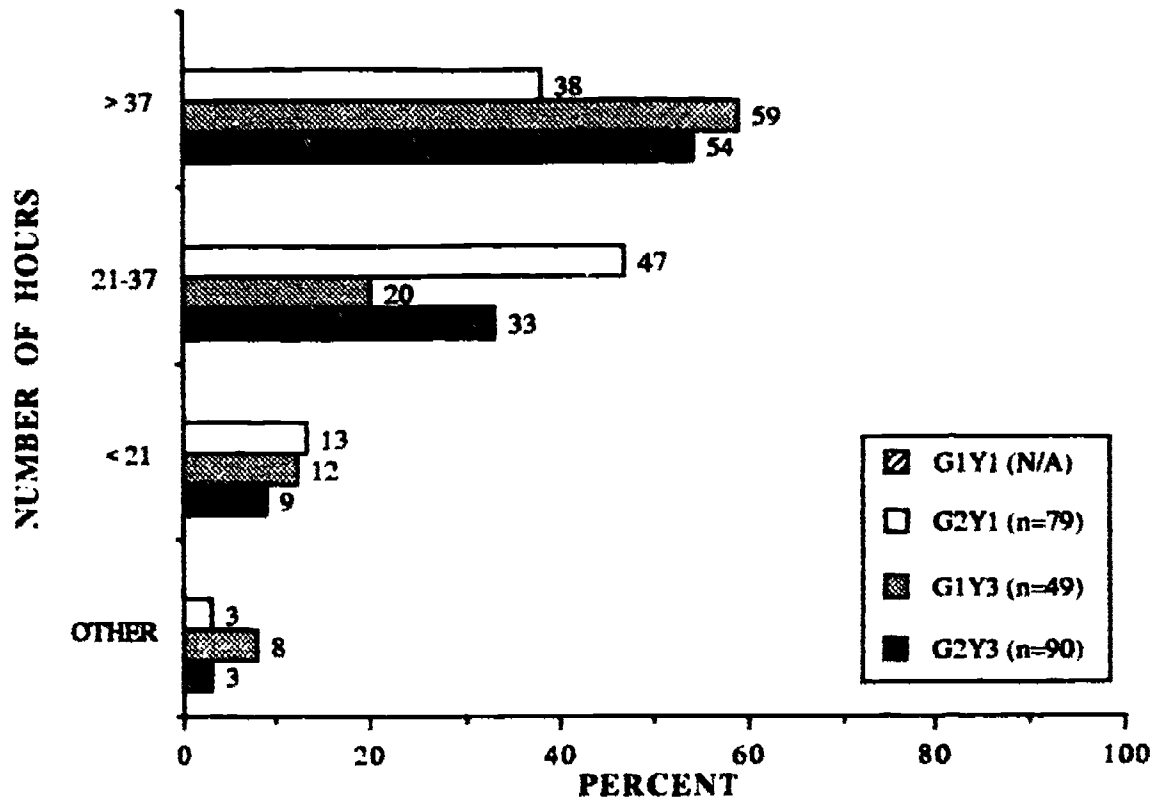
programs worked in competitive jobs. Among these individuals, about one-fourth (24%) were laborers, and approximately two-thirds (61%) were service workers. The remaining 15% had higher status jobs. There was a substantial increase in the proportion of persons who were working full time at Year 3 (54%), when compared to Year 1 (38%) (see Figure 32). Another one-third of the respondents were employed between 21-37 hours per week, while the remainder worked less than half time or seasonally.

The mean wage per hour among SCI graduates in competitive jobs was \$4.08, which compares favorably to the average wage per hour of \$3.73 at Year 1 (see Figure 33). These individuals also experienced substantial increases in some job benefits between Years 1 and 3. The proportion of individuals receiving health insurance increased from 20% to 40%

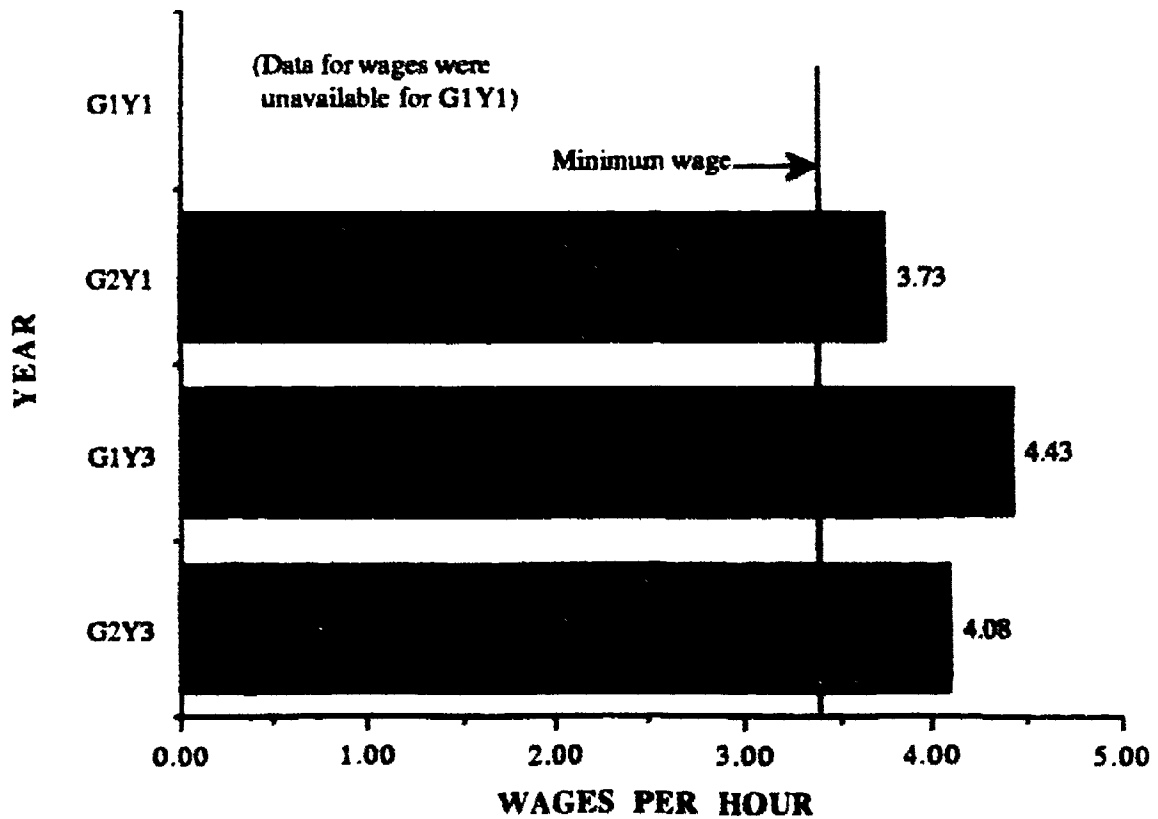
(see Figure 34), and those getting vacation time increased from 32% to 48% during the same time period. About one-third (32%) said they received sick leave from their current employer.

**Characteristics of Graduates in Sheltered/Supported Employment.** Of those persons who were employed three years after graduation, 14% held jobs in sheltered settings (2% in community-based programs, and 12% in workshops). The majority of these individuals were laborers (64%) or service workers (21%). The remaining workers were operatives. Somewhat less than half (43%) of the employed individuals were working full time. There was a substantial drop in the percentage of persons employed between 21-37 hours per week, from 61% at Year 1 down to 36% at Year 3 (see Figure 35). The remaining individuals worked less than half time or seasonally.

**Fig. 32 NUMBER OF HOURS WORKED PER WEEK IN COMPETITIVE EMPLOYMENT - SCI**

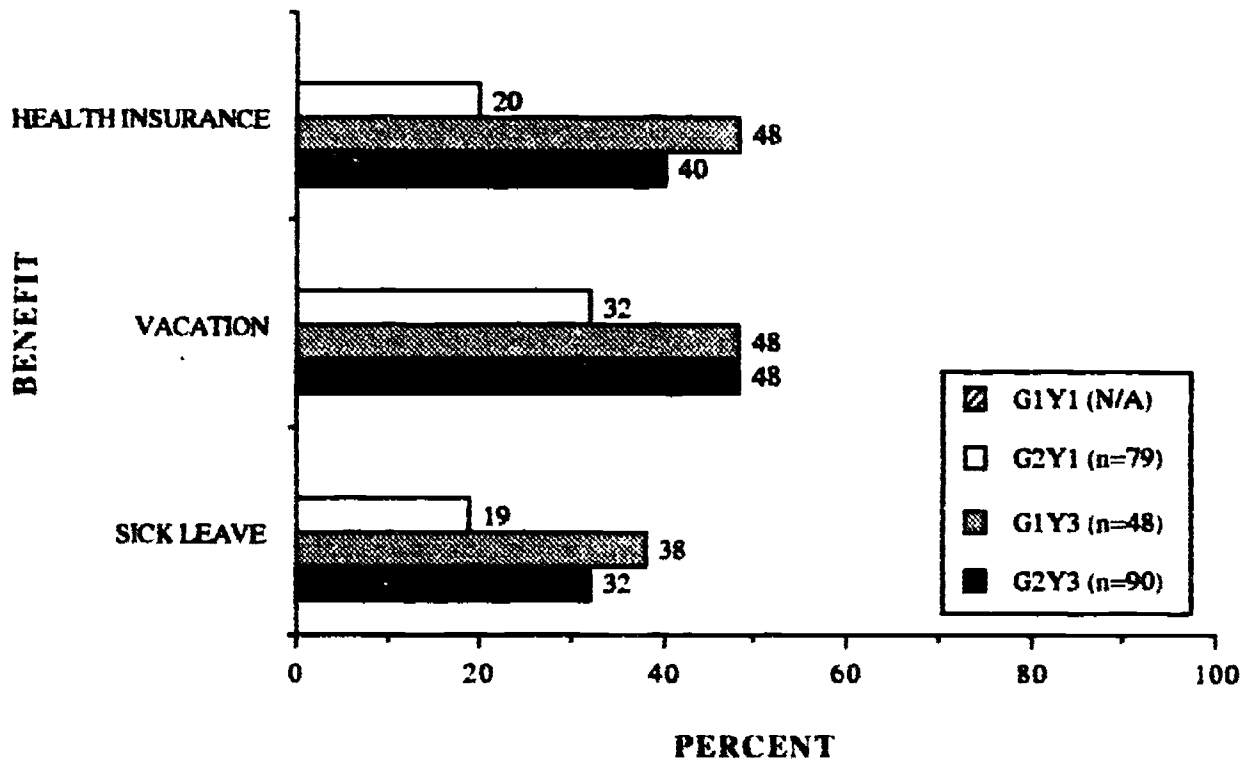


**Fig. 33 WAGES EARNED FROM CURRENT JOB IN COMPETITIVE EMPLOYMENT - SCI**

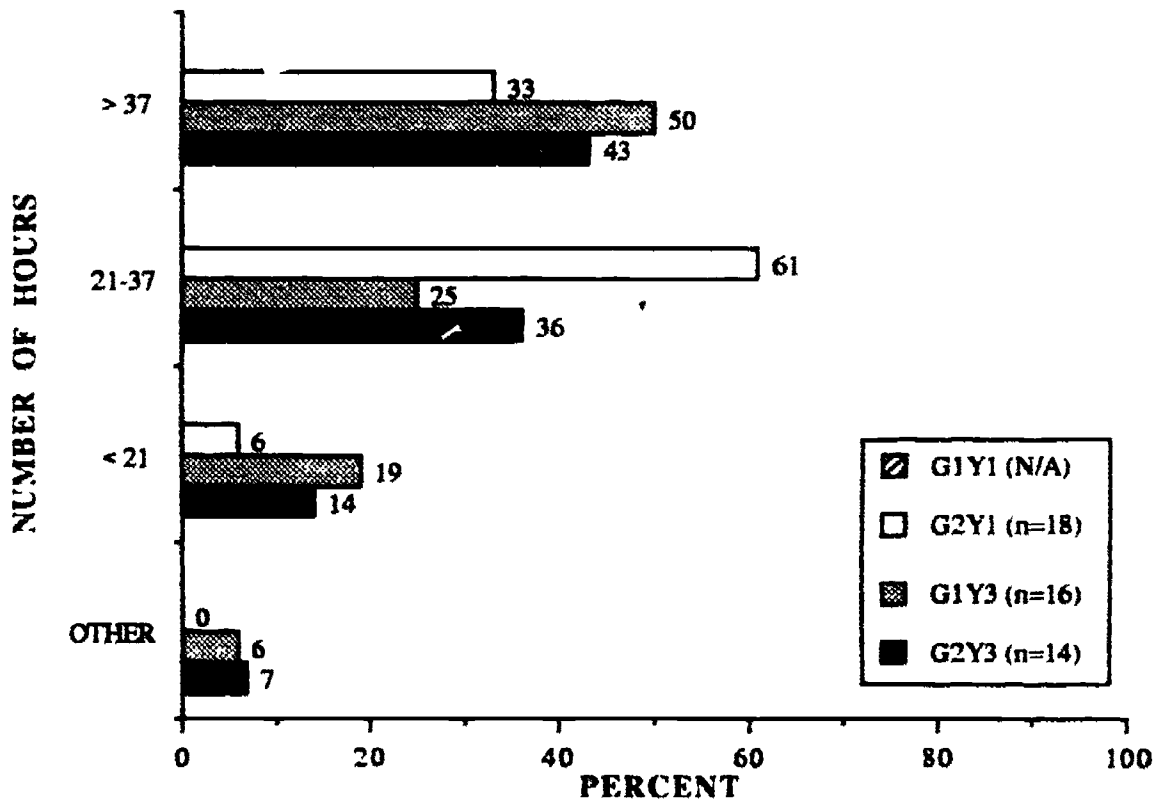




**Fig. 34 JOB BENEFITS RECEIVED IN COMPETITIVE EMPLOYMENT - SCI**



**Fig. 35 NUMBER OF HOURS WORKED PER WEEK IN SHELTERED EMPLOYMENT - SCI**

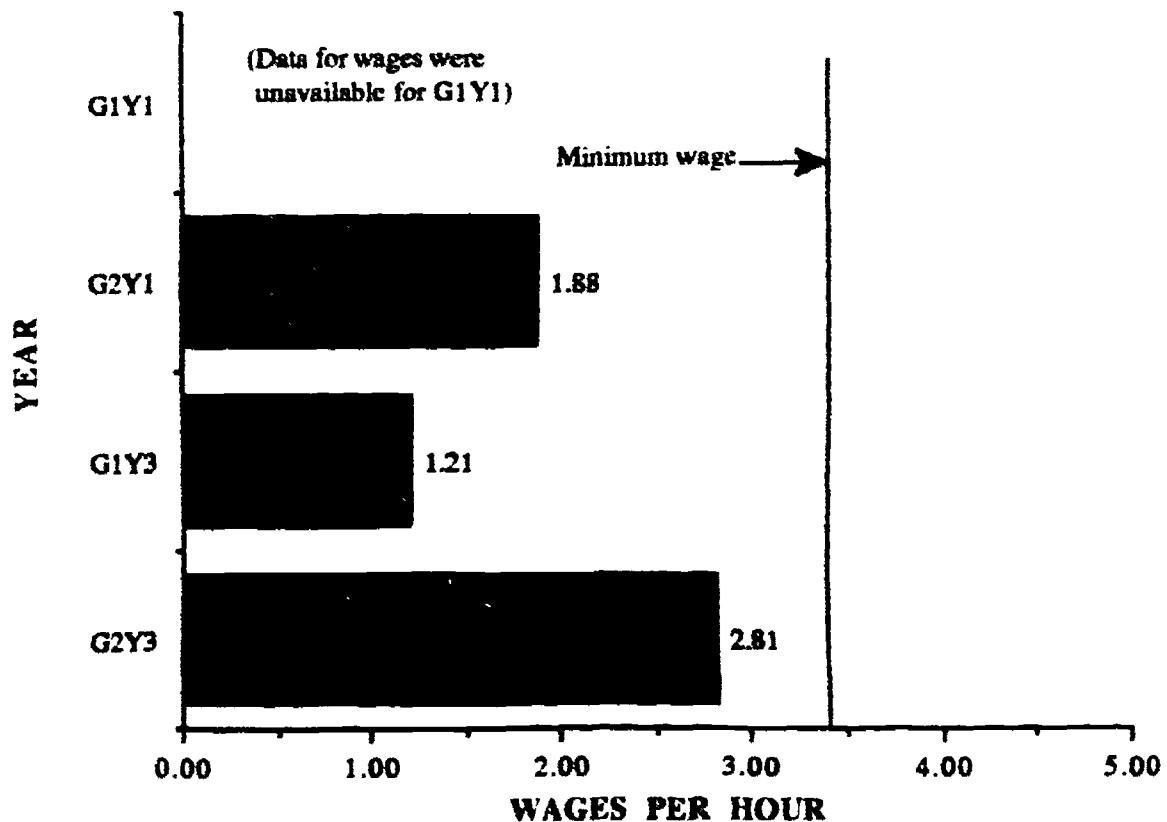


The mean wage per hour among SCI graduates who were employed in sheltered settings was \$2.81 per hour, an increase of almost a dollar per hour over the average wage of \$1.88 among individuals in G2Y1 (see Figure 36). One substantial improvement also was reported by these individuals concerning job benefits, where the proportion receiving health insurance increased from 22% for G2Y1 to 50% for G2Y3 (see Figure 37). Slightly more than half (57%) received vacation time, and about one-fourth (21%) reported getting sick leave from their current employer.

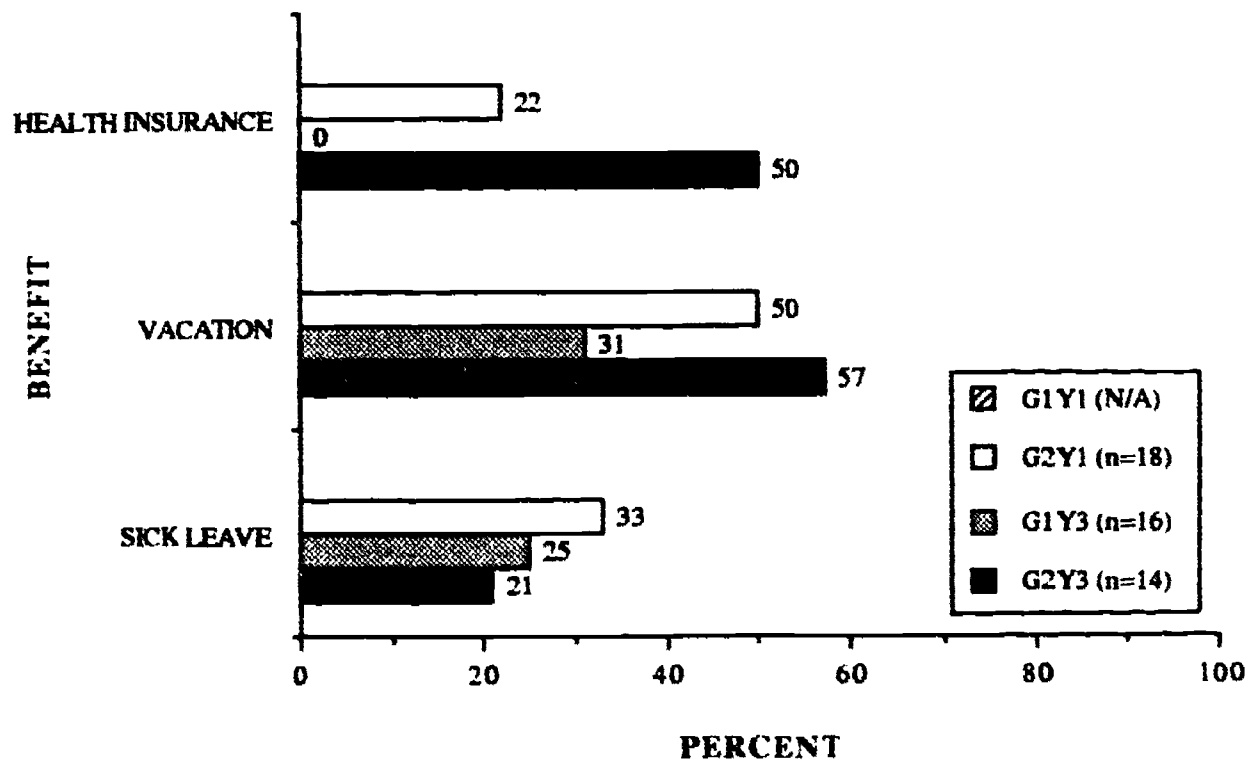
A chi-square test was conducted to examine the relation between location of job and source of help in finding current job for G2Y3 individuals. Two values were assigned to the location of job variable (one for those who were in com-

petitive employment or in a community-based job which was supervised by rehabilitation professionals, the other for those who were in a sheltered workshop). Two values also were assigned to the source of help variable (one for those who found a job through the self/family/friends network, the other for those who found a job through some public agency, such as a school, vocational rehabilitation, Job Service of Iowa, or a JTPA agency). A significant statistic was obtained,  $X^2 (1, n=98) = 10.75, p = 0.001$ . When the self/family/friends network was used to find a job, 95% of the individuals worked in competitive or community-based employment and 5% worked in sheltered employment. When a public agency was used to find work, 70% of the individuals worked in competitive or community-based employment

**Fig. 36 WAGES EARNED FROM CURRENT JOB IN SHELTERED EMPLOYMENT - SCI**



**Fig. 37 JOB BENEFITS RECEIVED IN SHELTERED EMPLOYMENT - SCI**



and 30% worked in sheltered employment.

Successful Graduates

In order to identify those SCI graduates who had made a successful adjustment to adult life, the criteria cited above were applied to this group. The application of the "high" criteria results in the identification of 4.7% (n = 6) persons as having successfully adjusted to adult life one year after graduation. When the lower criteria were applied to this same group of SCI graduates, an additional 12.6% (n = 16) were viewed as successful.

Composites also were used to judge the successful adult adjustment of SCI graduates three years after leaving high school (see criteria listed above). Two percent (n = 3) of the graduates met the "high" criteria for success (when

those individuals who were employed, but did not report their salary, were excluded from the computation, 2.3% were successful). When the lower standards were applied, an additional 16.2% (n = 24) of the SCI graduates were considered to have made a successful adjustment of adult life (when those individuals who were employed, but did not report their salary, were excluded from the computation, 18.5% were successful).

Comparison of Groups 1 and 2

Where differences ≥15% were found between G1Y1 and G2Y1, or between G1Y3 and G2Y3, these findings are reported here; all differences related to salary are reported. Instances where a change from Years 1 to 3 was substantial (≥15%) for one group, but not the other, also are reported here. The actual statistics are not reported.

Differences between Groups for the Same Year. Some differences were found between groups for the same year. Substantially more G2Y3 persons were living independently compared to G1Y3 individuals. A larger proportion of G1Y1 persons were receiving financial assistance from parents compared to G2Y1 persons. Among individuals in sheltered employment, a greater proportion of G2Y3 persons were receiving health insurance and vacation time from their employers, when compared to G1Y3 individuals.

A comparison of wages earned per hour for G1Y1 and G2Y1 was not possible because hourly wage data were not available for G1Y1. The hourly wage earned by G1Y3 persons in competitive employment was higher than that of G2Y3 persons, while the reverse was true in the comparison of average wages for persons in sheltered employment.

Differences between Groups in Changes from Years 1 to 3. Some differences also were noted between Groups 1 and 2 relative to changes from Years 1 to 3. Instances where the change for one group was substantial, but not for the other, are reported below with Group 1 as the reference group. There was not a substantial increase from Years 1 to 3 in the proportion of Group 1 individuals living independently. Neither was there a substantial decrease in the proportion of individuals living with relatives. A substantial drop occurred between G1Y1 and G1Y3 in the proportion of individuals receiving financial assistance from parents. Potential differences in changes between Years 1 and 3 for the two groups could not be determined for employment variables (i.e., job status, hours worked per week, salary per hour, and fringe benefits) since location of job data (sheltered vs. competitive) were not available for G1Y1.

Conclusions regarding Comparison. Twelve variables and 44 categories

within variables were involved in this investigation (e.g., Living Expenses Paid, a variable, breaks down into 3 categories, All, Some, and None). For the SCI group, differences were found for only 16% of the categories. Differences in the proportions of successful G2Y3 vs. G1Y3 graduates were 2% or less (in favor of G2Y3) when the high and low criteria for success were applied.

### Special Class with Little Integration

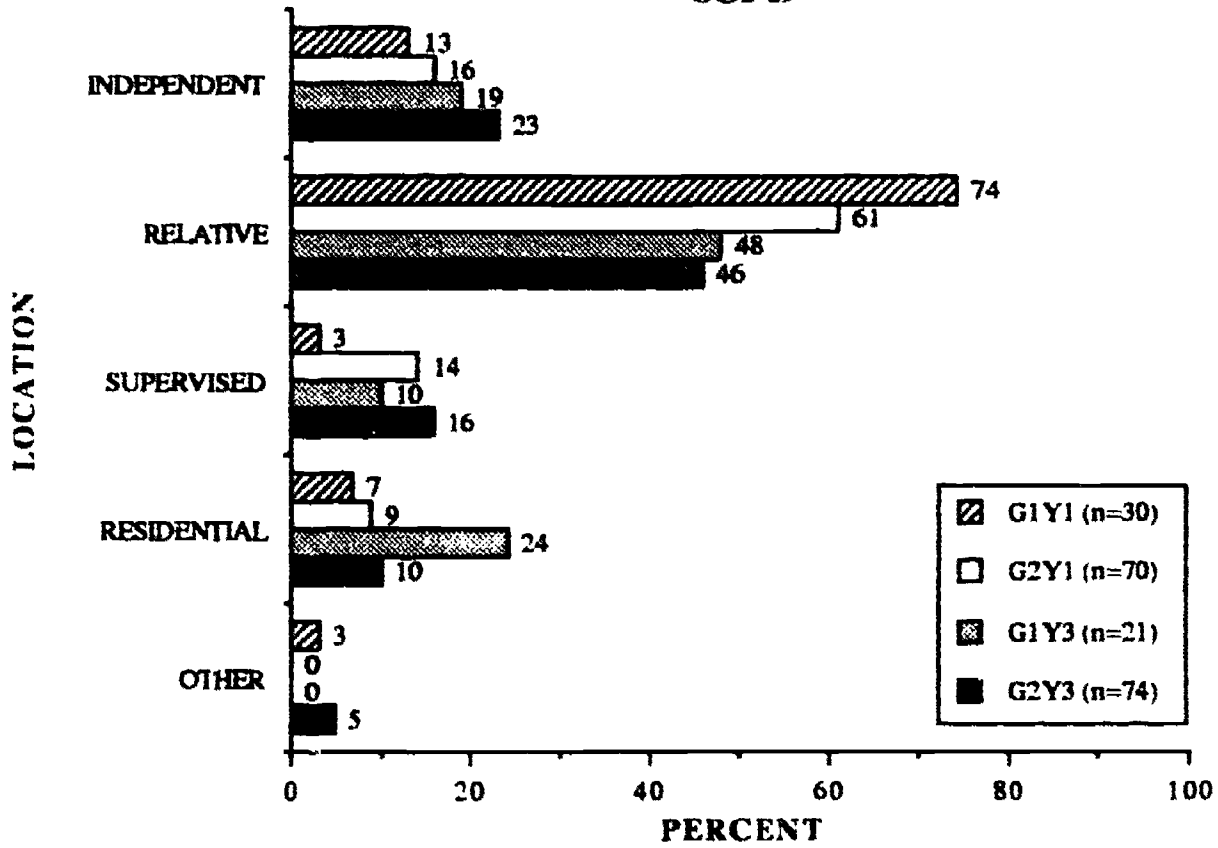
#### General Status

Most (89%) of the graduates of SCI-L programs were single and 7% were married three years after exiting high school. The remaining persons were divorced or separated. Less than one-fourth (23%) of these individuals were living independently. The majority (46%) were living with relatives; this is a substantial drop from Year 1 when 61% were living with relatives (see Figure 38). Sixteen percent were living in supervised housing (supervised apartment or group home), and 10% were living in residential centers (care facilities or institutions).

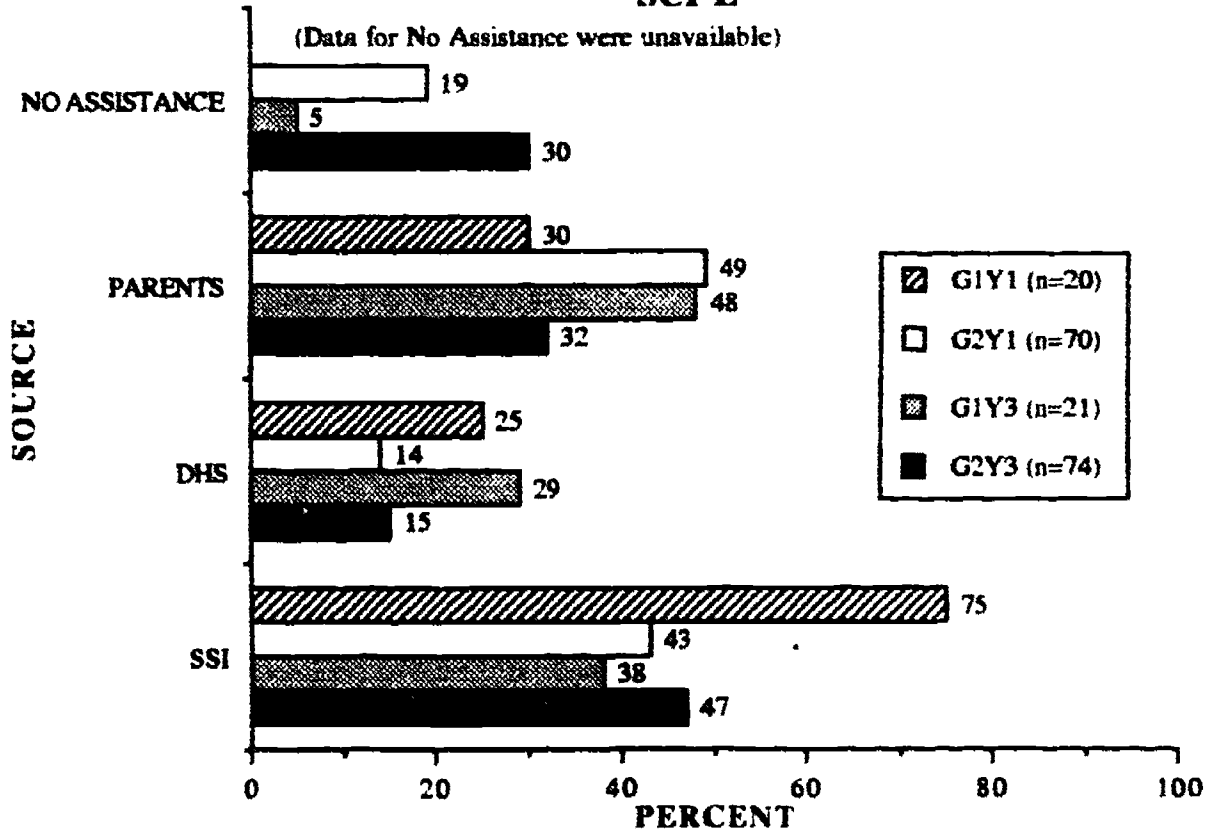
Approximately two-thirds of the respondents were involved in from 1-3 leisure activities. An additional 33% participated in more than three activities, while only 10% said they did not have any leisure activities.

Twenty percent of the SCI graduates paid all of their living expenses, and over half (52%) paid some of their expenses. About one-fourth (28%) paid none of their living expenses. One-third (30%) of these individuals reported they received no financial assistance from other sources. A substantial decrease was noted from Years 1 to 3 in the proportion of persons who said they received financial help from parents (from 49% to 32%) (see Figure 39). Almost half indicated they received some financial assistance in the form of supplemental security

**Fig. 38 LIVING ARRANGEMENTS  
SCI-L**



**Fig. 39 SOURCES OF FINANCIAL ASSISTANCE  
SCI-L**





income; 15% said they were given financial help from the Iowa Department of Human Services.

Participants were asked during the interview about involvement in postsecondary training. Almost three-fourths (72%) said they had no such training. A few were involved in private programs (10%), community college programs (7%), or the military (3%). Only a very small proportion participated in adult education or apprenticeship programs.

### Information on Employment

Approximately three-fourths (70%) were employed (either full- or part-time) and about one-fourth were unemployed. The remaining individuals were otherwise engaged as homemakers, students, or in job training. All individuals were asked what agencies they had contacted to obtain employment. Workshops were contacted most frequently (37%), followed by Job Service of Iowa (31%). Twenty-eight percent had talked to Vocational Rehabilitation about employment, and 24% talked to a Job Training Partnership Act agency about a job. Among Group 1 individuals, there was a substantial drop (from 50% to 24%) from Years 1 to 3 in the proportion of persons who said they had talked to Vocational Rehabilitation

Characteristics of Graduates in Competitive Employment. Forty-two percent of the employed graduates of SCI-L program worked in competitive jobs. The majority of these individuals were laborers (27%) or service workers (55%); the proportion of service workers dropped substantially between Years 1 and 3 (see Figure 40). The remaining 19% worked as operatives or in higher status occupations. Slightly more than half (55%) worked full-time, up substantially from Year 1 (32%); and another third (36%) worked between 21-37 hours

per week, down substantially from Year 1 (58%) (see Figure 41). The remaining 9% worked less than half time.

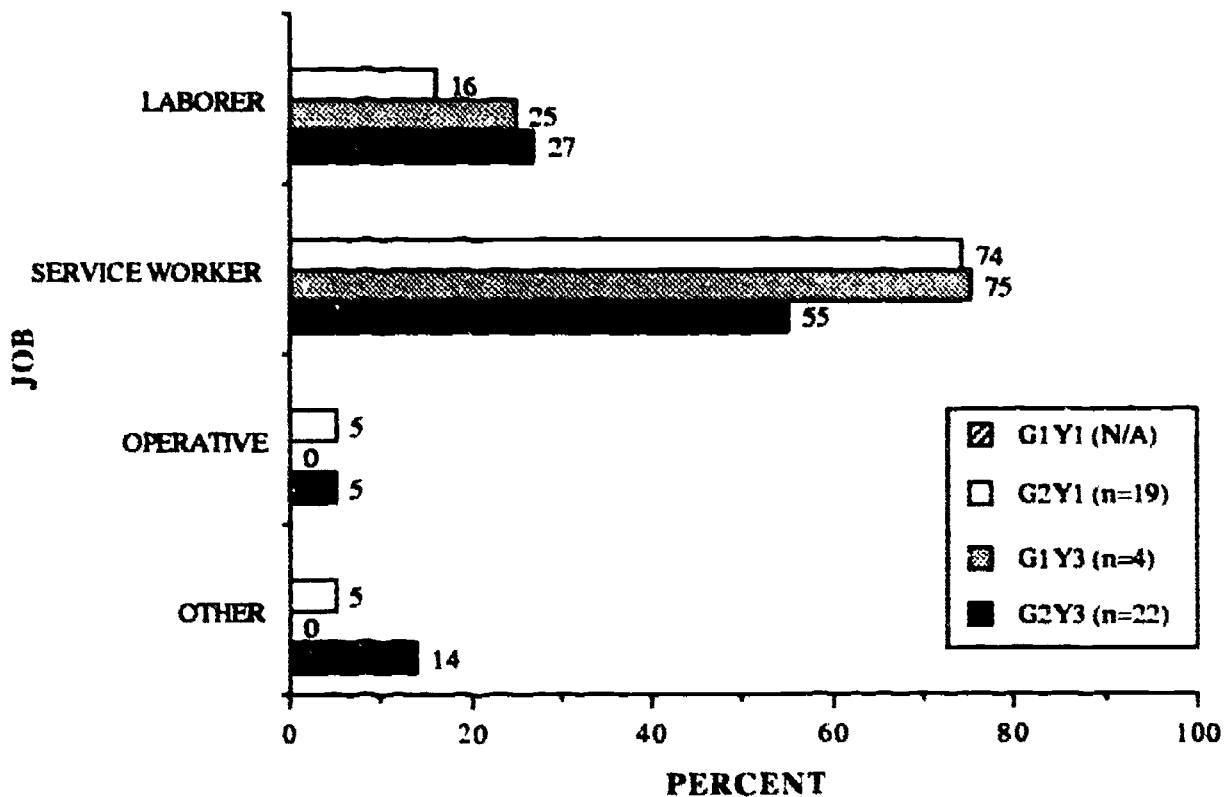
The average wage per hour among competitively employed persons was \$4.19, up substantially from \$3.59 per hour at Year 1 (see Figure 42). Members of this group made substantial gains in job benefits in two areas, where 27% reported they received health benefits (compared to 0% at Year 1) and 32% said they were given vacation time (compared to 11% at Year 1) (see Figure 43).

Characteristics of Graduates in Sheltered/Supported Employment. Among the employed graduates of SCI-L programs, 57% worked in sheltered settings (either in the community or in workshops). About two-thirds (63%) of the workers held jobs as laborers; another 13% were service workers. Of the remaining employed individuals, 20% were operatives and 3% were classified as "other." There was a substantial increase from Years 1 to 3 in the proportion of persons who reported they were employed full time (from 19% to 38%) (see Figure 44). There was a corresponding decrease over the same time period in the proportion of individuals who said they were working between 21-37 hours per week (from 70% to 52%). Only a small group of individuals (7%) were employed less than half time

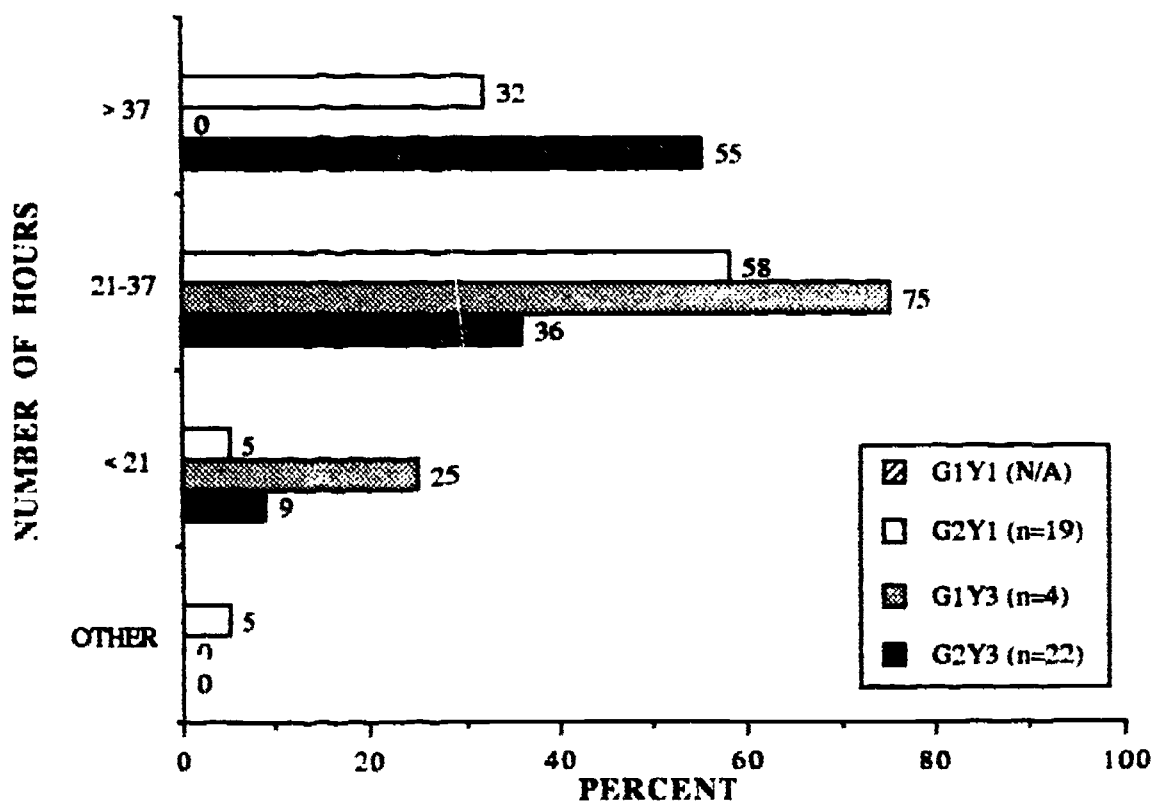
The average wage per hour earned by persons in sheltered employment was very similar for Years 1 and 3 (\$1.24 vs. \$1.27, respectively). There also were no substantial changes in the job benefits received by the employed respondents. Ten percent were getting health insurance, 47% received vacation time, and 27% reported getting sick leave.

A chi-square test was conducted to examine the relation between location of job and source of help in finding current job for G2Y3 individuals. Two val

**Fig. 40 CURRENT JOB CLASSIFICATION IN COMPETITIVE EMPLOYMENT - SCI-L**

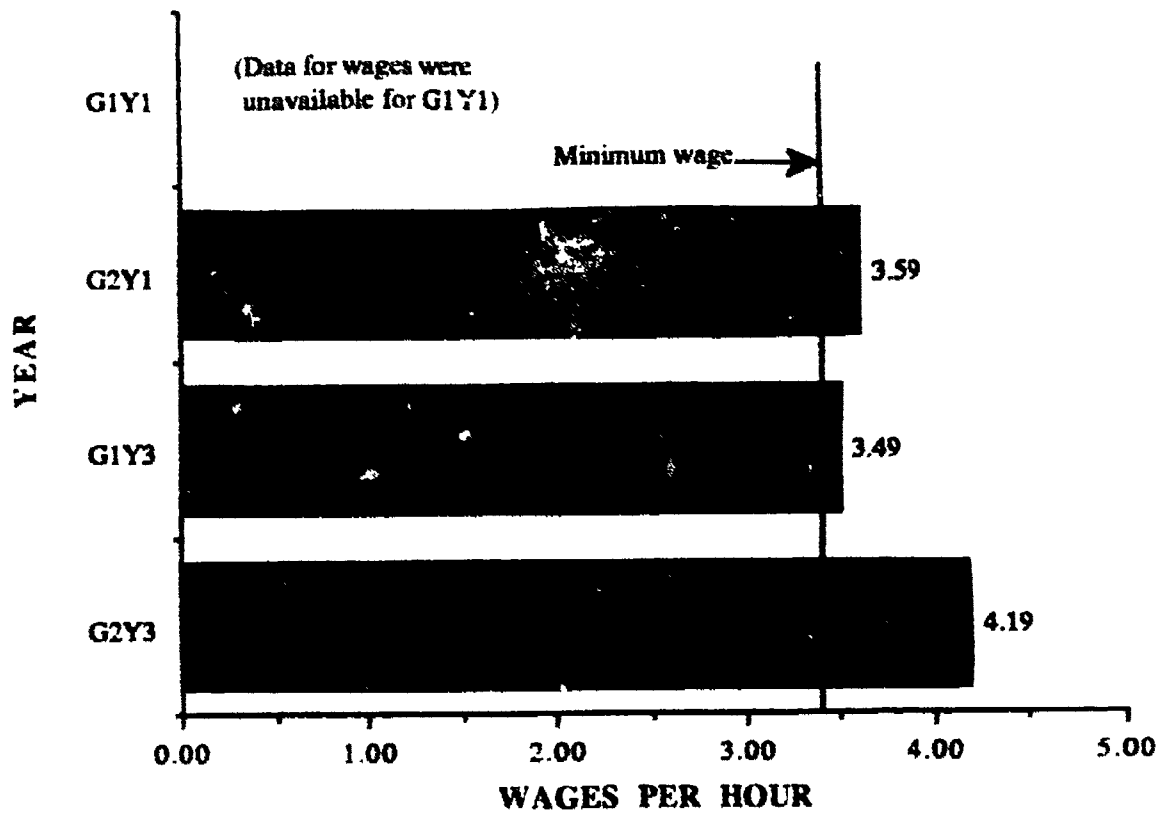


**Fig. 41 NUMBER OF HOURS WORKED PER WEEK IN COMPETITIVE EMPLOYMENT - SCI-L**

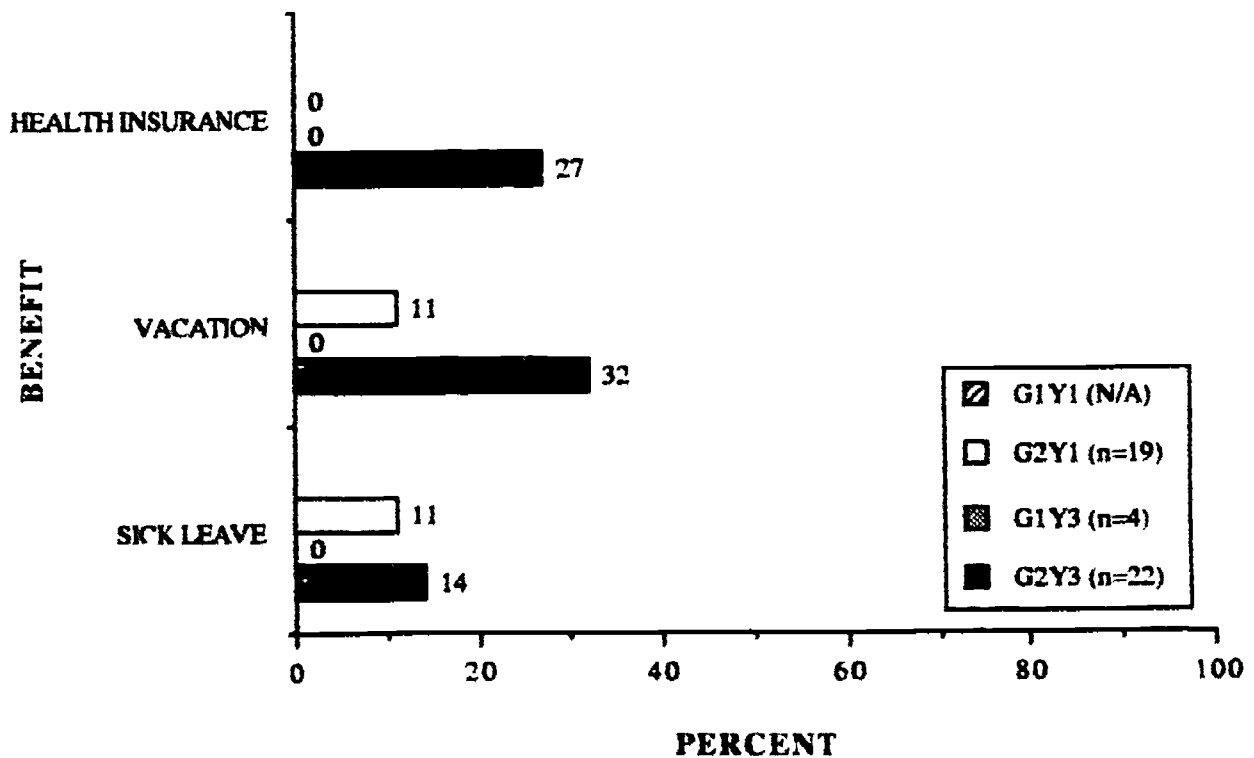




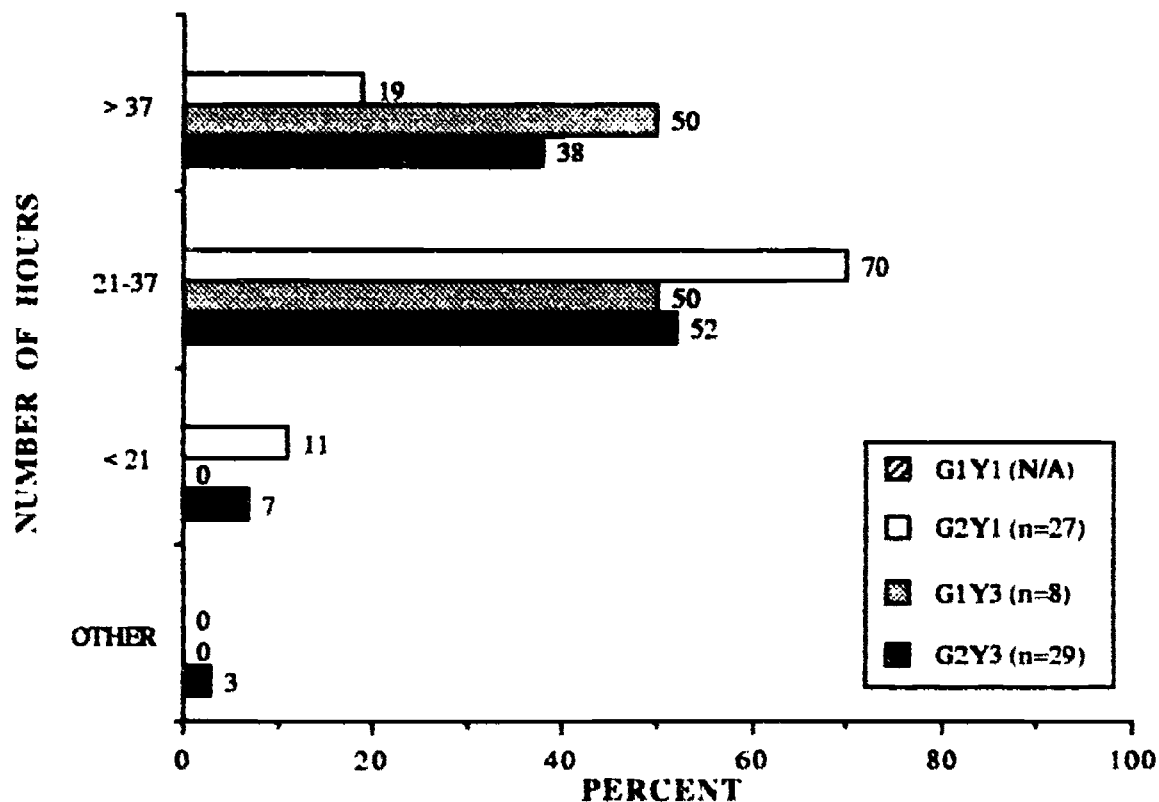
**Fig. 42 WAGES EARNED FROM CURRENT JOB IN COMPETITIVE EMPLOYMENT - SCI-L**



**Fig. 43 JOB BENEFITS RECEIVED IN COMPETITIVE EMPLOYMENT - SCI-L**



**Fig. 44 NUMBER OF HOURS WORKED PER WEEK IN SHELTERED EMPLOYMENT - SCI-L**



ues were assigned to the location of job variable (one for those who were in competitive employment or in a community-based job which was supervised by rehabilitation professionals, the other for those who were in a sheltered workshop). Two values also were assigned to the source of help variable (one for those who found a job through the self/family/friends network, the other for those who found a job through some public agency, such as a school, vocational rehabilitation, Job Service of Iowa, or a JTPA agency). A significant statistic was obtained,  $X^2(1, n=42) = 8.07, p = 0.005$ . When the self/family/friends network was used to find a job, 86% of the individuals worked in competitive or community-based employment and 14% worked in sheltered employment. When a public agency was used to find work, 45% of the individuals worked in competitive or community-based employment

and 55% worked in sheltered employment.

### Successful Graduates

Composites used to determine the proportion of individuals in the total group who were successful as young adults also were used to judge success among graduates of SCI-L programs. The application of the "high" criteria resulted in the identification of 8.3% ( $n = 4$ ) of the group as having made a successful adjustment one year after graduation. When the lower criteria were applied, an additional 4.2% ( $n = 2$ ) were identified as successful.

The composites used to determine the proportion of individuals in the total group who were successful three years after graduation also were used with this subgroup. Application of the "high" cri-

teria for successful adjustment three years after graduation resulted in the identification of only one person (1.4%) (when those individuals who were employed, but did not report their salary, were excluded from the computation, 1.8% were successful). When the "low" criteria were applied, 9.5% of the subgroup were judged to be successful (when those individuals who were employed, but did not report their salary, were excluded from the computation, 12.5% were successful).

### Comparison of Groups 1 and 2

Where differences  $\geq 15\%$  were found between G1Y1 and G2Y1, or between G1Y3 and G2Y3, these findings are reported here; all differences related to salary are reported. Instances where a change from Years 1 to 3 was substantial ( $\geq 15\%$ ) for one group, but not the other, also are reported here. The actual statistics are not reported.

Differences between Groups for the Same Year. A few differences were identified between groups for the same year. More G1Y1 than G2Y1 individuals had contacted JTPA agencies and Vocational Rehabilitation about work. A substantially greater proportion of G1Y1 than G2Y1 individuals were receiving supplemental security income. Substantially more G1Y3 than G2Y3 persons in competitive jobs were service workers. Substantially more G1Y3 than G2Y3 persons in sheltered employment were operatives. Concerning hours worked per week, substantially more G2Y3 individuals in competitive jobs worked full-time when compared to G1Y3 persons, whereas substantially more G1Y3 than G2Y3 persons in competitive jobs worked between 21-37 hours per week.

A comparison of wages earned per hour for G1Y1 and G2Y1 was not possible because hourly wage data were

not available for G1Y1. There was a difference between G1Y3 and G2Y3 persons who were in competitive employment related to the average wage earned per hour. G2Y3 persons in sheltered employment were paid substantially more per hour than were G1Y3 individuals. A larger proportion of G2Y3 persons in competitive employment were receiving health insurance and vacation time when compared to G1Y3 persons.

Differences between Groups in Changes from Years 1 to 3. Groups 1 and 2 did differ on some variables in terms of changes from Year 1 to Year 3. Instances where the change for one group was substantial, but not for the other, are reported below with Group 1 as the reference group. A substantial increase was seen from Years 1 to 3 in the proportion of Group 1 individuals living in residential facilities. A substantial decrease occurred between Years 1 and 3 in the proportion of Group 1 persons who received supplemental security income. Potential differences in changes between Years 1 and 3 for the two groups could not be determined for employment variables (i.e., job status, hours worked per week, salary per hour, and fringe benefits) since location of job data (sheltered vs. competitive) were not available for G1Y1.

Conclusions regarding Comparison. Twelve variables and 44 categories within variables were involved in this investigation (e.g., Living Expenses Paid, a variable, breaks down into 3 categories, All, Some, and None). For the SCI-L group, differences were found for only 14% of the categories. Differences in the proportions of successful G2Y3 vs. G1Y3 graduates were 7% or less (in favor of G2Y3) when the high and low criteria for success were applied.

## Self-Contained Special Class

### General Status

All of the graduates of SSC programs reported their marital status as single. A substantial drop (from 64% to 43%) was observed from Years 1 to 3 in the proportion of individuals who said they were living with parents or relatives (see Figure 45). There was a corresponding substantial increase (from 9% to 24%) in the proportion of persons who were living in residential facilities at Year 3. About one-fourth (24%) were living in supervised settings (apartment or group home). Only 10% of the SSC graduates said they were living independently.

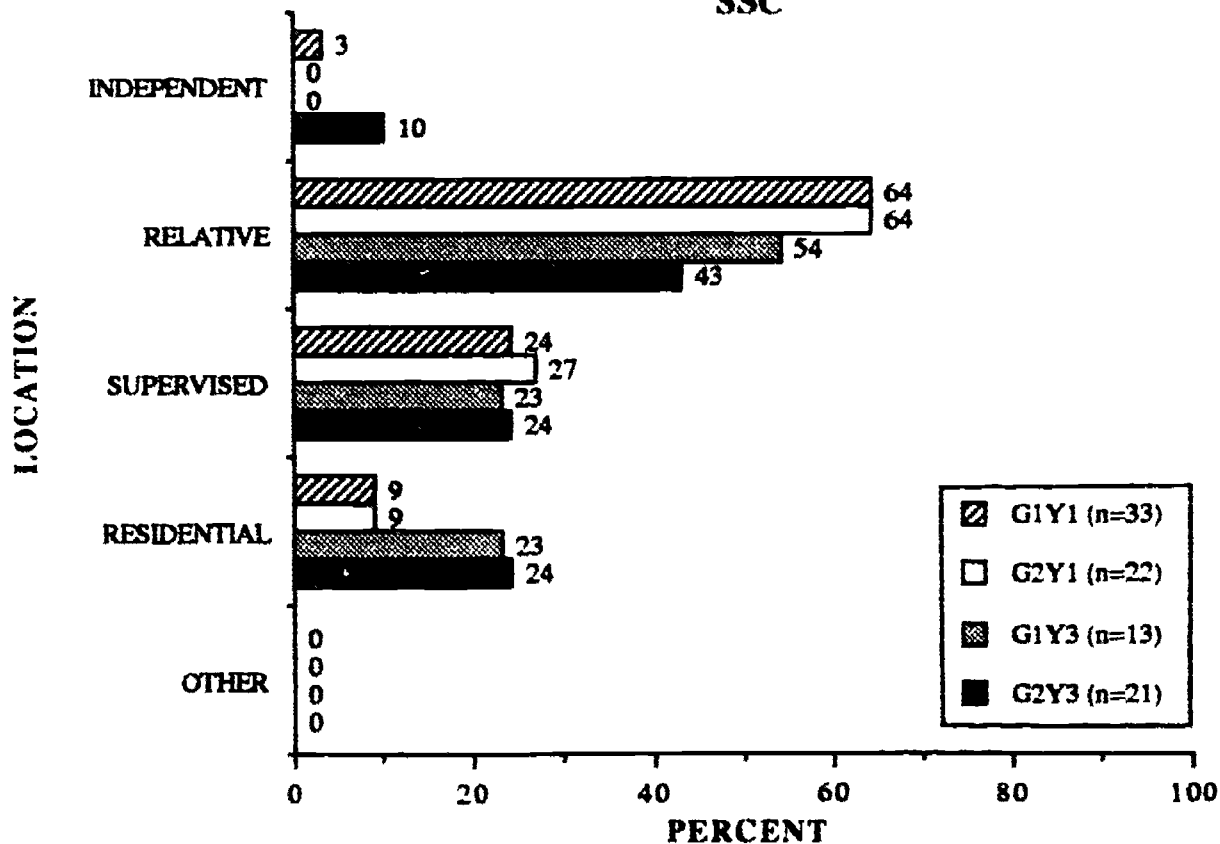
Most (81%) of the SSC graduates were involved in 1-3 leisure activities.

Another 5% said they were involved in more than 4-6 activities. Fourteen percent reported they were not involved in any leisure pastimes.

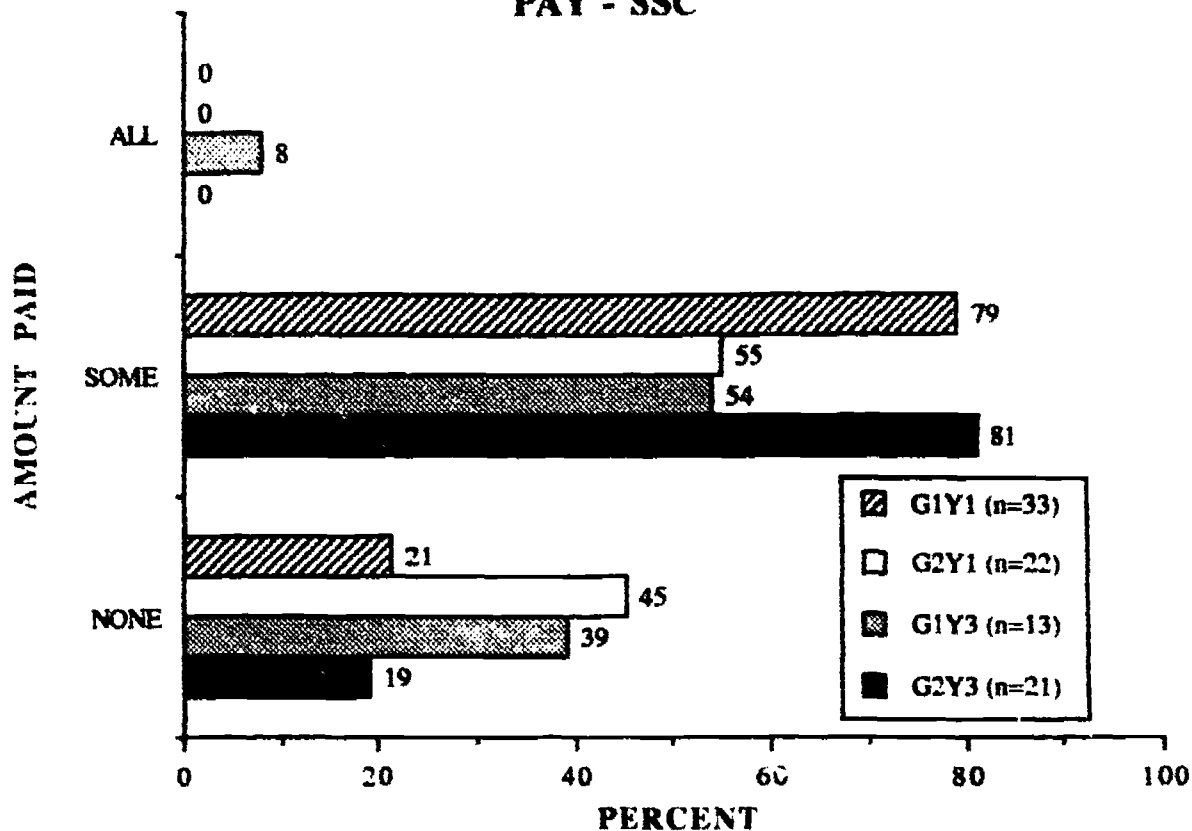
Eighty-one percent of the G2Y3 individuals paid some of their living expenses, a substantial increase over G2Y1 (see Figure 46). There was a corresponding decrease (from 45% down to 19%) between Years 1 and 3 in the proportion of persons who reported they paid none of their living expenses. Virtually all of the SSC graduates reported receiving some type of financial assistance. The majority (86%) said they received supplemental security income, and 14% got assistance from the Iowa Department of Human Services. Parents also provided financial help to 38% of the respondents.

Involvement in postsecondary training programs was discussed during the interview. Over three-fourths (76%)

Fig. 45 LIVING ARRANGEMENTS  
SSC



**Fig. 46 PROPORTION OF EXPENSES PERSONS PAY - SSC**



said they had not participated in any such programs since graduation from high school. Most persons (19%) with post-secondary schooling received their training in private programs. Only a very small proportion participated in adult education or apprenticeship programs.

Information on Employment

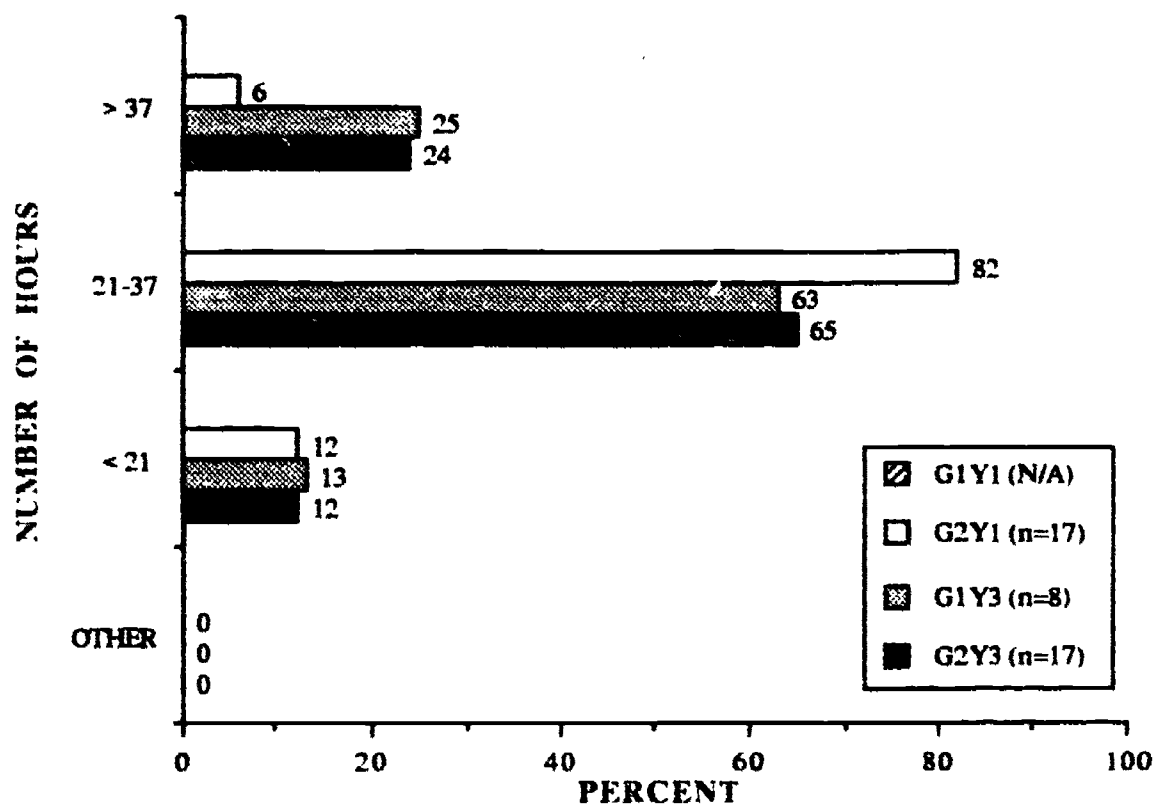
Almost all (86%) SSC graduates were employed at the time of the Year 3 interview. The remaining individuals in this subgroup were unemployed. All persons were asked about the agencies they had talked to about employment. Most (57%) had talked to a workshop; substantially fewer G1Y3 than G1Y1 individuals reported talking to a workshop. Far fewer had talked to other agencies. Only 5% had talked to Job Service of Iowa and Vocational Rehabilitation.

None had contacted a Job Training Partnership Act agency.

Characteristics of Graduates in Competitive Employment. Only one individual worked in a competitive job as a service worker. This person worked less than 21 hours per week, and earned a wage of \$3.50 per hour. Further, this person received no job benefits.

Characteristics of Graduates in Sheltered/Supported Employment. The remaining employed individuals (94%) worked in sheltered workshops in jobs classified as laborers (82%), service workers (6%), or operatives (12%). A substantial increase (from 6% to 24%) between Years 1 and 3 was seen in the proportion of individuals working full-time (see Figure 47), and a substantial drop (from 82% to 65%) during this same time period was observed in the proportion of persons working between 21-37 hours per week. The average

**Fig. 47 NUMBER OF HOURS WORKED PER WEEK IN SHELTERED EMPLOYMENT - SSC**



wage per hour drop from \$1.09 for G2Y1 to \$0.82 for G2Y3 (see Figure 48). In spite of the drop in wages, there was some improvement in job benefits received. The proportion of persons receiving vacation time rose from 35% for G2Y1 to 53% for G2Y3, and the percentage getting sick leave increased from 18% to 35% (see Figure 49).

A chi-square test to examine the relation between location of job and source of help in finding current job could not be conducted since all SSC individuals held jobs in workshops.

**Successful Graduates**

Composites also were used to determine "high" and "low" levels of successful adult adjustment of the SSC individuals in this investigation; however, the criteria were altered slightly for some levels. Where the levels differ from those

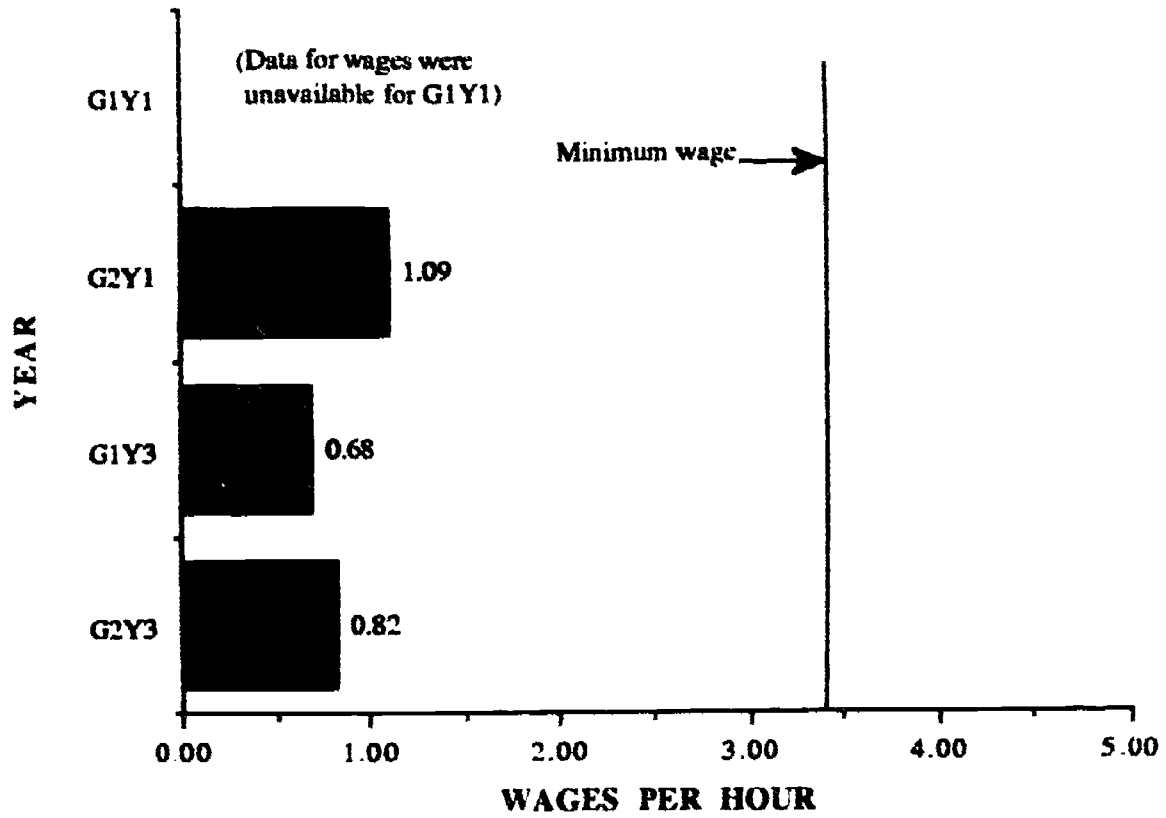
for the total group, the differences are specified below.

The composite for a high level of success for graduates one year after graduation (G2Y1) was composed of the same variables as the composite for the total group, but living arrangements included the following: buying a home, living independently, living with a friend, living in a supervised apartment, or living in a group home. None of the individuals from the SSC group met this set of criteria. When the lower set of criteria were applied (which were the same for the total group), only two individuals (14.3%) were selected.

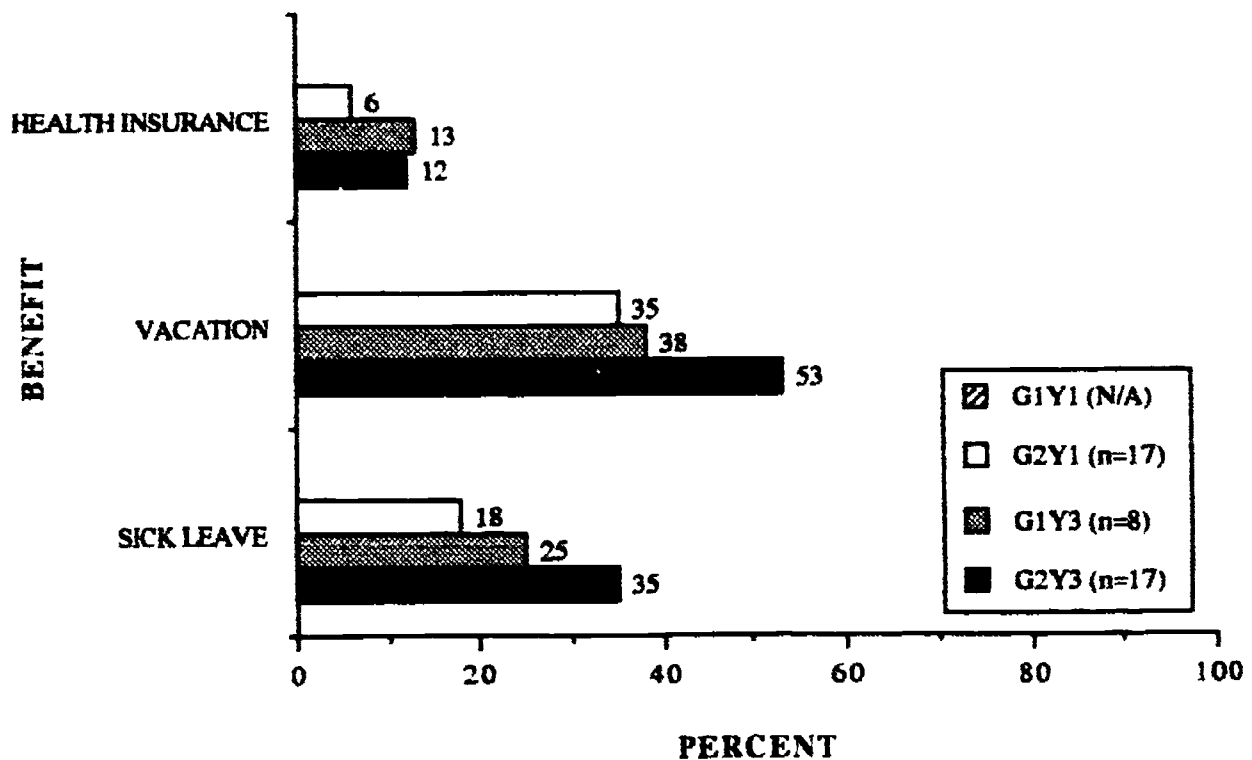
The composite for a high level of success for graduates three years after graduation (G2Y3) was composed of the same variables as the composite for the total group, except for living arrangements. The present criteria required that the individual be buying a home, living



**Fig. 48 WAGES EARNED FROM CURRENT JOB IN SHELTERED EMPLOYMENT - SSC**



**Fig. 49 JOB BENEFITS RECEIVED IN SHELTERED EMPLOYMENT - SSC**





independently, living with a friend, living in a supervised apartment, or living in a group home. None of the individuals met this set of criteria. The lower criteria also were similar, except concerning the individual's job, which had to be paying at least minimum wage (persons not reporting wages were excluded from this analysis), be community based, and must be at least 20 hours per week. None of the individuals in this subgroup met these criteria either.

### Comparison of Groups 1 and 2

Where differences  $\geq 15\%$  were found between G1Y1 and G2Y1, or between G1Y3 and G2Y3, these findings are reported here; all differences related to salary are reported. Instances where a change from Years 1 to 3 was substantial ( $\geq 15\%$ ) for one group, but not the other, also are reported here. The actual statistics are not reported.

Differences between Groups for the Same Year. A few differences were observed between groups for the same year. A greater proportion of G2Y3 than G1Y3 individuals were employed. Concerning the proportion of living expenses paid by respondents, there were substantial differences between G1Y1 and G2Y1 as well as between G1Y3 and G2Y3 relative to the percentages who paid some or none of their living expenses. A greater proportion of G1Y3 were receiving financial support from parents compared to G2Y3. Substantially more G2Y3 persons participated in post-secondary training than did G1Y3 persons. There was a substantial difference in the proportion of G2Y3 vs. G1Y3 individuals working in sheltered workshops who were laborers; this was also true of the proportions of those who were service workers. More G2Y3 than G1Y3 persons were receiving vacation time from their employer.

A comparison of wages earned per hour for G1Y1 and G2Y1 was not possible because hourly wage data were not available for G1Y1. The hourly wage earned by G2Y3 persons in sheltered employment was somewhat higher than that for G1Y3.

Differences between Groups in Changes from Years 1 to 3. Some differences also were noted between Groups 1 and 2 relative to changes from Years 1 to 3. Instances where the change for one group was substantial, but not for the other, are reported below with Group 1 as the reference group. There was not a substantial decrease in the proportion of Group 1 individuals living with parents, nor was there a substantial increase in the proportion of persons living in residential facilities. A substantial increase was observed concerning the proportion of persons receiving financial support from parents. Potential differences in changes between Years 1 and 3 for the two groups could not be determined for employment variables (i.e., job status, hours worked per week, salary per hour, and fringe benefits) since location of job data (sheltered vs. competitive) were not available for G1Y1.

Conclusions regarding Comparison. Twelve variables and 44 categories within variables were involved in this investigation (e.g., Living Expenses Paid, a variable, breaks down into 3 categories, All, Some, and None). For the SSC group, differences were found for 27% of the categories. There were no differences in the proportions of G2Y3 vs. G1Y3 graduates judged to be successful when the high and low criteria for success were applied--no one was perceived as successful in either group.

## DISCUSSION

This section is organized to respond to four major questions.

1. What was the level of adult adjustment of individuals with mental disabilities three years after they had been graduated?

2. What major changes occurred in the adult adjustment of individuals with mental disabilities in the period from one to three years after graduation?

3. Do the data on the two separate groups of individuals (Groups 1 and 2) indicate a true replication of the results?

4. What implications do the results have for programming in our schools and for the transition planning process?

Within each section we also will attempt to address differences found between males and females and among the four program models.

### Adult Adjustment Three Years after Graduation

Using the criteria of "success" which we have proposed, 18.5% of the total group met the low criteria for success and only 3.9% met the high standard for success three years out of school. When males and females were compared, there were only minor differences in the proportions who were highly successful and a somewhat larger proportion of females who met the lower success criteria. Across program models, students from RTP classes were more successful than those from the more restrictive models, but the differences in percent of success were not as large as might be expected in viewing the functioning level of these individuals. Perhaps here we have an interaction of functioning level with the type of programming provided to these individuals.

A majority of the individuals were still living at home and single. Only 30% reported paying all of their living expenses; one-third indicated they received no financial assistance from relatives or

social service agencies. Two-thirds had received no postsecondary training three years after graduation. More females than males were married (27% vs. 8%) and were living independently (49% vs. 30%).

The rate of employment (72%) compared favorably to other studies conducted with individuals with mental disabilities, but only 73% of the employed individuals held competitive jobs. Two-thirds of those in competitive employment worked full time, compared to 35% in sheltered employment. At most, only 50% of these individuals received any type of fringe benefit.

There were major differences in the hourly wages and number of hours worked between those competitively employed and those in sheltered employment. More males than females were employed, and similar differences in wages and hours worked existed between those in competitive vs. sheltered employment. Perhaps one of the most significant findings of this study was that there was a significant relationship between the use of school or adult service agency to find employment and the location of employment, but the relation was not in the direction we would want. When compared to use of the self/family/friend network, use of such agencies resulted in a significantly higher percent of placements in sheltered vs. competitive or community-based supported employment. This finding was consistent across gender and across program models. Thus, this phenomenon cannot be attributed solely to a difference in the functioning level of individuals seeking assistance from the school or adult service agencies.

### Major Changes in Adult Adjustment 1 vs. 3 Years after Graduation

The second major focus of this study was changes which occurred in the

adult adjustment of individuals with mental disabilities between one and three years after graduation, in most cases with little or no transition planning assistance. Table 3 presents a summary of significant improvements on the key variables for Group 2, between one and three years out of school. As mentioned before, we have defined "significant improvements" from one to three years out of school as a change of  $\geq 15\%$  in the desired direction.

It should be remembered, however, that although significant improvements may have occurred in a specific category, the end result may still not be acceptable levels of adult adjustment.

As indicated in Table 3, there were positive shifts in a number of adult adjustment variables. Over the post-graduation period, the total group of graduates labeled mentally disabled became more independent in their living ar-

Table 3

Significant Improvements on Key Variables Between G286 and G288

Variable	Total Group	Subgroup					
		Males	Females	RTP	SCI	SCI-L	SSC
<b>General Status</b>							
Lives independently	+	.	+	+	+	.	.
Pays all living expenses	+	.	+	+	+	.	.
No financial assistance	.	.	+	+	.	.	.
<b>Employment Status</b>							
<b>Competitive</b>							
Full-time work	+	.	+	+	+	+	.
Salary (+ .50/hr)	+	+	.	+	.	+	.
Health insurance	+	+	+	+	+	+	.
Vacation	+	+	+	+	+	+	.
Sick leave	.	+	.	+	.	.	.
<b>Sheltered</b>							
Full-time work	+	+	.	NA*	.	+	+
Salary (+ .50/hr)	.	.	.	NA	+	.	.
Health insurance	.	.	+	NA	+	.	.
Vacation	.	.	.	NA	.	.	+
Sick leave	.	.	.	NA	.	.	+

Note. + indicates that a change of  $\geq 15\%$  (except Salary) was found from G286 to G288.

\* No RTP individuals were in sheltered employment.

rangement, as they moved away from living with parents or other relatives and also were paying more of their living expenses. When the results were broken down by subgroups, this shift toward financial independence and independence in living arrangements held true for females and those from RTP and SCI programming models.

In terms of employment, there was no major improvement in employment rate, or change from "otherwise engaged" to employed. As a total group, those who were competitively employed increased the number of hours they worked, generally moving from the 21-37 hour time frame to full time. For subgroups, this shift was a major one for females and those from all program models except SSC. The number of individuals receiving fringe benefits except sick leave increased for the group as a whole. These increases held for both males and females and for graduates of all program models except SSC. Hourly wage increased for the group as a whole and for males and graduates of RTP and SCI-L programs.

The increases from one to three years out of school were far less numerous for those in sheltered employment. For the total group, the only significant shift was in the number of individuals in full-time employment. This shift also held true for males and graduates of SCI-L and SSC programs. Graduates of SCI programs showed positive shifts in hourly wage and numbers receiving health insurance. Graduates of SSC programs showed significant increases in numbers receiving vacation and sick leave. The only other significant shift occurred for females in terms of numbers receiving health insurance. This lack of progress in key areas of adult adjustment also was found by Frank, Sitlington, and Carson (in press) in a separate study of individuals with severe/profound mental disabilities.

## Comparability of Groups 1 and 2

One of the goals of the Iowa Statewide Follow-up Study was to collect data on different graduating classes to determine if the results were consistent across classes. In this monograph we have addressed the comparability of Groups 1 and 2 for the same number of years out of school and in changes from Years 1 to 3. The groups were similar in terms of general functioning level while in high school, as measured by the last formal tests administered before graduation, and by their last program placement. A review of the figures indicates a great deal of similarity between the groups, sometimes to within 1 or 2 percentage points. Where differences did exist, the shift from Years 1 to 3 was in the same direction, although not always of the same magnitude. These differences could be caused by differences in the economy in the years in which the data were collected, or by other causes which are not readily apparent.

As the data are broken down into male/female and program model subgroups, however, more differences appeared in the groups. This may be caused by the fact that as the groups were subdivided, the number of individuals decreased and differences between specific individuals had more effect on the subgroup outcome. Few follow-up studies contain replication or comparison groups. What we have found in this study appears to indicate that the conclusions drawn for total samples have general applicability to adjacent graduating classes, but that more caution needs to be employed in interpreting the results for subgroups, such as male/female and program model and in generalizing these results across graduating classes.



## Implications for Programming and Transition Planning

The implications which these results have for programming in our schools and for the entire transition planning process are complicated by three factors. First, the longer the individual is out of school, the less confidence we have in attributing success or lack of success solely to the school program. Second, when differences in the adjustment of individuals from different program models occur, they may be a result of the differing functioning levels of the individuals, the differing curricula and other experiences offered in each program, or an interaction between these two factors. Third, the interview process itself and the resulting contact between the individual and the interviewer in the one year interview may have constituted an intervention that would not otherwise have existed. A number of interviewers indicated that they answered specific questions or provided assistance to individuals concerning where to go for help. This constituted a "follow along" function which is a major component of the Iowa Transition Model.

With these issues in mind, however, we do feel that the results of this study hold a number of implications for parents, the individual, school personnel, and adult service providers as they work together in the transition planning process. First, without formal transition planning assistance and in many cases without any postsecondary training or contact with adult service providers, graduates with mental disabilities do make progress toward successful adult adjustment in the period from one to three years out of school. In particular, it appears that females make up some of the gaps that occur between their adjustment and that of males. This holds great promise for the effect a strong foundation in school, successful transition

planning, and follow up and follow along from school personnel and adult service agencies can have on the adult adjustment of individuals with mental disabilities.

Second, if intervention from school and adult service providers is to be effective, the career/vocational programming process and transition planning must focus on placement in community-based employment. The results of this study and that of Frank, Sitlington, and Carson (in press) indicate that sheltered employment is a dead-end street for individuals with mental disabilities.

Third, we must do a better job of linking graduates with mental disabilities with appropriate service providers, and involving these agencies at an earlier stage in the transition planning process. We must also link these individuals with postsecondary training programs if they are to rise above entry level occupations with few or no fringe benefits.

Finally, although the adult adjustment of the individuals in this study compares favorably with the results of other follow-up studies, only 22% of these individuals met even the low criteria of success established in this study. These individuals have shown that they have the capacity for improving their status, even without formal assistance. To maximize this capacity, we must integrate transition planning into the Individualized Education Plan no later than age 14 and continue this transition planning process until the individual and/or the transition planning team feels that s/he is ready to exit this process or has been "handed off" to an adult service provider.

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