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ABSTRACT

A study explored the role of work experience in addressing problems of homeless people in Saint Paul (Minnesota) during the 1989-91 grant cycles of the McKinney Job Training for the Homeless Demonstration Program. The program included a number of elements: outreach, intake, assessment and enrollment, orientation, work experience, basic skills/General Educational Development program/adult basic education, job skills class, job search, job placement, and follow-up. Of the 249 participants, most were likely to be middle-aged, white or black males involved in the shelter system or transitional housing; 71 percent were homeless for 12 months or less; and 56.9 percent had a full-time job within the last 12 months. A direct association existed between months homeless at intake and months since a full-time job. Over 70% had high school diplomas or equivalencies, and literacy levels were within national norms. Although most identified health, self, and family as priorities, current life-styles did not reflect these concerns. Self-Assessment Scales showed that many were isolated, individualistic survivors with a pessimistic world view. Mental health issues concerned 22.1 percent, chemical dependency issues 53.4 percent. Sample scores on the Wechsler Adult Intelligence Scales-Revised indicated "normalcy," but results were limited in predicting success in the work experience program. Successful completion of the work experience or other program objectives was achieved by 141 (56.6%). During work experience, each individual received a pay raise after 2 months. This served as a powerful program incentive, and the most powerful predictor of success became participants' ability to reach the 2-month mark. (107 endnotes) (YLB)

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# HOMELESSNESS AND WORK EXPERIENCE: TWO YEARS IN SAINT PAUL

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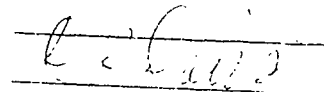
## *FINAL REPORT*

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**November, 1992**

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Prepared for presentation at the American Evaluation Association Annual Meeting, Seattle, Washington, November 5-7, 1992. Dr. Davis coordinates the work experience portion of the program, conducts the orientations, secures the work experience placements, and works closely in direct service to the participants. Views expressed in this report are his alone and not necessarily those of the Saint Paul Public Schools.

## PREFACE

*I began working with the homeless population in Saint Paul four years ago. With some eight years of youth work experience in jobs and training programs and six years of teaching experience in basic education behind me, I was prepared for yet another at-risk population to serve. I had seen, heard, if not done, it all. Wrong again.*

*Immediately, I was confronted by both the individuality of the life stories and the commonality of the excuses--the newness of enthusiasm over actually working forty hours per week and the oldness of playing cards at the Mission on a sunny Friday morning. Housing! I heard from homeless advocates on one side. CD! I heard from another. MH! From yet another. These were exhortations and acronyms that cohered with my experience, but not totally--not completely. Again, the life stories returned.*

*Certainly "Propeller Man" continued his parade on Lake Street by flaying his arms at passers-by and certainly "Program Man" continued his charade by signing-up for every free service available, but the people who I worked with day-to-day, week-by-week, sincerely desired to create new life stories above and beyond their own autobiographies. Some did. Some did not. But given the choice and the opportunity, all tried.*

*Dennis R. Davis  
Saint Paul, Minnesota  
November, 1992*

## ABSTRACT OF THE STUDY

This study explores the role of work experience in addressing the problems of the homeless in Saint Paul during the 1989-91 grant cycles of the McKinney program. Some of the findings from the baseline, process, and outcome characteristics are as follows:

- ◆ Participants were likely to be middle-aged, White or Black males involved in the shelter system or transitional housing.
- ◆ 71.0% were homeless for 12 months or less.
- ◆ 56.9% had a full-time job within the last 12 months.
- ◆ A direct association exists between months homeless at Intake and months since a full-time job.
- ◆ Levels of education and literacy were close to national averages.
- ◆ Lifestyle priorities of health, self, and family were not surprising, but current lifestyles were out-of-balance.
- ◆ Sociability issues were primary in the Self-Assessment Scales.
- ◆ Mental health concerns had been or were a concern for 22.1% of the sample.
- ◆ Chemical dependency issues had been or were an obstacle for 53.4% of the sample.
- ◆ The Full Scale I.Q. score mean of the WAIS-R was close to the test mean.
- ◆ The Digit Symbol sub-scores on the WAIS-R were low.
- ◆ The Vocabulary sub-scores on the WAIS-R, while inconclusive, were highly suggestive for success in work experience.
- ◆ 141, or 56.6%, of the terminations were positive and 108, or 43.4%, were negative.
- ◆ 68.8% of the positive terminations were placed in competitive full-time jobs.
- ◆ The average adjusted mean wage was \$6.30 per hour and 61.2% of the positions involved benefits.
- ◆ The wage rate was related to self-reporting chemical dependency issues and the number of months since the last full-time job.
- ◆ The most powerful predictor of success in the program was the ability of the participants to reach the two-month mark.

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## I. PROGRAM OVERVIEW

### THE PROBLEM

Saint Paul was an initial recipient of a grant from the United States Department of Labor under the Jobs Training for the Homeless Demonstration Program (JTHDP). Commonly known as a McKinney Grant, this program has been administered by the city's Department of Planning and Economic Development and has involved the cooperation of several agencies--among them, Catholic Charities, Saint Paul Public Schools, St. Paul Rehabilitation Center, St. Paul Housing Information Office, Goodwill/Easter Seal, Minnesota Department of Jobs and Training, Minnesota Department of Rehabilitative Services, and the YWCA. Different agencies have contributed their services at various stages in the program, but Catholic Charities has been the primary case management agency, St. Paul Rehabilitation Center the assessment agency, and the Public Schools the work experience agency. Additionally, a special grant from the McKnight Foundation generously contributed to the needed monies for the work experience payroll.

This study was conducted in order to explore the efficacy of work experience in addressing the problems of the homeless during the 1989-91 grant cycles. For over 20 years work experience has been a primary vehicle for the delivery of employment and training services to at-risk and disadvantaged populations. While work experience has been designed to address structural unemployment by instilling good work habits and employability skills in participants, the concept has been broad and all-encompassing. Work experience, in some respects, had been set up for mixed reviews and it did not disappoint the detractors.<sup>1</sup> Programs ranged from part-time to full-time, short-term to long-term, make work to skills training, summer youth to transitional adult, out-of-school to in-school, unsupervised to well supervised, poorly-funded to well-funded, and specific client-based to open enrollment. In short, the array of human services offered and delivered since the 1960's.

Partially as a consequence of these difficulties and partially as a result of a more thorough understanding of the needs of at-risk populations, the following assumption is posited: *Work experience, standing alone, is not an effective instrument for providing an avenue toward self-sufficiency. Rather, it must be a component of a larger, more holistic, approach to human services in tandem with a complete case managed system. In addition, the following provisions are required for a successful contemporary work experience program:*

- FOCUS:** The goals and objectives need to be exact and subject to review and accountability.
- TARGET:** The sub-group of the population needs to be carefully defined and then individualized.
- RESEARCH:** The sub-group needs to be understood politically, economically, and sociologically.

- PLAN: Early planning and time-line declarations are essential for effective programming.
- CHANGE: The model developed needs to be mutable and open to possible changes in the environment and in the needs of the group.
- STAFF: Duties and responsibilities of all trained staff, managers, case managers, and supervisors must be clear from the outset.
- SUPPORT: Client activities should be concentrated around education, job-keeping and job-seeking skills, practical life skills, and, most of all, support services for the reduction of barriers such as chemical dependency and other self-defeating behaviors.
- ASSESS: A thorough and unimpaired impact evaluation of program goals, objectives, and social consequences is a necessity. The emphasis should be on process use by stakeholders and staff, not simply on contractual obligations.

By following the above, the overall results in Saint Paul have far exceeded program goals in terms of people served, retention rates, and job placement successes. Participants have been offered three general tracks with client support available throughout: work experience, vocational training, and immediate job placement. Most clients (85%) were involved in six months of full-time work experience at a private or public non-profit worksite at a starting wage of \$4.25 per hour. The work experience portion of the program is designed to facilitate the development of good work habits, provide a local work history and work reference, and maintain a steady income while clients stabilize other factors in their lives. In this sense, work experience has been at the core of the program and has served as an environment in which other issues may surface and be addressed from a case managed perspective.

In a Special Report by the National Commission for Employment Policy the question of work experience is directly addressed:

Furthermore, because most homeless individuals' need for immediate money--they simply cannot afford to pursue a training program without a needs-based payment--and, in many cases, their lack of interest in pursuing training that does not provide some type of payment, the enrollment of homeless individuals in JTPA training programs other than on-the-job (OJT) training is unrealistic.<sup>2</sup>

Work experience seems well-suited for the homeless. The salient reasons are five-fold:

1. Six months of work experience allows the needed time and a safe environment for unreported barriers to surface and to be addressed through support services provided by the case managing agency.

2. This same period allows the time and opportunity for stabilization in other areas such as housing, health care, recovery from substance abuse, and re-entry.
3. The development of job-keeping and job-seeking skills is an integral part of work experience and occurs throughout the period, both on the job and in the classroom. Work experience placements are real jobs, with real rules and regulations, involving real co-workers and supervisors.
4. Work experience also involves real money. Income is provided on an "hours worked" basis for the payroll. Since these positions are full-time and since most participants qualify as exempt from taxes, they can take home from \$320 to \$360 bi-weekly. This figure does *not* include added dollars spent by the case managing agency on support services such as bus cards, clothing, housing, and treatment.
5. Self-image is usually assumed to be a "problem" for participants engaged in human service delivery systems and most employment programs are designed to augment self-esteem. This may turn out not to be the case with this sample. More importantly, perhaps, is the time allowed, on and off the job, for the enhancement of social skills and the dismantling of other barriers.

In general, homeless individuals face multiple obstacles in pursuit of full-time, permanent employment and the acquisition of a living wage. Some of the most common barriers are the need for housing stabilization, chemical dependency, mental illness and mental health, overall health care, poor work history, the lack of local references or contacts, the absence of the GED or high school diploma, and a shortage of technical skills, basic living skills, and fundamental social skills. At the onset some of these barriers go unreported, but during the course of work experience even the most "hidden" barrier becomes evident. Subsequently, the case manager deals directly with the issue. Contracts are signed, teeth are gnashed, and tempers are raised, but in the end an agreement is reached or services are ended. Homelessness need not mean hopelessness and many of the participants have managed to overcome massive barriers out of quiet determination, sheer will, and the needed support services.

## THE PARTICIPANTS

The two year grant cycle, due to extensions, actually covers the period from October 1, 1990 to April 30, 1992. The first half of the cycle was termed Decisions I and the latter half, Decisions II. During this time a total of 249 clients from the program were enrolled into work experience.<sup>3</sup> The scope of this study, then, encompasses the demographics, experiences, outcomes, and disposition of these homeless adults.<sup>4</sup>



## THE PROCESS

For over twenty-five years the Center for Employment and Training, a sub-department of the Saint Paul Public Schools, has administered employment and training services for both youth and adults. Consequently, cooperative relationships have been developed over the years with over 250 private and public non-profit agencies to serve as worksites. These relationships are formalized in worksite agreements, supervisor training, payroll procedures, and staff liaisons. The positions available for work experience are not fabricated for the clients, but are pre-existent jobs that demand stringent job-keeping abilities. Although the worksite supervisors exhibit more flexibility than those in the private competitive sector, work experience is understood to be the experience of "real work" in the "real world of work." Clients, for example, can fail the worksite interview, violate worksite personnel policies, and be fired for cause from the worksite. The coordination of work experience between the client, the worksite, the worksite supervisor, and the case managing agency is the central responsibility of the Center for Employment and Training.

Participants proceed through the program process in an orderly and predetermined manner although flexibility at each stage has been crucial to the needs of each individual.

Outreach: The program is announced at various meetings and locations, including the shelters, throughout Saint Paul by the case managing agency. However, word of mouth has been the main contributor to program availability. Appointments are scheduled over the phone or on sign-up sheets at these locations.

Intake: Case managers conduct the first interview and determine eligibility. At this point the potential client responds to questions from the agency designed McKinney application. Questions range from levels of education to employment history.

Second Interview: After determining eligibility the case managers conduct a second interview scheduled for two to three days later. Not only does this meeting provide more in-depth information, but case managers are able to ascertain the level of seriousness and commitment on the part of the client. The "drop-out" rate at this juncture is about 50%.

Assessment and Enrollment: After the second interview clients are scheduled for a two week work evaluation assessment. Psychological and vocational evaluations may also be ordered by the case managers. At the end of the assessment period a committee of all the agencies involved makes a determination as to the options open to the client based upon both qualitative evaluations and quantitative findings. The level of preparedness and job readiness of the client usually results in immediate competitive employment (5%), other program referrals such as rehabilitative services (10%), or six months of work experience (85%).

Orientation: During the two-day orientation conducted by the work experience coordinator, participants cover issues ranging from job-keeping skills to proper employment documentation. Essentially these sessions are attitudinal and provide an opportunity for the participants to express short-term and long-term employment interests. Also during this week the case managers facilitate the first "Life Skills" class and clients meet with the housing specialist.

Work Experience Placement: Utilizing information gained from the assessment and the orientation, the work experience coordinator schedules an interview for the client with a worksite supervisor. Examples of worksites utilized are as follows:

<b>Worksite</b>	<b>Job Type</b>
Adams Elementary	Janitorial
American Indian Center	Clerical
Ames Elementary	Janitorial
Attorney General's Office	Clerical
Aurora-St. Anthony Block Club	Maintenance
Boys & Girls Club	Recreational
Catholic Charities	Receptionist
Center for Employment and Training	Clerical
Colborne Administration	Janitorial
Como Conservatory	Gardener
Dorothy Day Center	Kitchen
Downtown Daycare	Child Care
Exodus Housing	Receptionist
Franklin Elementary	Janitorial
Ft. Snelling State Park	Maintenance
Goodwill/Easter Seal	Assembler
Hancock Junior High	Janitorial
Hill Elementary	Janitorial
Housing and Urban Development	Clerical
Internal Revenue Service	Clerical
Jackson Elementary	Janitorial
Little Sisters of the Poor	Kitchen
Martin Luther King Center	Clerical
Mazakute Indian Mission	Janitorial
MN Department of Administration	Maintenance
MN Department of Revenue	Clerical
MN Pollution Control Agency	Clerical
Model Cities Health Services	Clerical
Native American Health Center	Clerical
Native Arts Circle	Graphics
Neighborhood House	Janitorial
Newgate Autobody School	Autobody
Penumbra Theater	Clerical
Planning and Economic Development	Clerical
Public Library	Janitorial
Ramsey Junior High	Janitorial
Randolph Heights Elementary	Janitorial
Resources for Child Care	Clerical
Roosevelt Elementary	Janitorial
St. Paul Rehabilitation Center	Assembler
St. Paul Technical College	Receptionist
Social Security Administration	Clerical
Town Square Park	Janitorial
Union Gospel Mission	Desk Clerk
United Arts	Clerical
Veterans Center	Receptionist
West Side Community Center	Graphics

Work Experience: These individual, full-time placements are all entry-level and the most common tasks are clerical, janitorial, assembly, and child care. The worksite agreement abides by all union regulations pertaining to the worksite and precludes work experience participants from replacing any striking or laid-off workers. This program emphasizes the experience of work, not the experience of displacement.

Basic Skills/GED/ABE: During work experience all participants are allotted up to eight hours per week to improve on skills lacking in their work and educational history. This can vary from enrollment in a GED program to the "Life Skills" sessions offered by the case managers. This time is considered "paid leave" by the worksite.

Job Skills Class: As participants approach the four-month mark of work experience, or about 700 hours, they attend a three-day job skills session as the starting point for finding competitive employment. Meanwhile, they remain employed at their worksite. The rationale for this stage is that "the time to find a job is when you have a job."

Job Search: Using resources from several of the agencies involved, participants seek competitive employment by meeting with job developers and job placement specialists, filling out job applications, and interviewing. This period can last until the end of work experience.

Job Placement: As the culmination of the program, the client moves on to unsubsidized employment in the private sector or vocational training. This is the final act of stabilization.

Follow-Up: The case managers continue to track the client and to provide any needed support services for up to three months.

## THE SOLUTION

Of the 249 individuals involved in work experience, 141, or 56.6%, were positive terminations and 108, or 43.4%, were negative terminations. This 55-45 split seems quite respectable for any job training program and should be considered moderately successful.

Again, the Report from the National Commission is helpful in delineating the components of a successful program. In summary: careful screening of participants; documentation; adequate housing during the program; committed staff knowledgeable about the homeless; a case management approach; drug and alcohol rehabilitation programs; expectation of set-backs and failings; and close follow-up after program completion.<sup>5</sup>

With the strength of a solid case management approach and a diverse and competent work experience network, the McKinney program in Saint Paul has developed each of the above items and expanded them into a demonstration project of major consequence.

## II. BASELINE CHARACTERISTICS

The summarization and representation of demographic data address the question: "Who was served." Baseline demographics, then, identify the characteristics of the sample and contribute to a developed "profile" of those participants assessing work experience. Standing alone, this information can apprise general trends in the programming. For example, if baseline data reveal that most participants are male, the question arises as to whether this is acceptable within programming guidelines and representative of the larger population, or whether further action needs to be taken.

### DEMOGRAPHIC FREQUENCIES

The sample was broken down into clients from Decisions I and from Decisions II and statistical tests were executed in order to gauge if the two groupings were from the same or different larger populations. In addition, many comparisons were also made with results from a local homeless survey conducted by the Wilder Foundation.

#### AGE

The range of the age of the clients was from 17 to 63 years with an overall mean of 36.25. No differences were detected between the ages in Decisions I (35.55 years) and Decisions II (37.22 years). Although these figures are slightly higher than the means reported to the Shelter Board, they are consistent with averages from other national studies.<sup>6</sup>

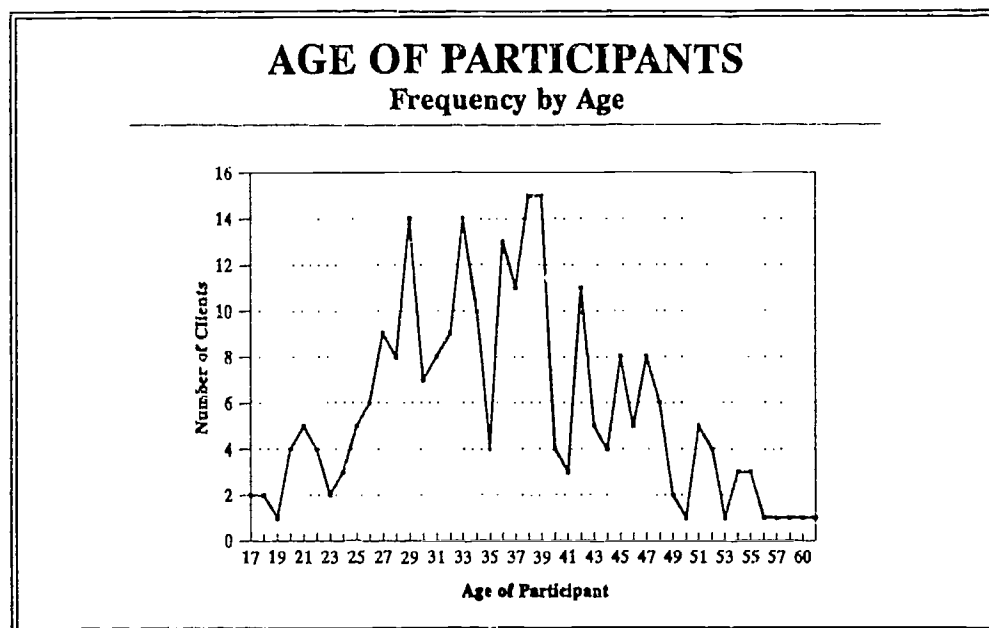


Figure 1

## GENDER

Although work experience is purported to be best suited for single males without children, the gender distribution in this sample closely paralleled estimates for the larger homeless population. Two hundred five males (82.3%) and forty-four females (17.7%) participated in work experience with no difference between Decisions I and Decisions II. The Shelter Board report from 1990 had a 76.3% male/23.3% female split, representing only a five percent difference. However, in the 1991 report the Shelter Board specifically included "Battered Women's Shelters" as a category and the breakdown changed to 61.9% male and 38.1% female. Observational information from the local shelters and drop-in centers suggests that these figures are changing as more women with children are accessing "traditional" homeless services.<sup>7</sup>

## RACE

The racial breakdown presents a very complicated picture and the fluctuations are perhaps due to sampling intent and program focus. Overall, the percentages indicated in the graph below are not disparate from other national figures.<sup>8</sup>

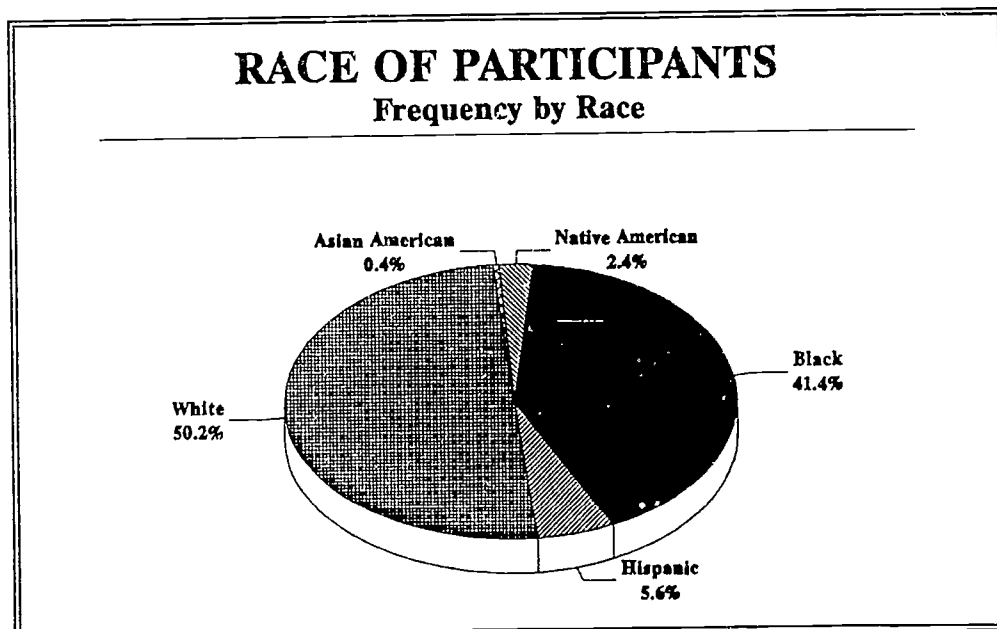


Figure 2

However, as witnessed in the following table, racial characteristics for local samples differ widely.<sup>9</sup> In addition, tests of independence reveal that the samples from Decision I and Decisions II were decidedly *not* from the same population.<sup>10</sup> Part of the explanation is that during Decisions II programmatic changes targeted more minorities. Yet the question remains as to the nature of the larger homeless population itself.<sup>11</sup>

Racial Percentage Breakdown for Local Samples					
Sample	W	B	H	N-A	A-A
Decisions I	56.3	36.1	5.6	2.1	0.0
Decisions II	41.9	48.6	5.7	2.9	1.0
Wilder '90	40.7	35.3	8.3	4.4	.5
Wilder '91	34.9	45.4	5.6	9.7	1.1
JTPA-Eligible	61.8	12.8	5.6	1.9	17.9
STRIDE	47.2	27.4	6.1	3.4	15.8

Table 1

### PLACE OF RESIDENCE AT INTAKE

This variable proves interesting as to who qualified for the program and, therefore, work experience. Shelter residents accounted for 40.2% of the sample and many clients were participating in the next stage of housing stabilization, Residential Programs (10.4%) or Transitional Housing (26.9%). Thus, a full 77.5% of the participants in work experience were involved in some form of housing beyond living on the streets or "staying" with friends and relatives. The Decisions I and Decisions II sub-samples show no differences.

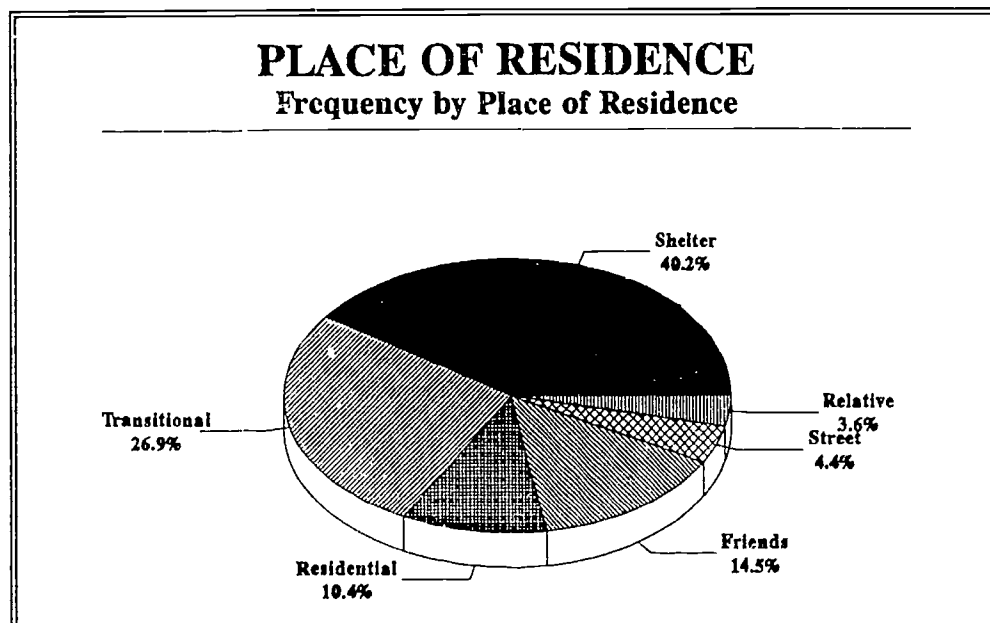


Figure 3

### YEARS IN SAINT PAUL AT INTAKE<sup>11</sup>

This variable, similar for both Decisions I and Decisions II, is heavily loaded on the top and bottom ends. These figures seem to cohere with the results from the Shelter Board reports. The pattern is puzzling, but indicates both a transient and a settled homeless population.<sup>12</sup>

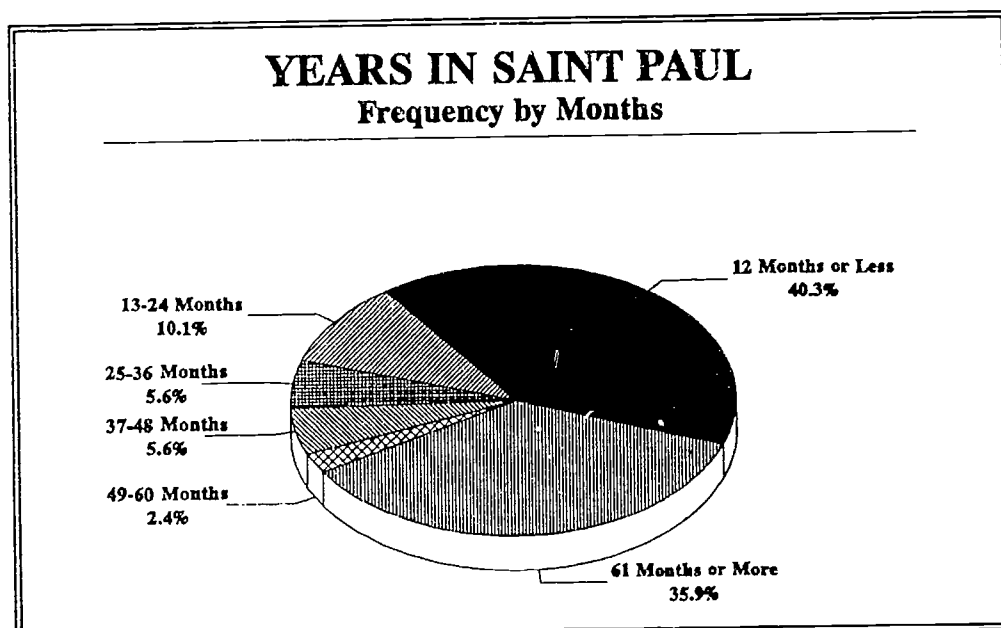


Figure 4

### OUT OF STATE PRIOR TO SAINT PAUL

At first glance this may seem an odd variable. But the information sought attempts to distinguish between those individuals moving from out of state and those local to the metropolitan area. One hundred fifty-six participants, or 62.9%, responded in the affirmative and ninety-two, or 37.1%, in the negative. For the 1991 Shelter Board Report the percentage is even higher at 70.8%.<sup>13</sup> More interesting, perhaps, is that a comparison of Decisions I and Decisions II *does not fail* the test of independence. The results from Decisions I show 53.8% of the participants indicating that they are from out of state and in Decisions II that jumps to 75.2%.<sup>14</sup> A partial explanation might be that during the summer between the two years a new men's and women's shelter was opened by Catholic Charities. Since this organization is the primary case management agency, more individuals entered the program through this facility.

### RECEIVING ASSISTANCE AT INTAKE

The Twin Cities appears to have a reputation as an "easy" area to access various forms of public assistance. Yet only 110 participants, or 44.4%, were receiving some form of assistance at the Intake. No differences were detected between Decisions I and Decisions II and no overall trend is evident.

### PARTICIPANT EVER ABUSED

Of the 248 valid cases, 56 participants, or 22.6%, reported that they had been physically, sexually, and/or emotionally abused at some point in their lives. No differences were detected between Decisions I and Decisions II and these percentages are consistent with the results from the Shelter Board Reports.<sup>15</sup> Since over 80% of the clients were male, this figure is impressive since men, especially from this sample, might be more reticent to report abuse.

### PARTICIPANT EVER FOSTER CHILD

In the Shelter Board Report for 1990, only 2.8% of the respondents indicated that they had ever lived in a foster care facility.<sup>16</sup> This percentage is considerably smaller than the 10.1% from the work experience sample who answered "yes" to this question at Intake. There were no differences between Decisions I and Decisions II.

### EX-OFFENDER STATUS

Statistics for ex-offender status are notoriously skewed considering the general social undesirability of felony convictions. Self-reported information in this area can be tested against official records to find the extent of the error, but in this program such information was not available nor sought. Although under-reporting is assumed, 81, or 32.5%, of the participants reported ex-offender status: conviction, not arrest, for a felony, not a misdemeanor.<sup>17</sup>

### MONTHS HOMELESS AT INTAKE

The range of this important variable is from one month to 60 months with a median of 5.00 months and a mean of 13.19 months. Neither of the latter figures are helpful since several extreme responses skew the data. The 5% trimmed mean at 11.28 months is more usable. No differences are evident between Decisions I and Decisions II and the 5% mean stands at 10.37 and 12.52 months respectively. *More importantly, perhaps, 71.0% of the sample was homeless for 12 months or less and a full 22.6% report having been homeless for less than one month.*<sup>18</sup>

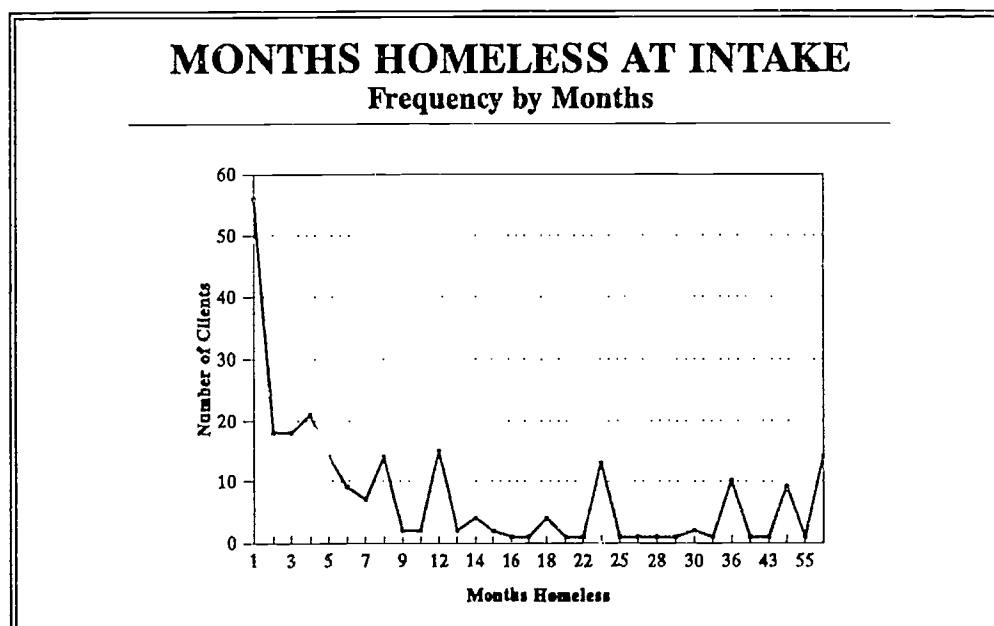


Figure 5



### MONTHS SINCE LAST FULL-TIME JOB

As with the above variable, extreme responses cause the median at 10.00 months and the mean at 18.82 months to be problematic. Again, trimming the mean by 5% is helpful with a more usable 17.52 months as long as the dispersion is recognized to be non-uniform. The 5% trimmed mean is 17.38 months for Decisions I and 17.70 months for Decisions II indicating no statistically significant difference. Unlike "Months Homeless at Intake" the percentage for participants with a full-time job in the last 12 months is lower at 56.9%. *In fact, a comparison that more closely approximates the 71.0% who were homeless in the last 12 months is that 73.4% of the participants self-reported a full-time job within the last 24 months. This suggests that the loss of a full-time job precedes homelessness.*<sup>20</sup>

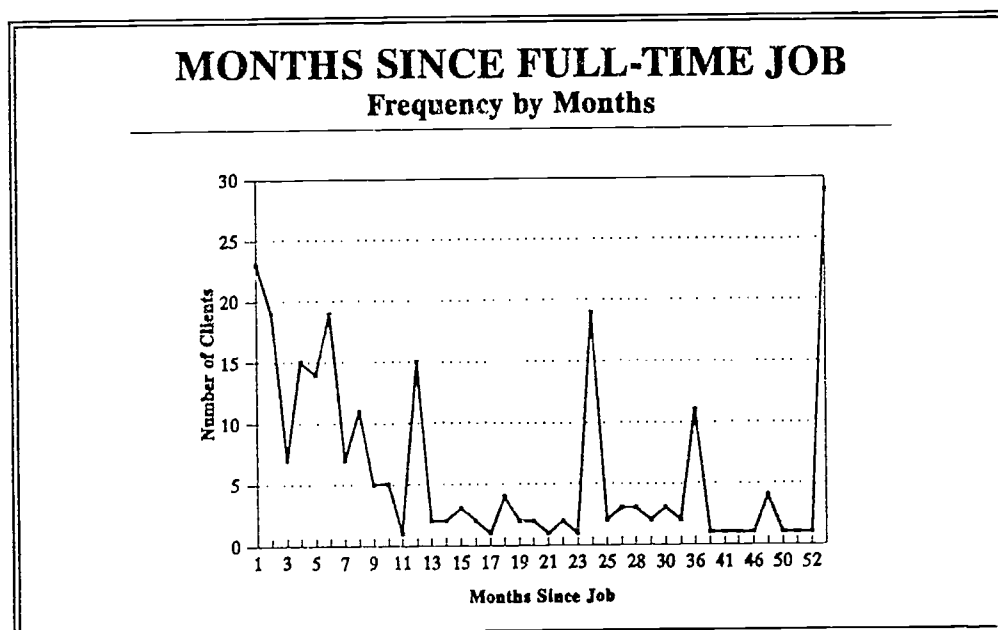


Figure 6

## EXPLORING DEMOGRAPHIC RELATIONSHIPS

One of the most critical aspects of thorough evaluation research is the exploration of underlying relationships, measures of association, between variables in the analysis--particularly variables that are of primary interest in the sample under consideration. A relationship can be said to exist between two variables when the distribution of the values of one variable is connected to the distribution of the values of another variable; that is, the variance of one variable is patterned in some manner on the variance of another variable and not due to chance alone or sampling errors. Six criteria need to be fulfilled for a potential relationship to be statistically useful.

### CRITERIA OF INCLUSION

1. Statistical Significance: Tests of Independence, especially the  $X^2$  statistic, examine the null hypothesis that the two variables are *not* related. The assumption is that they are *independent*. If the null hypothesis is rejected at a confidence level of at least 95.0%, then a statistically significant relationship can be said to exist.
2. Statistical Distribution: The distribution must be random and the sample size adequate. If the sample size and expected frequencies, for example, are too small then the  $X^2$  statistic becomes questionable.
3. Statistical Strength and Direction: The above, however, says little about the strength or direction of a relationship. Pearson's R addresses this question. A relationship may be positive (direct correlation) or negative (inverse correlation) according to the following categories of strength: below .19 is too low; .20 to .29 is very weak; .30 to .39 is weak; .40 to .49 is low modest; .50 to .59 is modest; .60 to .69 is high modest; .70 to .79 is strong; .80 to .89 is very strong; and .90 and above is excellent. Only relationships having a very weak or better rating should be considered. A rigorous analysis, however, demands a modest relationship or above.<sup>20</sup>
4. Non-Spurious: Although a relationship may seem to be statistically significant and strong enough for consideration, the connection may not be genuine. Suspected associations that are spurious can be analyzed by various combinations of the variables in question to determine actual relationships.
5. Time-Ordered: An understandable time series sequence needs to exist between variables. This is particularly crucial in exploring relationships between demographic and process characteristics of the sample.
6. Statistical Meaningfulness: A relationship between two variables may meet all the above criteria and yet the information gained is self-evident, common sensical, or not helpful. A relationship also needs to be meaningful to be useful.

Fifty-two correlations pass the test of significance, but only the following combinations pass all six criteria of inclusion.

### VERY WEAK ASSOCIATIONS

ASSIST by AGE ( $Eta = .219$ ): Using AGE as the dependent variable, results show that older clients were more likely to be receiving assistance at Intake.

ASSIST by CD (.239): Clients who self-reported chemical dependency issues were more likely to be receiving assistance of some kind at Intake. A partial explanation is that many of these individuals were in recovery programs.

MATH by AGE (.239): Older clients tended to do better on the math test.

READ by GRADE (.244): Not surprisingly, scores on the reading test increased as the number of grades completed in school also increased. This connection, however, should not be considered as non-meaningful.

ABUSE by MH (.247): Individuals self-reporting abuse were also more likely to self-report mental health issues.

CDOBSERV by CD (.263): Unfortunately, 52.2% of the individuals who self-reported chemical dependency at Intake also had the issue surface during the six months of work experience. Only 35.8% were expected. Not all terminated negatively since many entered treatment and subsequently returned to work.

ABUSE by GENDER (-.279): Although 17.2% of the males self-reported abuse, the percentage for females was 47.7%. Thus, females were much more likely to self-report abuse and, it must be noted, most of the females on work experience were in flight from abusive circumstances.

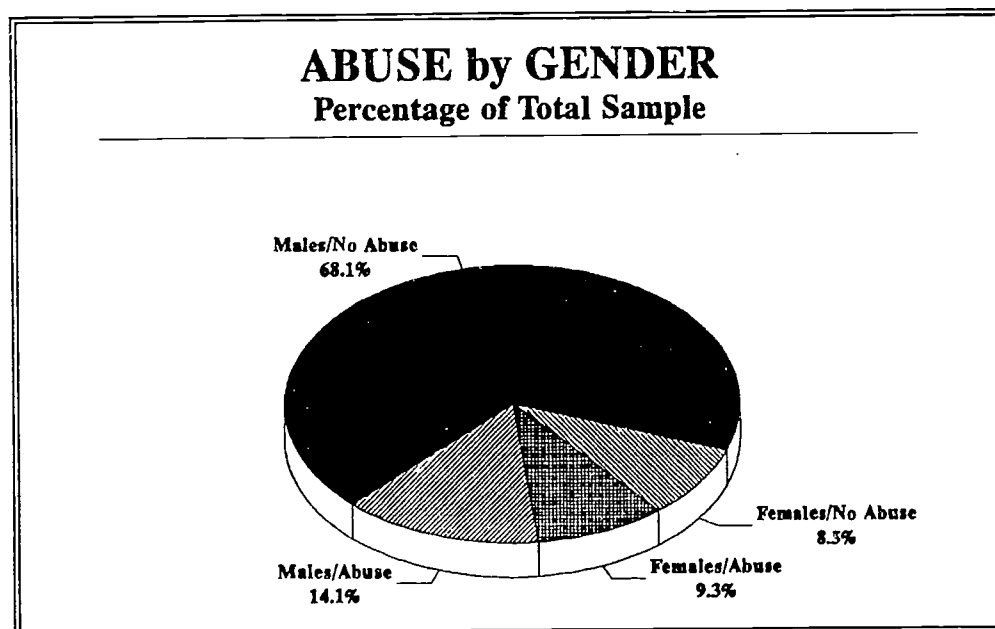


Figure 7

MHORSERV by MH (.283): Twelve individuals reported mental health issues and had those issues surface during work experience. Only 4.1 were expected.

### WEAK ASSOCIATIONS

READ by RACE ( $Eta = .317$ ): Whites were more likely to do well on the reading test than non-Whites.

OUTSIDE by STP ( $Lambda = .318$ ): An unsurprising connection exists here. Those clients responding that they were from outside of Saint Paul were more likely to have arrived within the last twelve months.

ABUSE by FOSTER (.332): These two variables form a 2 x 2 contingency table and 16 clients self-reported "Yes" to both questions. Only 5.6 were expected. In fact, 64.0% of the foster children reported abuse.

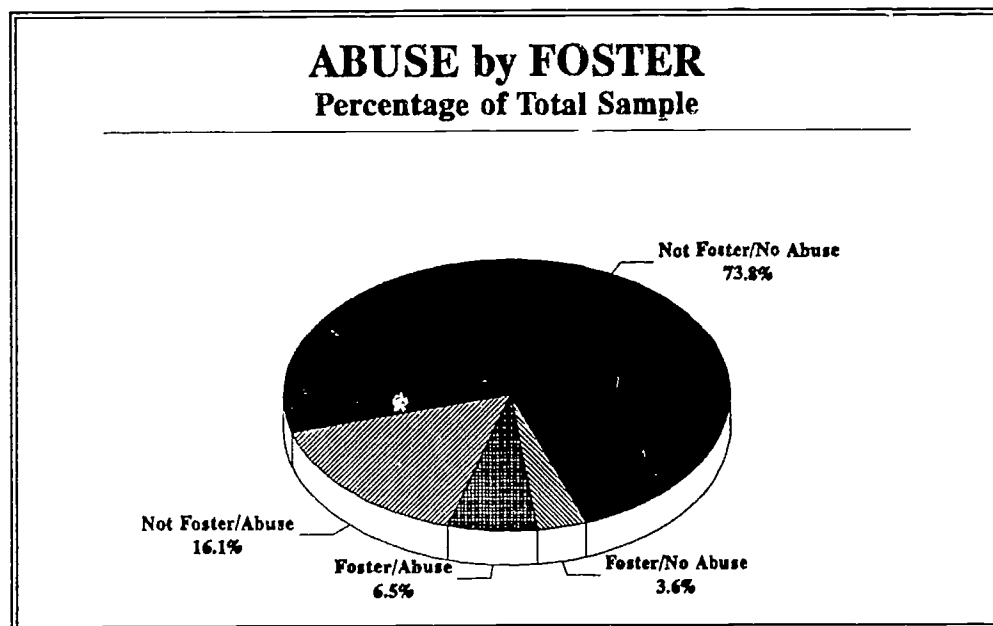


Figure 8

HSGED by READ ( $Eta = .362$ ): Not surprisingly, those clients who had obtained a high school diploma or GED scored higher on the reading test.

HSGED by MATH ( $Eta = .365$ ): These findings mirror the above.

GRADE by MATH (.373): Scores on the math test increased as the grade level also increased. This is a stronger association than GRADE by READ.

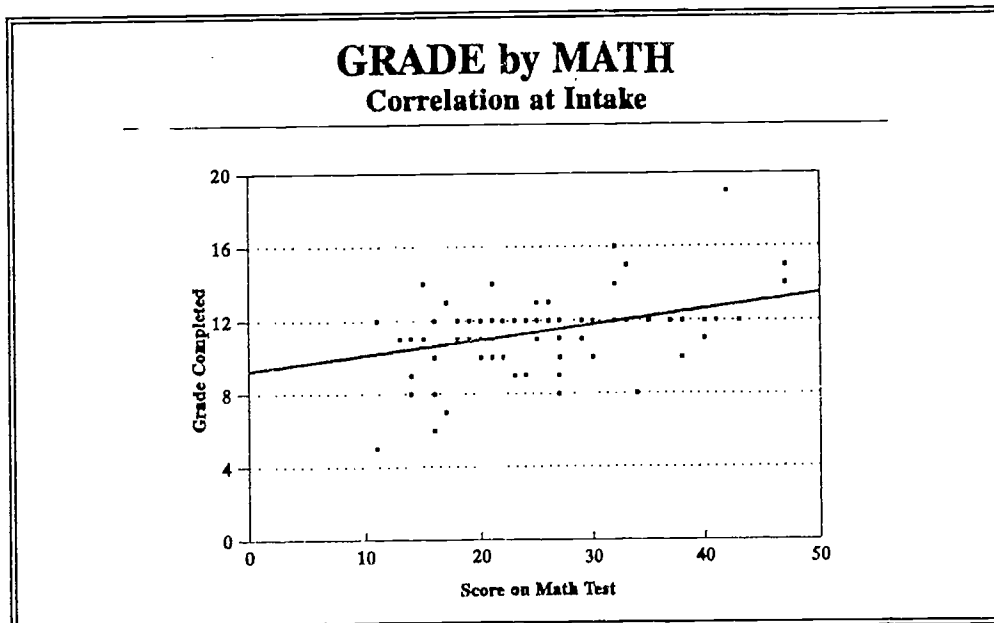


Figure 9

LOW MODEST ASSOCIATIONS

HOME by MONTHJOB (.431): This association is critical and reveals a direct relationship between months since a full-time job and months homeless at Intake.

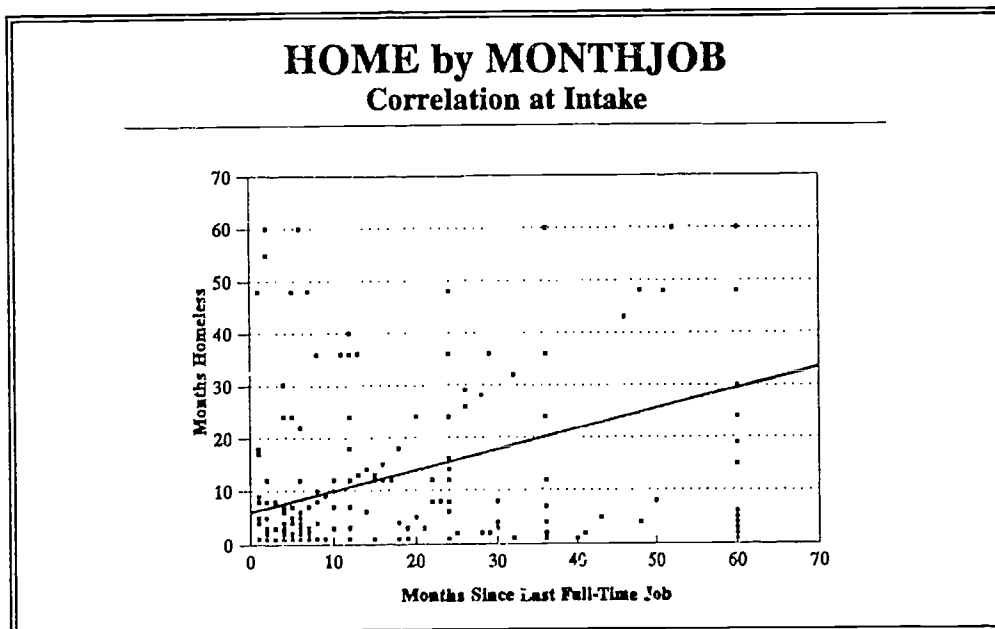


Figure 10

MATH by RACE ( $\eta = .474$ ): On the math test, Whites were even more likely to do better than non-Whites than on the reading test.

### MODEST ASSOCIATIONS

READ by MATH (.538): The strongest correlation coefficient in the baseline characteristics is the positive relationship between these two variables.

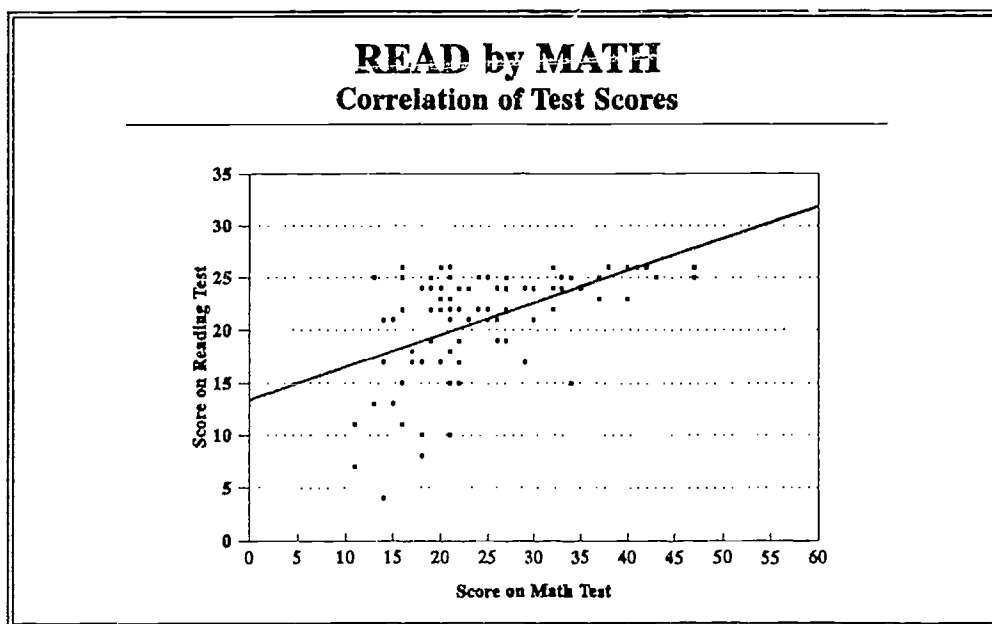


Figure 11

### CONCLUSION

For human service workers involved with the homeless population few of the above associations are surprising; rather, the analysis provides confirmation of the experiential. Probably the two most instructive, and alarming, relationships involve the inverse relationship between WAGE and MONTHJOB and the direct correlation between HOME and MONTHJOB. Suddenly, the amount of time unemployed begins to emerge as both a difficult life experience and a meaningful statistic.

## LEVELS OF EDUCATION AND LITERACY

Societal stereotyping of the "street person" as uneducated, perhaps uneducable, seems pervasive. This propensity to view the homeless population as less than literate is common and, according to this sample, wholly misguided.

Of the 249 valid cases in this study, only 16 clients, or 6.4%, reported no high school experience. Consequently, the remaining 233, or 93.6%, had at least some high school experience.<sup>21</sup> In addition, 136 of the total sample, or 54.6%, reported having completed the twelfth grade or better. No differences are apparent between Decisions I and Decisions II and the mean for "actual grade completed" is 11.15.

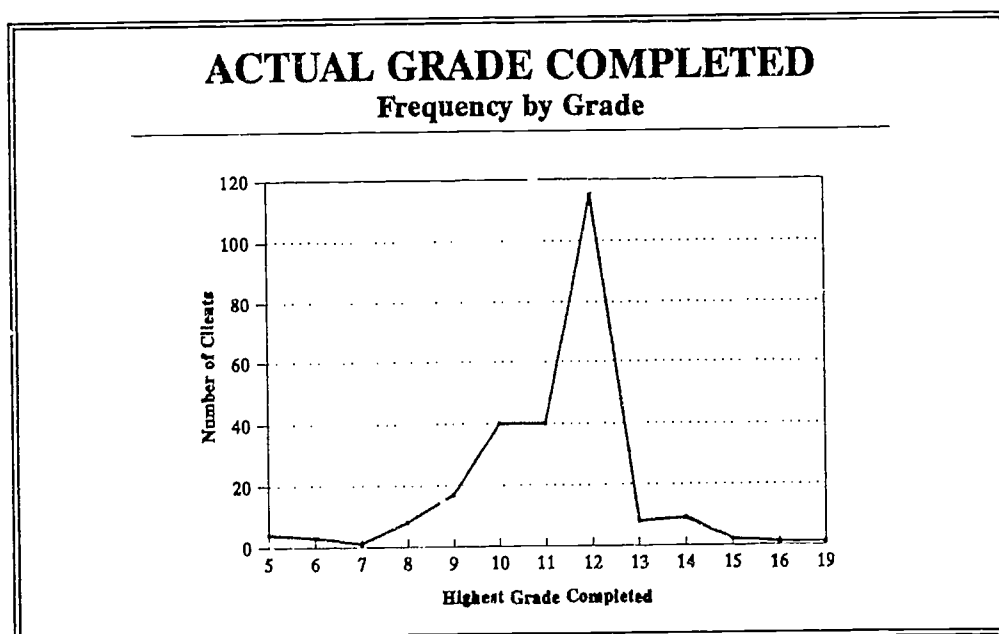


Figure 12

All participants were asked if they had acquired a high school diploma or GED. Only one value is missing and 71.8% responded "yes." Again, there is little difference between Decisions I and Decisions II and the percentage is slightly lower than the 75.7% rate reported by the Shelter Board.<sup>22</sup> While this graduation rate is well below the State average of 90.6%, it is extremely close to the National average of 71.1%.<sup>23</sup>

With this very "average" graduation rate, some form of post-secondary education might be assumed for many of the clients. This is the case with 106 individuals, or 42.7%, reporting at least one year of vocational training. Additionally, 103 of the valid cases, or 41.5%, reported having attended college for at least one year.<sup>24</sup> However, only 12 participants from the total sample, or 4.8%, received a college diploma and this accounts for a low graduation rate of only 11.7%.

During the work experience orientations all clients are given the "Counseling Reading Screening Test." One-hundred and ninety-four individuals participated and the range of the test is from 0 to 26. Four of the cases are outliers with one score of 4 and three of 7. Trimming the mean by 5%, then, gives an average of 21.02 (grade level = 8.5). Since the average for Decisions I is 20.21 and for Decisions II it is 20.95, no differences are apparent. This procedure is common with most programs dealing with JTPA eligible participants and most often is used by case managers as a "Yes-No" determination as to levels of literacy with respect to Standard English skills. Consequently, the results of two other programs, the Transitions Employment Program and the STRIDE program, were available for this study.<sup>25</sup> The following table is a further indication that the homeless work experience sample, is at the very least, no less literate than other participants involved in human service programs.

JTPA Reading Test Scores		
Program	Mean Score	Grade Level
Homeless Program	20.21	8.3
STRIDE Sample	19.72	7.9
Transitions Program	19.15	7.6

**Table 2**

Similarly, during Decisions II a math test was administered from the WRAT (Wide Range Achievement Test) in order to gauge abilities for higher level clerical work experience placement possibilities. The test range is from 0 to 56 and 90 clients participated. No outliers were present and, again, the scores are compared to a STRIDE sample:

JTPA Math Test Scores		
Program	Mean Score	Grade Level
Homeless Program	25.40	7.4
STRIDE Sample	20.36	5.7

**Table 3**

Relationships between levels of education and literacy have been discussed above. Also, the implications for these relatively high scores for "old schooling" patterns will be further addressed in the section concerning the WAIS-R. The overall results are revealing. Over ninety percent of the homeless sample entering work experience had received at least some high school education, over seventy percent had received their high school diploma or GED, and over forty percent had attended college. The reading and math scores were the highest of the programs researched and well within the norms for raw scores and grade levels. *This sample, then, is clearly better educated and more literate than might at first be assumed.*



## SELF-MANAGEMENT: THE "PIE OF LIFE" CHARTS

The intent of this exercise was to gather information about how individuals perceive their life priorities and their self-reported behavior with respect to those declared priorities. Recorded information can lack factualness--even such supposedly hard data as "years of education" or "present address." This is particularly the case with samples from the homeless population and contributes to the difficulty of conducting homeless surveys. Added to this problem is the reluctance of targeted groups to answer questions that are personal rather than opinion-oriented. Perhaps as a consequence of distrusting agencies, this homeless sample has been reticent in responding to personal inquiries. Some fear disclosure of their whereabouts while others fear intrusions into their private lives. Some for good reason.

Consequently, the "Pie of Life" Charts were administered in strict anonymity to the extent that even standard demographics such as age, sex, and race were intentionally omitted in order to avoid possible identifiers. Participants were assured that this was not just a matter of confidentiality, but of absolute anonymity. This approach certainly reduced the amount of information obtained and disallowed any direct comparisons of demographics to the responses. However, the completeness of the responses increased the reliability of the data and, hopefully, the accuracy of the information.

In order to maximize external reliability the testing environment was controlled in the following manner: all groups were located in the same room; all groups were given identical instruments with identical instructions from the same person; the charts were administered on the second day of the work experience orientation at 1:30 for twenty minutes; and, to assure anonymity, a volunteer participant collected the charts and shuffled the pile of responses.

Participants were presented with a list of 18 items designed to represent generalized aspects of most people's lives. In one column they were asked to rank ten of those items in descending order of importance for their lives in general. After completing this section they were then asked to go to the second column and rank any of the 18 items with respect to how they currently spend their "time and energy." Participants were unaware of the purpose of the second column while addressing the first column thus increasing the veracity of the responses. The range of the scale, then, is from 1 to 10.

One hundred and two valid cases, or 41.0% of the total sample, were used in the following analysis. Two explanations for this reduced number of cases are evident. First, the instrument was not administered until the mid-point of Decisions I. Second, some of the charts were incorrectly executed--primarily with multiple responses for the items.

Obviously the rankings themselves are of some interest and during the work experience orientations participants engaged in animated and self-disclosing discussions about their own (and other people's) responses. In addition, overall results from the exercise were utilized in training sessions for the case managers. The key element is derived from the *differences* between declared priorities and actual behavior thus indicating the degree of congruency in the present life of the individual. The methodological assumption is that the lower the total scores for the differences scale, the more balanced the lifestyle.

Some of the items had very few responses. For example, only 12 people, or 11.8% of those who participated, indicated that "volunteering" was important at all in their lives. Only items with a response rate of 50.0% or better will be considered.

ANALYSIS OF THE MEANS

Twelve of the 18 items satisfy the requirement for inclusion in the "life priorities" category. "Health" and "Self" head the list.<sup>26</sup> However, the appearance of "Family" and "Children" for this homeless, ostensibly unattached, sample does seem uncharacteristic. Notice also that "Housing" follows "Job" in order of importance.

Priorities Ordered by Mean	
Item	Mean
Health	3.78
Self	3.89
Family	3.96
Children	4.10
Job	4.29
Housing	5.17
Career	5.61
Partner	5.61
Religion	5.54
School	5.98
Friends	7.06
Recreation	7.31

Table 4

A very different picture is represented by the following "time and energy" table. "Job" rises to the top--perhaps since all individuals are involved in an employment and training program.<sup>27</sup> While "Self" remains in the second position, immediate concerns with housing also become more important. Notice also that "Health" falls to fifth place.<sup>28</sup> More importantly, perhaps, "Children," "Partner," "Religion," and "School" all disappear from the listing.<sup>29</sup>

Time and Energy Ordered by Mean	
Item	Mean
Job	3.24
Self	4.33
Housing	4.93
Family	5.24
Health	5.33
Recreation	5.49
Friends	5.59
Career	6.13

Table 5

The mean of the difference between life priorities and self-reported behavior should provide some indication of areas that are most out of balance. "Family," "Recreation," and "Friends" do quite well. "Job," however, is out of balance by more than three points. Individuals are clearly more involved in job-seeking activities than they would prefer. Conversely, the scores for "Self" and "Health" both indicate less activity in these areas than the declared priorities would suggest.<sup>31</sup>

Differences Ordered by Mean	
Item	Mean
Family	2.64
Recreation	2.64
Friends	2.77
Career	2.82
Housing	2.85
Self	3.03
Job	3.21
Health	3.48

Table 6

Each exercise was also scored as to the total difference between declared priorities and actual behavior in lifestyles. The range of the entire chart is from 0 (a perfectly balanced life) to 106 (a perfectly unbalanced life). The overall mean was 38.95 with a standard deviation of 15.7 and the shape of the distribution of the scores is mostly normal.<sup>32</sup>

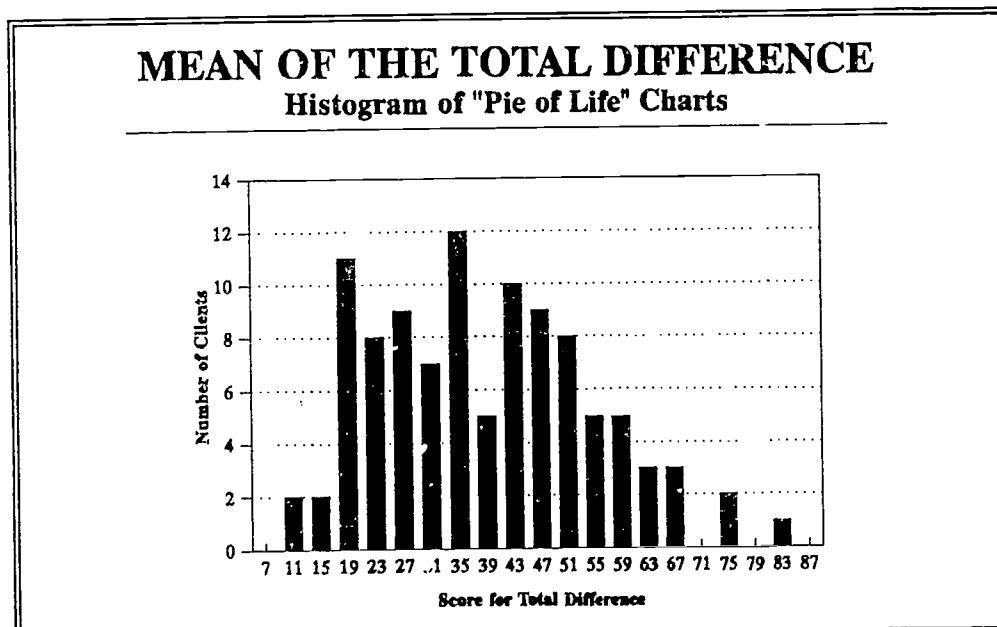


Figure 13

### MEASURES OF ASSOCIATION

Correlation analysis provides more insight into the lifestyle issue and follows the criteria of inclusion as described above. Sixteen correlations pass all six tests of inclusion in the priorities section, but only six combinations have a response rate of 50.0% or better.

Job by Self (-.244): This very weak inverse relationship would indicate that as the concern for the individual self increases, the concern for a job decreases as a life priority.

Housing by Family (-.286): Although this association is very weak, family interests seem to decline as housing concerns increase.

Job by Children (-.311): As with Job by Self, it appears that as children become a more important life priority, job concerns decrease.

Health by Religion (-.354): Why these two items would have an inverse relationship or, for that matter any relationship, remains inexplicable.

Career by Self (-.354): This weak correlation would seem to indicate that career takes precedence over self for an individual's life priorities.

Job by Housing (.388): This is the only positive relationship in this section, the strongest, and perhaps the most interesting. Concerns about housing and employment seem to rise and fall in tandem. Clearly, for this sample the intimate connection between shelter and sustenance is recognized.

Very different findings are involved in the "time and energy" section. Fifteen combinations did meet the criteria for inclusion, but only four had a 50.0% or better response rate.

Friends by Housing (-.316): This weak negative correlation shows that as housing activities increase in the day-to-day activities of the participants, time remaining for friends diminishes.

Recreation by Self (-.318): As evidenced above, current recreational activities for this sample are relatively high.<sup>32</sup> However, the inverse relationship here suggests that recreation decreases as activity for the individual self increases.

Job by Self (-.419): This low modest inverse relationship is probably an unfortunate, although necessary, consequence of the immediate primacy of employment and remuneration.

Recreation by Health (-.433): Why these two items would have a low modest inverse relationship seems inexplicable. Participants, however, have suggested that for many of them recreation has been connected with chemical dependency behavior patterns. As these patterns subside, interest in a healthier lifestyle increases.

Eighteen combinations satisfy the criteria for inclusion into the analysis for the differences between declared priorities and actual activities. A response rate of 50.0% or better is necessary for *both* items; consequently, only two combinations meet this requirement. An added complication is that the score for differences, while always positive, gives no indication as to the direction of the difference.

Career by Friends (.212): This very weak correlation is positive and the *difference* for the two items is likely to increase and to decrease together. However, revisiting the analysis of the means shows that the mean for "Career" decreases from the "priority" section to the "time and energy" section, while the mean for "Friends" increases. Thus, a common sense interpretation would be that participants with a decrease in the "Career" item for current concerns would also have an increase in activities with friends.

Career by Self (.226): While this correlation is also very weak and positive, the means for both items decrease from the "priority" section to the "time and energy" section. Thus, unlike the relationship above, participants with a decrease in career goals during current circumstances are also likely to experience a corresponding decrease in concerns with the individual self.

### CONCLUSION

The above results from the correlation analysis, while interesting, are not that helpful in understanding lifestyle changes in the homeless sample. The most important and useful information emerges from the analysis of the means. The appearance of "Family" as an item on both the "priorities" and "time and energy" lists and its low score on the differences list seems to be a positive indicator of lifestyle values. Another positive sign is the number one position of "Job" on the "time and energy" list.

However, two negative findings also surface from the analysis of the means. First, "Children" and "Partner," both declared priorities, are missing from current activities and this would seem to indicate a lack of intimate relationships. Second, while "Health" and "Self" head the list of declared priorities, both are significantly out of balance. This manifests a group confronted by external circumstances that continually detract from concerns for the individual.

Everyone, it seems, wants to stay healthy, take care of themselves, and maintain relationships. But the differences and overall balance point to actual lifestyle activities that are quite disparate.

## SELF-IMAGE: THE SELF-ASSESSMENT SCALES

Self-Assessment Scales are used primarily as an instrument to measure attitude and values.<sup>34</sup> They do not survey interests (such as Career Assessment Inventories), needs (such as Self-Actualization Inventories), or personal characteristics and abilities (such as Self-Description Inventories). They are, rather, an attempt to quantify areas that are most often reported as anecdotal. In this sense, Self-Assessment Scales measure world views--how individuals view themselves and their belief-system in relation to the world around them.

As with the "Pie of Life" Charts, the SAS scales were administered in strict anonymity in order to enhance truthfulness. The scales were passed out on the first day of the work experience orientation at 1:30 for twenty minutes according to the procedures followed for the "Pie of Life" Charts.

Two hundred and four cases, or 81.9% of the total sample, are valid for this study. The remaining cases were determined to be invalid based upon multiple responses to the same statements or refusal to participate.

Most individuals tend to self-report toward the positive no matter the nature of the survey. Personal problems seem to diminish and educational levels seem to rise. Sometimes to the point of hyperbole. With the homeless sample involved in the program this is quite evident considering the disparity between the information obtained during the Intake process and subsequent behavior and disclosures. A "driving while suspended" misdemeanor, for example, could later prove to be a "possession of controlled substance" felony. The accuracy of responses can sometimes be measured by comparing self-reported results with official records. Since a values survey does not lend itself to such an examination, in this report the central tendency, dispersion, and shape of the data is assumed to be skewed to the positive.

### THE SCALES

The SAS scales consist of three sections as described below. The scoring ranges from -3 to +3 for each statement depending upon the strength of the response. Overall the entire scale has a range of scores from -150 to +150.

Comparative: There are fifteen one-work responses to the statement: "Compared to most people my age, I am \_\_\_\_\_." Participants are asked to rate themselves on a scale from "much more" to "much less." Thus, negative scores would approach -45 and conversely positive scores +45. Statistics from Reliability analysis indicate that three of the variables, Clumsy, Careless, and Naive, have low reliability scores. Even so, as a whole the scales exhibit a good internal reliability.<sup>35</sup>

Normative: Again fifteen one-word responses are requested to the statement: "Compared with who I am, I feel that I should be \_\_\_\_\_." The same scaling is used as for the Comparative section and again the range is -45 to +45. The reliability coefficient for this scale is slightly less than for the Comparative scale, but is quite acceptable.<sup>36</sup>

Reflective: The section deals primarily with the strength of responses to statements about work, self, social life, and life in general. Twenty statements are presented on a true-false continuum from "very true" to "very false." Since twenty, not fifteen, statements are used the range is from -60 to +60. Reliability on this scale is the most difficult to determine. Three of the variables have low reliability scores with subjects ranging from "feeling close to others" to "getting upset over poor work." Although this shows some lack of cohesiveness in the scale, the reliability is still in the middling range.<sup>36</sup>

### ANALYSIS OF THE MEANS

Unlike the "Pie of Life" Charts where certain items could be omitted from the rankings, the Self-Assessment Scales demand a response. Also, since all the scales were completed there are no "missing values" in the analysis. Outliers, or extreme responses, however, are present and at times adjustments to the mean are warranted in order to better interpret the results.<sup>37</sup>

In the following analysis the responses range from -3 to +3. For example, a respondent who answered "much more productive" in the comparative mode would be scored as +3. Similarly, "much less lazy" would also be scored as a +3. "Some more productive" would receive a +2 while "a little more productive" would receive a +1. "The same" is equal to 0.<sup>38</sup>

Comparative: All the means are positive and the distribution of the scores meets the test of normality.<sup>39</sup> Certainly the sizeable differences in the means prove interesting, but the order itself is revealing. The ranking of Kind at the top and Friendly in third place would seem to indicate that the homeless see themselves as much less intimidating than they are perceived. Similarly, the high rankings of Reliable, Lazy, and Productive directly contradict societal stereotyping of the homeless as willingly unemployed. However, the most significant result from this category appears to be the extremely low, albeit positive, score for Social and its position at the bottom of 15 variables.<sup>40</sup>

Comparative Section: Ordered by Mean		
Item	Mean	Adjusted Mean
Kind	1.33	1.33
Reliable	1.19	1.17
Friendly	1.18	1.27
Lazy	1.16	1.26
Productive	1.14	1.21
Positive	1.13	1.22
Mature	1.09	1.16
Clumsy	1.08	1.13
Confident	1.08	1.08
Intelligent	1.03	1.05
Irresponsible	1.00	1.09
Naive	.98	1.08
Careless	.87	.93
Practical	.77	.78
Social	.58	.63

Table 7

**Normative:** The results here, although all negative, meet the test for normality.<sup>42</sup> Characteristically, normative scales tend toward the negative since individuals are overly self-critical. For example, it is not uncommon for a client to rate themselves "some more" intelligent on the Comparative scale and subsequently report that they should be "some more" intelligent on the Normative scale.<sup>43</sup> Consequently, Reliable and Lazy achieve very low rankings on the scale, while Social seems to demand little attention by this sample for how they feel they "ought" to be.<sup>44</sup>

Normative Section: Ordered by Mean		
Item	Mean	Adjusted Mean
Impatient	-.47	-.53
Immature	-.52	-.51
Social	-.53	-.53
Open	-.58	-.53
Careless	-.62	-.67
Practical	-.69	-.70
Irresponsible	-.73	-.69
Disorganized	-.78	-.78
Kind	-.79	-.75
Naive	-.82	-.55
Violent	-.86	-.78
Reliable	-.89	-.86
Clumsy	-.89	-.83
Intelligent	-.91	-.84
Lazy	-1.05	-1.00

Table 8

**Reflective:** The responses to these statements ranged from "very true" to "very false" and this provides the core of the survey. Accordingly, the scoring results were both positive and negative and covered a range of almost four points from the highest to the lowest. Also, the differences between the mean and the adjusted mean are greater than in the other two sections. Clearly, these results are the most diverse in the entire survey.

The most positive variable, "Doing a good job makes me feel good," is not surprising considering the results above; but the 2.78 mean is quite high.<sup>45</sup> Human service providers tend to work under the supposition that the homeless, as with many at-risk populations, would exhibit a low degree of self-esteem. Issues of dislocation, poverty, chemical dependency, or mental health, for example, would all seem to be rooted in and perpetuate feelings of inadequacy and insecurity. However, this sample seems to feel otherwise. "I like the real me" and "I feel good about myself" received very high scores relative to the other variables and were within .13 points of each other on the unadjusted mean scale. Low feelings of self-worth, then, do not appear to be perceived as a specific problem or barrier for this sample.<sup>46</sup>



A grouping of variables at the bottom of the scale suggests that although their self-esteem may be high, this sample's view of its place in the world is pessimistic at best. "I need to be more positive" is bottom-ranked on both scales and closely followed by "Life is very hard." While the placement of these two variables might not be surprising, this is a strong statement as to how the homeless sample perceives its circumstances.

The presence of another variable toward the bottom of the Reflective scale presents an interesting dilemma. "I do not let others know the real me" is scored approaching "a little true." However, the variable concerning intimate relationships, "I like feeling close to others," lies on the positive side of the axis and the two are almost two points apart on the scale.

Reflective Section: Ordered by Mean		
Item	Mean	Adjusted Mean
Doing a good job makes me feel good.	2.78	-
I like the real me.	1.92	-
I feel good about myself.	1.79	2.07
I can talk easily with others.	1.43	1.79
I feel at ease with myself.	1.41	1.80
I get upset when I do poor work.	1.32	1.82
I like feeling close to others.	1.27	1.67
I am unsure unless others agree.	.93	1.37
I am not comfortable with myself.	.87	1.02
Something tells me I'm not quite right.	.71	.79
I decide how good I feel from others.	.59	.68
I like the direction of my life.	.39	.53
I compare myself to others too often.	.25	.29
Problems upset me too easily.	.05	-.18
I need to get compliments.	-.05	-.11
I feel shy with others.	-.30	-.76
My life is a mess.	-.42	-.84
I do not let others know the real me.	-.51	-.89
Life is very hard.	-.94	-1.25
I need to be more positive.	-1.18	-1.54

Table 9

The mean of the Comparative scales as a whole is 15.59, adjusted downward to 14.75, with a standard deviation of 12.8. Only three cases fall beneath two standard deviations. For the Normative scale the mean, of course, was negative at -11.05, adjusted upward to -9.25. The standard deviation is 10.9 with six individuals over two standard deviations to the negative. Finally, the Reflective scale showed a mean of 12.46, adjusted to 12.16, with a standard deviation of 15.31. Only three cases were below two standard deviations.<sup>46</sup>

Overall the mean of the entire scale was 17.11, adjusted upward to 17.51, with a standard deviation of 22.78. The range of this scale was large from -62 points to +68 points. Even with seven cases over two standard deviations to the negative, the shape of the distribution fairly normal.

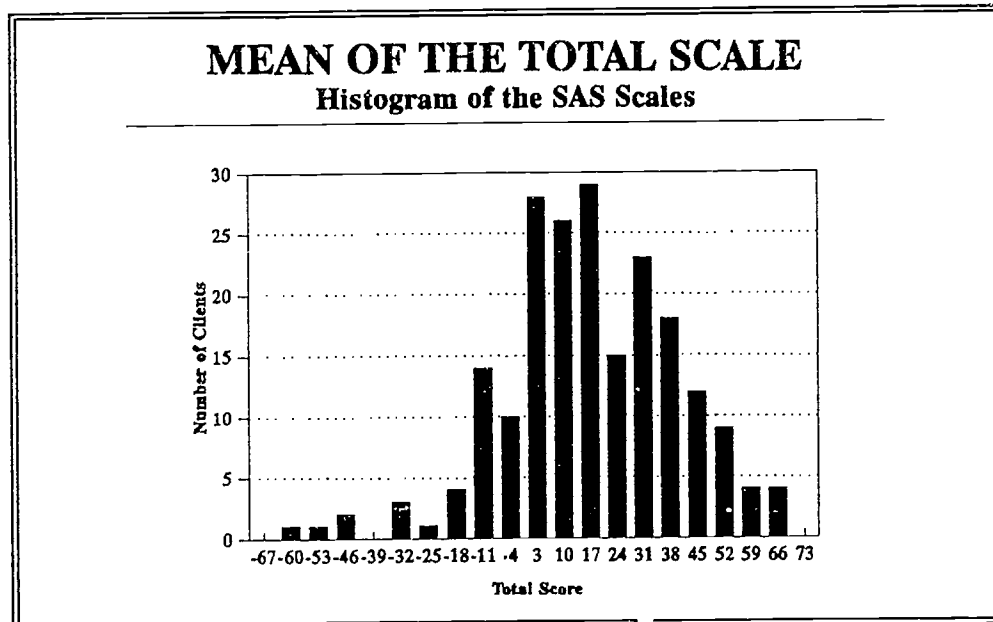


Figure 14

The most important results in the analysis thus far, it seems, involve the scores on the Social variable in the Comparative and Normative sections and the anomaly in the data of the Reflective section. How can an individual desire to "feel close" and at the same time hide the "real me?" What accounts for the position of the Social variable? Finally, how well do any of these variables relate to each other--especially those involving sociability?

### MEASURES OF ASSOCIATION

Correlation analysis should provide more information concerning these scales as a whole and specifically address the questions above. The standard criteria of inclusion will be followed except that very weak correlations will be excluded. Due to the highly inter-related nature of the scales, only a Pearson's R above .30 will be considered.

Comparative: Under the original criteria of inclusion 71, or 67.6%, of the possible 105 combinations qualified. The following discussion uses the more stringent guidelines and yet 45, or 42.9%, remain in the analysis.

<b>Comparative Section: Weak Associations</b>	
<b>Relationship</b>	<b>Pearson's R</b>
Irresponsible by Confident	.305
Irresponsible by Mature	.311
Productive by Positive	.312
Irresponsible by Clumsy	.316
Productive by Social	.322
Intelligent by Reliable	.327
Productive by Practical	.327
Productive by Mature	.328
Practical by Reliable	.337
Kind by Practical	.339
Lazy by Clumsy	.342
Friendly by Confident	.348
Kind by Intelligent	.349
Irresponsible by Reliable	.356
Careless by Reliable	.357
Lazy by Reliable	.361
Social by Mature	.361
Intelligent by Positive	.369
Intelligent by Confident	.373
Intelligent by Productive	.374
Lazy by Careless	.377
Reliable by Confident	.382
Social by Confident	.382
Productive by Reliable	.387
Kind by Confident	.388
Intelligent by Mature	.389
Friendly by Positive	.392
Irresponsible by Careless	.399

**Table 10**

Eleven combinations satisfy the low modest category and the most intriguing are the associations between Kind, Positive, and Social. All three characteristics could be said to fall under the rubric of sociability.

<b>Comparative Section: Low Modest Associations</b>	
<b>Relationship</b>	<b>Pearson's R</b>
Practical by Intelligent	.402
Practical by Positive	.428
Kind by Mature	.430
Practical by Confident	.436
Social by Positive	.438
Positive by Mature	.451
Practical by Mature	.461
Kind by Reliable	.465
Kind by Friendly	.483
Kind by Positive	.493
Social by Kind	.496

**Table 11**

The six relationships exhibiting a modest association offer no surprises. Notice especially that the Social by Friendly combination surfaces.

<b>Comparative Section: Modest Associations</b>	
<b>Relationship</b>	<b>Pearson's R</b>
Social by Friendly	.519
Positive by Reliable	.519
Mature by Reliable	.530
Irresponsible by Lazy	.541
Mature by Confident	.543
Positive by Confident	.569

**Table 12**

**Normative:** In this section 47 combinations, or 44.8%, meet the original criteria for inclusion. Twenty-six, or 24.8%, remain in the analysis.

<b>Normative Section: Weak Associations</b>	
<b>Relationship</b>	<b>Pearson's R</b>
Clumsy by Careless	.307
Social by Reliable	.308
Clumsy by Violent	.316
Careless by Lazy	.320
Disorganized by Lazy	.322
Social by Kind	.326
Lazy by Violent	.334
Open by Reliable	.334
Irresponsible by Violent	.338
Clumsy by Immature	.343
Careless by Violent	.369
Disorganized by Irresponsible	.383
Careless by Naive	.388
Lazy by Immature	.388
Social by Open	.388
Lazy by Clumsy	.397

**Table 13**

Eight combinations qualify with low modest associations and none help address sociability.

<b>Normative Section: Low Modest Associations</b>	
<b>Relationship</b>	<b>Pearson's R</b>
Open by Intelligent	.402
Kind by Open	.403
Kind by Reliable	.406
Intelligent by Reliable	.408
Kind by Practical	.419
Irresponsible by Clumsy	.433
Irresponsible by Immature	.442
Irresponsible by Careless	.458

**Table 14**

Only two relationships fit the modest category: Disorganized by Clumsy (.503) and Irresponsible by Lazy (.524). Neither provides information concerning the sociability issue.

Reflective: Fewer connections are apparent in this section with only 66, or 34.7%, of the 190 combinations meeting the original criteria. Thirty-two, or 16.8%, remain after increasing the Pearson's R requirement.

<b>Reflective Section: Weak Associations</b>	
<b>Relationship</b>	<b>Pearson's R</b>
Ease With Self by Feel Good About Self	.300
Something Not Right by Like Real Me	.301
Upset Poor Work by Problems Upset	-.301
Feel Shy by Unsure Unless Others	.304
Decide From Others by Something Not Right	.305
Like Feeling Close by Talk Easily	.306
Upset Poor Work by Life a Mess	-.306
Not Comfortable Self by Compare Self	.312
Unsure Unless Others by Something Not Right	.312
Not Comfortable Self by Something Not Right	.318
Feel Shy by Not Comfortable Self	.319
Good Job by Like Real Me	.319
Decide From Others by Problems Upset	.313
Decide From Others by Need Compliments	.320
Unsure Unless Others by Know Real Me	.321
More Positive by Life is Hard	.324
Need Compliments by Unsure Unless Others	.331
Life a Mess by Something Not Right	.332
Compare Self by Problems Upset	.342
Feel Good About Self by Life Direction	.347
Not Comfortable by Feel Good About Self	.347
Not Comfortable by Need Compliments	.348
Decide From Others by Compare Self	.351
Life Direction by Like Real Me	.352
Something Not Right by Like Real Me	.371
Not Comfortable by Unsure Unless Others	.374
Need Compliments by Compare Self	.376
Decide From Others by Unsure Unless Others	.387
Something Not Right by Problems Upset	.396

**Table 15**

Only two relationships have a low modest correlation: Decide from Others by Not Comfortable (.402) and Unsure Unless Others by Compare Others (.445). Feel Good Self by Like Real Me (.522) has, not surprisingly, a modest correlation. While the above table reveals some combinations of interest, from the standpoint of social relations one correlation is glaringly missing. "I do not let others know the real me" and "I like feeling close to others" received a Pearson's R of .123. In addition, the Know Real Me by Like Real Me results were .109. Apparently the Know Real Me variable has little or no association with closeness or self-esteem. Further analysis is needed.

## FACTOR ANALYSIS

Since a large number of variables, especially in the Reflective section, are involved in the Self-Assessment Scales, another analytical technique should help sort out commonality in the responses. Factor analysis uses the observed correlations to identify underlying relationships, or factors, in order to explain complex phenomenon. To be usable, Factor analysis must be straightforward, parsimonious, and easily interpretable. The process usually involves four steps: computation of the correlation matrix, parsimonious extraction of the factors, rotation of the factor matrix to enhance interpretability, and finally the computation of factor scores to indicate the strengths of the relationships.

Comparative: Partial results from the correlation matrix are evident in the Correlation section. The second step of factor extraction, however, is somewhat problematic. Initial results, using the Principal Components analysis and assuming that the factors need to account for variances greater than 1.00, suggests a four factor model. The percentage of total variance explained stands at 59.7%. Factor 4, however, only includes Naive and Clumsy and even after rotation appears uninterpretable.<sup>48</sup> Consequently, explorations of a three factor solution were more adequate resulting in a 57.8% explanation of the total variance.<sup>49</sup> The factor loadings may be understood as: Factor 1, Reliability; Factor 2, Sociability; and Factor 3, Employability.<sup>50</sup>

<b>Rotated Factor Matrix for the Comparative Section</b>			
<b>Variable</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>
Intelligent	.763		
Practical	.693		
Mature	.645		
Productive	.614		
Confident	.519		
Friendly		.799	
Social		.787	
Kind		.709	
Positive		.546	
Lazy			.816
Irresponsible			.803

**Table 16**

While this model is certainly useful in viewing the data and identifying sociability variables, what can then be determined specifically about the Social variable? Clearly it is related to the other variables in the Sociability factor, manifests a relatively high factor score coefficient at .428, and is far removed from Reliability (-.155) and Employability (-.055). Even so, the correlations are only modest.

The most important information gained concerning the homeless sample with the Factor analysis of the Comparative section comes from the explanation percentages for each factor: Reliability, 33.6%; Sociability, 12.3%; and Employability, 6.9%. *The point here is not that Reliability explains so much, but that Sociability, with only one less variable, explains so little.*

Normative: As might be anticipated from the discussion in the Correlation section, the results here are disappointing. The three factor model only explains 49.9% of the variance and the goodness-of-fit seems questionable.<sup>51</sup> The factors, even after rotation, are not easily labeled and the factor score coefficients are low.

Rotated Factor Matrix for the Normative Section			
Variable	Factor 1	Factor 2	Factor 3
Open	.731		
Kind	.718		
Reliable	.693		
Intelligent	.644		
Social	.588		
Practical	.583		
Careless		.688	
Naive		.649	
Impatient		.593	
Irresponsible		.579	.506
Violent		.557	
Immature		.551	
Disorganized			.779
Clumsy			.754
Lazy			.506

Table 17

The social variable, although factored in with Kind and Open, has a factor loading of only .588 and a low factor score coefficient of .219. Little information is gained concerning sociability.



**Reflective:** As in the Analysis of the Means and the Correlation Analysis sections, this category provides the most fruitful, if difficult, insights. In the initial analysis, six factors emerge and explain 58.0% of the variance. But the Feel Shy and Life is Hard variables solely constitute Factor 6 and contribute little. Thus, a five factor analysis was executed and the explanation for the total variance was only reduced to 56.4%.<sup>52</sup> This model seems well suited for the data and the loadings may be understood as: Factor 1, Other-Directed; Factor 2, Self-Worth; Factor 3, Sociability; Factor 4, Employability; and Factor 5, Unknown.<sup>53</sup>

Rotated Factor Matrix for the Reflective Section				
Variable	Factor 1	Factor 2	Factor 3	Factor 4
Unsure Unless Others	.723			
Compare Self	.677			
Decide From Others	.663			
Need Compliments	.584			
Something Not Right	.576			
Not Comfortable	.531			
Problems Upset	.515			
Life Direction		.777		
Like Real Me		.677		
Feel Good About Self		.625		
Life a Mess		.579		
Feel Close			.689	
Talk Easily			.673	
Upset Poor Work				-.710
Good Job				-.698
More Positive				.547

Table 18

The explanation percentages are instructive as follows: Other-Directed, 22.4%; Self-Worth, 11.8%; Sociability, 8.9%; and Employability, 7.0%. In this instance the lower percentage for Sociability, with only two variables, is understandable. Notice, however, that the Feel Close and Like Real Me variables are in separate factors. *More importantly, "I do not let others know the real me" fails inclusion in any of the factors.*<sup>54</sup>

### CONCLUSION

Self-Assessment Scales might be academically interesting, but their real purpose lies in their usefulness to better understand the homeless sample and therefore better serve their needs. The figures in Means analysis are not surprising. Societal perceptions of "threatening" populations rarely match reality. This would seem to be the case with respect to the homeless sample who view themselves as relatively benign. Assumptions are that at-risk populations exhibit overall a low self-image. However, the homeless sample appears to view itself as good and reliable workers. In addition, the homeless individuals entering work experience, frankly, seem to feel good about themselves.

While the homeless might show a good work ethic and positive traits of self-esteem, a pessimistic, almost nihilistic view of the direction of their lives is pervasive. Whether that positive self-image is born of self-centeredness, the defensiveness wrought from chemical use denial, or the confidence gained from survival on the streets is impossible to ascertain. More importantly, in spite of the self-esteem consideration, the outlook seems bleak. "Life is very hard" verges upon "life is impossible."

The results concerning the Social variable and the absence of "I do not let others know the real me" stand out as critical for understanding this sample. The sociability issue suggests that the homeless view themselves as asocial and outside of the mainstream of society. This sample may have a positive self-image, but this is not translated into social relations and leads to social disaffiliation.

The homeless seem to be isolated, individualistic survivors with a pessimistic world-view. And their relation to their world, their circumstances, and the people around them does not seem to be based upon kindness, or openness, or closeness, but more likely upon who they eat with, drink with, or travel with. Views of social relationships do not seem to be based upon vulnerability, but upon activity--not upon disclosing, but upon surviving.

The Overnight Shelter Board Reports present invaluable demographics and information on the homeless population that have been used throughout this study. Statistics from this survey range from shelter usage to employment barriers, but two small items give an added glimpse into the nature of the sociability issue. Buried within this material, in a sub-section aptly entitled "Social Support," are two figures that help validate the above findings: *16.9% of the homeless surveyed had no contact with their families within the last year and 52.1% could not name at least three friends.*<sup>54</sup>

### BASELINE CONCLUSION

A compilation of the above demographics reveals a traditional profile of the homeless population. Participants entering work experience were likely to be middle-aged, White or Black males involved in the shelter system or transitional housing programs. Some were recent arrivals to Saint Paul--some were not. Most had found themselves homeless within the last year and many had a full-time job within the last two years.

Educational levels are at or near national (not state) averages and this sample tended to test higher in reading and math skills than did comparable human service program participants.

Lifestyle aspirations are unsurprising in that most individuals desire good physical health, good mental health, intact familial relations, and the rudiments of sustenance, shelter, and security. However, immediate concerns of employment and housing take precedence over many of those aspirations.

*Sociability, not self-esteem, seems to be the weakest element derived from the Self-Assessment Scales. In fact, the lack of social skills, social support, and self-disclosure are common themes pervasive in the overall homeless program that demand considerable attention.*

### III. PROCESS CHARACTERISTICS

Process variables help to define the movement of a participant through the program. This addresses the question: "How were they served?" Again, descriptive statistics are utilized to represent the data. Specifically, issues surrounding mental health, chemical dependency, psychological evaluations, and the acquisition of a raise are assessed for each individual during the program and for the sample group. The determination of these characteristics greatly enhance the effectiveness of worksite placement, case management, and the eventual disposition of the client.

#### THE MENTAL HEALTH BARRIER

The issues of mental health and homelessness continue to be closely related, but it is not the intent of this study to explore the extant secondary literature on the subject. Some generalizations might be helpful. Many commentators suggest that upwards of 30% of the homeless suffer some form of mental illness and that this is, in part, a consequence of the deinstitutionalization of the mentally ill and the inadequacies of community health services. The Shelter Board Report for 1990, for example, offers the following affirmative responses:<sup>55</sup>

Ever Seen a Doctor for Mental Health Problems?	35.7%
Ever Quit a Job Due to Mental Health Problems?	21.7%
Feel That You Now Have Mental Health Problems?	25.1%

The frequencies from the work experience sample are not nearly as high. Only 9.6% self-reported any mental health issues and only 17.3% exhibited any mental health concerns during work experience.<sup>56</sup> A partial explanation for these lower percentages involves the work evaluation portion of the process. Clients with initial active and impairing mental health disorders, or for that matter any ADM (alcohol, drug, and mental) issues, would have been targeted for other support services, such as sheltered workshops or treatment, and would not have been enrolled into work experience.

Tests of independence between MH: SELF-REPORTED, MH: OBSERVED OR SURFACED, and other variables provide few surprises. The two mental health variables are related, but very weakly (.283).<sup>57</sup> The remaining association involves ABUSE and MH: SELF-REPORTED (.247). Fifty-six clients reported having been abused as a child and 13 of those 56, or 23.2%, reported mental health problems.<sup>58</sup> This connection can be useful for homeless advocates, mental health professionals, and child protection workers alike.

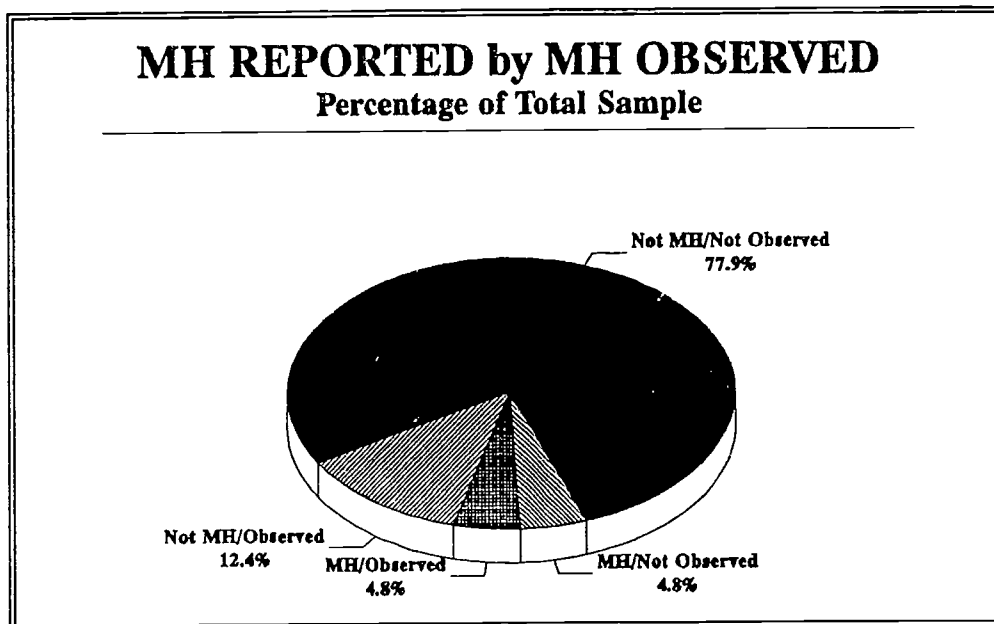


Figure 15

Combining the self-reported mental health variable and the observed mental health variable, thus creating a new variable, gives rise to some further insights into this issue. Only one variable is associated with the overall mental health barrier. The Abuse variable retains a very weak correlation coefficient (.222) and 22, or 39.3%, of the clients who reported abuse also self-reported and/or exhibited mental health issues.<sup>60</sup> Thus, although the relationship is weak, this percentage is of some consequence.

Twelve individuals, or 4.8%, of the total sample, who self-reported mental health issues also exhibited mental health problems during work experience. Twelve did not. However, 31 clients, or 12.4%, of the total sample, failed to report mental health issues and yet these issues surfaced during work experience. *Thus, the cumulative percentage of participants reporting and/or exhibiting mental health problems, even with the screening of the work evaluation period, reaches 22.1% and more closely approximates the results from the Shelter Board.*

Mental health issues, regardless of origin, assume a critical role in the program from the work evaluation period through the worksite placement and continues to be a major barrier for many participants.

### THE CHEMICAL DEPENDENCY BARRIER

As with the mental health issue, chemical dependency has received considerable attention with respect to the homeless population. Again, the secondary literature on the matter is vast and out of the scope of this study, but some observations should prove helpful. Percentage estimates for homeless individuals who are chemically dependent parallel the 30% figure for mental illness and, indeed, and one-third chemically dependent, one-third mentally ill, and one-third "other" serves as a useful generalization for many human service providers.<sup>61</sup> This characterization of the population, unfortunately, also has been construed as an explanation for the problem. Homelessness is a complex issue and chemical dependency no more defines the homeless than their lack of permanent residency. Treatment programs alone will not "solve" homelessness anymore than housing programs alone. But chemical dependency is a fact of life in the homeless population, as in the larger population, and deserves serious attention.

Frequencies from the work experience sample show that 36.9% self-reported chemical dependency and 35.7% had substance abuse issues surface during work experience.<sup>62</sup> Results from the Shelter Board Report are similar:<sup>63</sup>

Ever Admitted To A Detoxification Center?	32.4%
Ever Diagnosed As Chemically Dependent?	29.3%
Consider Yourself As Chemically Dependent?	33.2%

Only two relationships meet all the criteria for measures of association. More participants than expected self-reported both chemical dependency and that they were receiving assistance at Intake (.239).<sup>64</sup> Since the latter variable encompasses a wide range of public and private assistance and since most residents of treatment centers and halfway houses receive assistance, the relationship is understandable. Not surprisingly, self-reported chemical dependency and observed chemical dependency are related (.263). However, the correlation coefficient is weaker than anticipated and only moderately suggests that chemically dependent participants in the program are sustaining their recovery.<sup>65</sup>

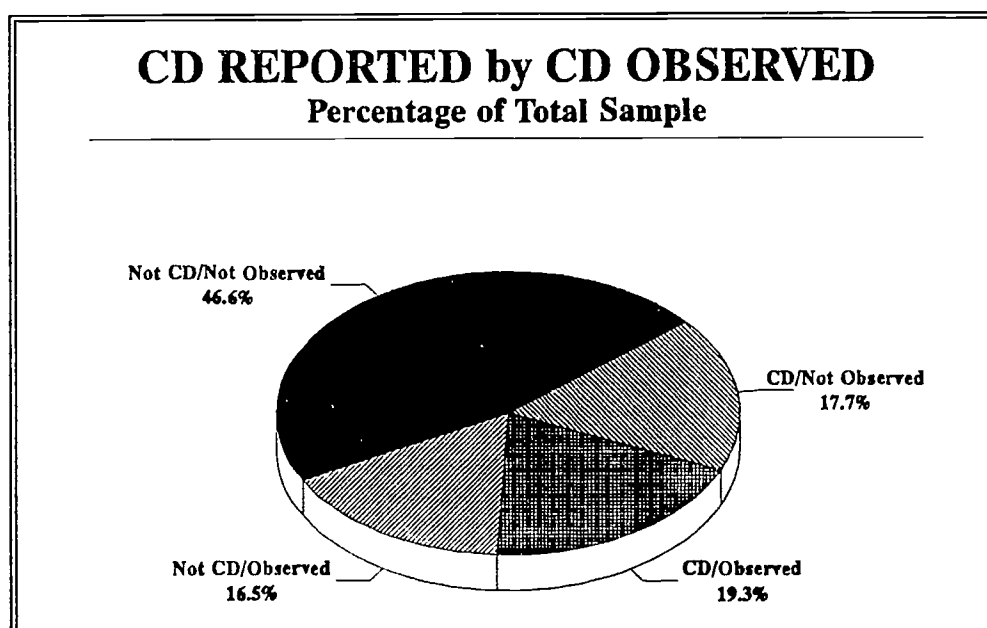


Figure 16

Combining the self-reported and the observed chemical dependency variables provides additional information for this contentious issue. However, only one variable, the ASSIST variable, had a statistically significant relationship (.228). The most important and startling information gained in this section stems from the frequencies of this combined variable. *One hundred and thirty-three participants, or 53.4% of the total sample, self-reported chemical dependency issues and/or were severely impaired during work experience by chemical use.*

The seriousness of this issue can hardly be exaggerated as it plays a major role in the lives of so many of the participants.

## THE WAIS-R

During the In-Depth Assessment component of the program, case managers have the option of ordering psychological evaluations for their clients. These evaluations are expensive and therefore generally ordered only if potential problems have been detected by the case managers during Intake or by supervisors during the work assessment period. Primarily designed for the case managers and other staff as part an informational package, these evaluations are also utilized at the client staffing. Results can be useful later to the case managers in assessing and determining on-going services to the client.

The written evaluation is an extensive document provided by a licensed psychologist and contains sections concerning social history, ability appraisal, mental status, clinical diagnosis, vocational strengths, functional limitations, and recommendations. While a full review of this component is outside the scope of this study, an analysis of the Wechsler Adult Intelligence Scales-Revised (WAIS-R) proves valuable for the development of client profiles. Thirty-six, or 28.8%, of the work experience clients were referred for psychological evaluations accounting for 40.4% of the total program participants evaluated. The average age of this group was 39.4 years and 91.7% were male. Racial characteristics breakdown as follows: White, 55.6%; Black, 38.9%; Hispanic, 2.8%; and Native American, 2.8%.<sup>65</sup> This small sample is the focus of the following discussion.<sup>66</sup>

After all eleven subtests are administered the raw scores are then converted to scale scores with a mean of 10 and a standard deviation of 3. Thus, 68.26% of the population can be expected to score from 7 to 13. Similarly, the Verbal, Performance, and Full Scale I.Q. scores are obtained and expressed on a scale with a mean of 100 and a standard deviation of 15. Again, 68.26% of the population will likely score from 85 to 115 on any of these I.Q. scales. Each scale will be discussed separately.<sup>67</sup>

**INFORMATION:** The Information subtest is one of the more stable in the array and measures general accumulated knowledge, long-term memory, and range of interests. Resistant to chronic and immediate disturbances, the subtest is considered a good indicator of very general intelligence.<sup>68</sup> The results from the sample identify only one outlier at 18 and the overall mean is 8.92--below the test mean of 10, but well within one standard deviation.<sup>69</sup>

**DIGIT SPAN:** "Digits Forward" and "Digits Backward" form the core of this subtest and are designed to measure immediate memory processing. Consequently, scores are negatively affected by lack of attention, anxiety, and auditory concentration.<sup>70</sup> Two high outliers and two low outliers are present and the overall mean is 3.78. As with the Information subtest this is below the test mean, but within one standard deviation.<sup>71</sup>

**VOCABULARY:** As the name suggests, this subtest measures verbal intelligence, variety of interests, and general educational background in a very stable and reliable manner. Vocabulary can be considered as the primary single indicator of general intelligence and the 10.53 mean score for this sample, with no outliers, falls *above* the mean test score.<sup>72</sup>



**ARITHMETIC:** The purpose of this subtest is quite evident and also includes the ability to concentrate. Results also may be indicative of an adequate educational background.<sup>73</sup> No outliers are present and the mean score of 8.94 is below the mean test score.<sup>74</sup>

**COMPREHENSION:** Sometimes understood as the "social" index, the Comprehension subtest measures social judgment, practical judgment, and relevant use of information.<sup>75</sup> For a sample potentially short on social skills, the mean at 10.69 is the highest of any subtest and the single outlier was high at 19.<sup>76</sup>

**SIMILARITIES:** This is the final verbal scale and the most difficult to interpret. It requires the ability to think abstractly, move from the specific to the general, and maintain flexibility. Low scorers tend toward literal interpretations and rigid thinking. No outliers are present and the mean score exactly equals the test mean at 10.00.<sup>77</sup>

**VERBAL SCALES:** These six subtests form the basis for the verbal subscale portion of the WAIS-R. Notice especially that all six subtests are well within one standard deviation from the mean. These are very average scores for a supposedly "non-average" sample.

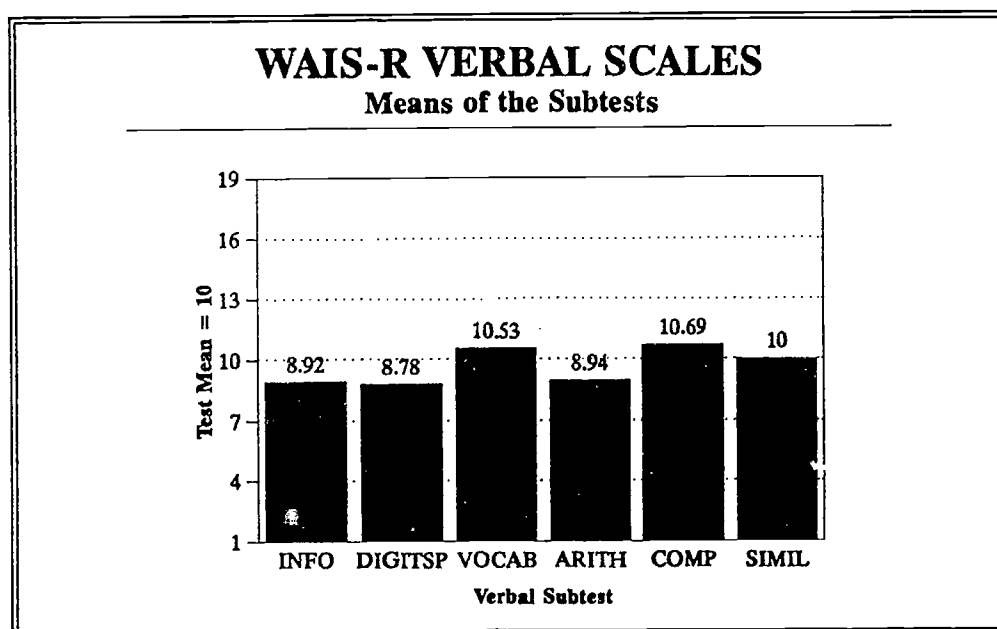


Figure 17

**VERBAL I.Q.:** The test mean for the verbal section is 100 and the mean for this sample stands at 99.53 with two outliers at the high end. If the Verbal I.Q. scale is 15 or more points higher than the Performance I.Q. score, various interpretations are possible including high academic achievement, neuroses, and right hemisphere cerebral difficulties. Six individuals, or 16.7%, exhibited this condition.<sup>78</sup>

The frequency distribution of the Verbal I.Q. is skewed to the right, but even if the outliers to the right (higher scores) are trimmed the adjusted mean is still 98.15 and the difference is negligible.

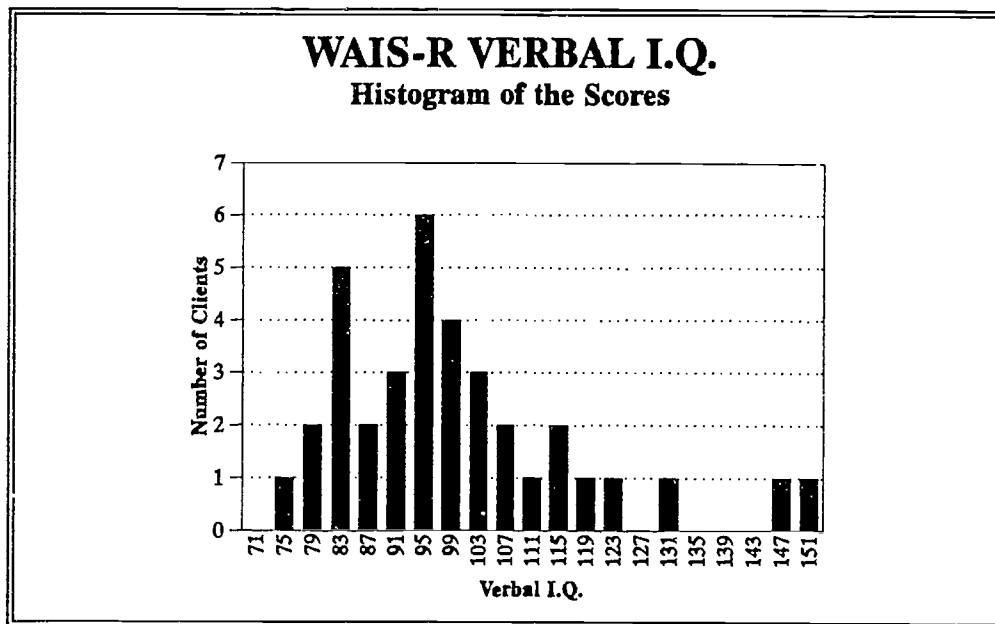


Figure 18

**PICTURE COMPLETION:** This is the first of the performance subscales and measures non-verbal information especially as it relates to cultural suppositions. Attention to detail and alertness are important for higher scores and low scores can signal impulsive behavior. The mean here is moderately low at 7.86, although still within one standard deviation.<sup>79</sup>

**PICTURE ARRANGEMENT:** If Picture Completion purports to test general non-verbal information, then the Picture Arrangement subtest measures practical interaction in social situations. Planning and anticipation are key for high scores. Two outliers are present and the sample mean is close to the test mean at 9.81.<sup>80</sup>

**BLOCK DESIGN:** Purported to be the most stable and reliable of the performance subtests, Block Design is also considered culturally-free. Therefore, it might be more informative than either Picture Completion or Picture Arrangement. With no outliers, the sample mean stands at 8.97.<sup>81</sup>

**OBJECT ASSEMBLY:** A test of coordination and configuration, Object Assembly is not a good measure of general intelligence. The sample mean here is 9.06 with no outliers.<sup>82</sup>

**DIGIT SYMBOL:** This subtest involves considerable repetitious visual-motor coordination and is perhaps the most sensitive to organic or functional impairments. Consequently, a common assumption is that individuals with a chronic history of substance abuse and/or depression will score poorly.<sup>83</sup> While there are no outliers, the sample mean is the lowest of any subtest at 6.94. *This is over one standard deviation below the mean and at least 86.85% of test takers in the general population score higher.*<sup>84</sup>

**PERFORMANCE SCALES:** These five subtests constitute the performance section of the WAIS-R. *Notice especially that none of the performance subtests are equal to or above the test mean.* A possible interpretation of the low averages for Picture Completion might be the general impulsiveness and impatience of the sample as reported by the psychologist. Digit Symbol seems clearly linked to substance abuse. The two scores are certainly not average.

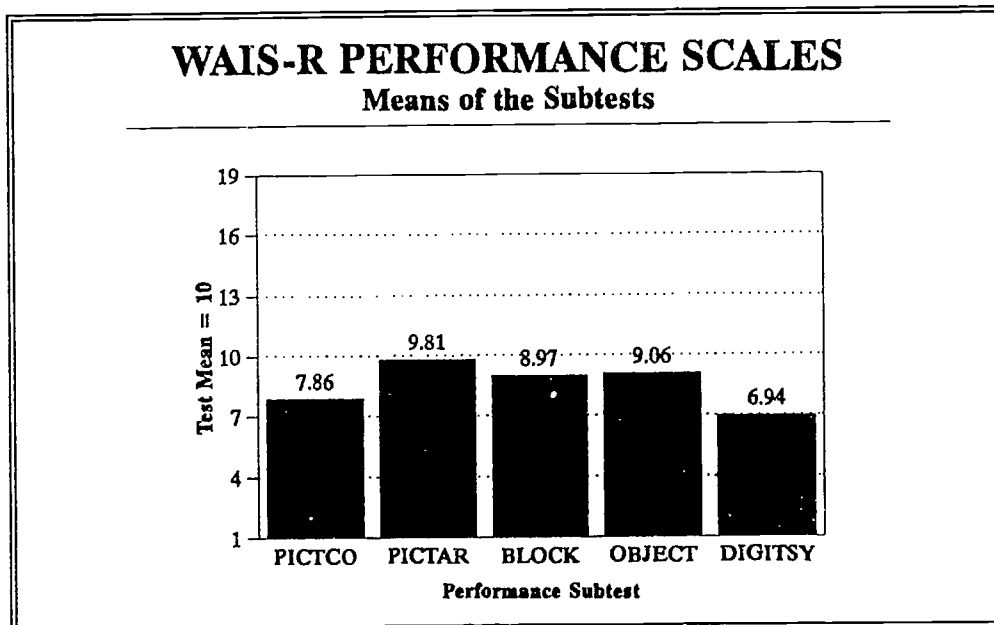


Figure 19

**PERFORMANCE I.Q.:** The test mean here is 100 and the sample mean is 95.89 with one high outlier.<sup>85</sup> If the Performance I.Q. is 15 points or higher than the Verbal I.Q., this could signify a situation of underachieving, delinquent behavior, or class differences. Only four clients, or 11.1%, fit into this category.<sup>86</sup>

As with the Verbal I.Q. scores, the frequency distribution of the Performance I.Q. scores is skewed to the right. But if the outliers are trimmed by 5%, the adjusted mean changes little and remains at 95.15.

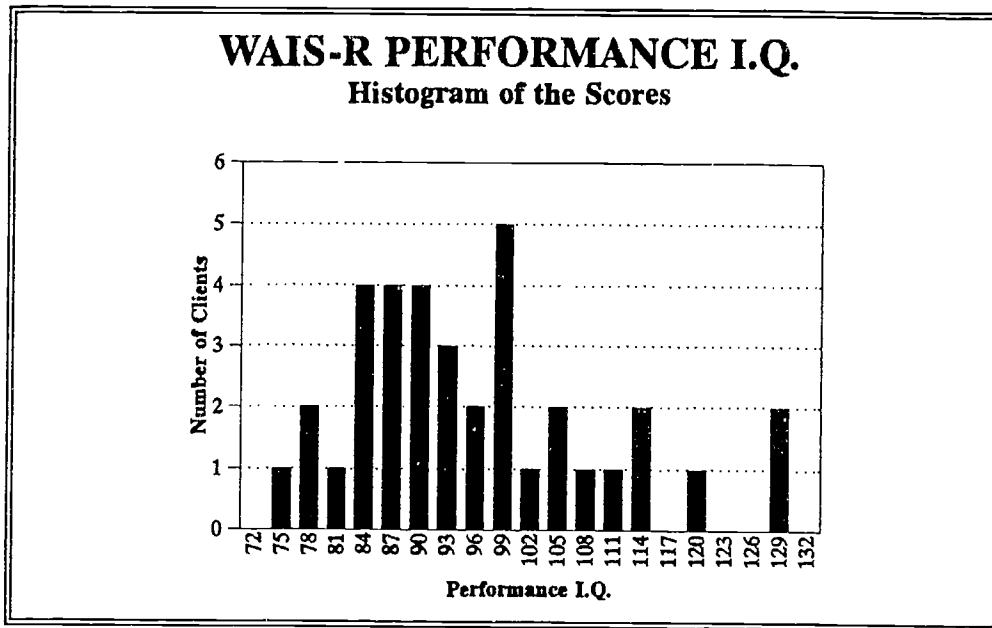


Figure 20

FULL I.Q.: The Full Scale I.Q. is ostensibly the most reliable and valid indicator of cognitive strengths and weaknesses and the best predictor of academic achievement. The test mean is 100 and, with only one outlier on the high end, the sample mean is close at 97.31.<sup>87</sup>

The frequency distribution of the Full Scale I.Q. is considerably more uniform than either of the other two I.Q. scales.

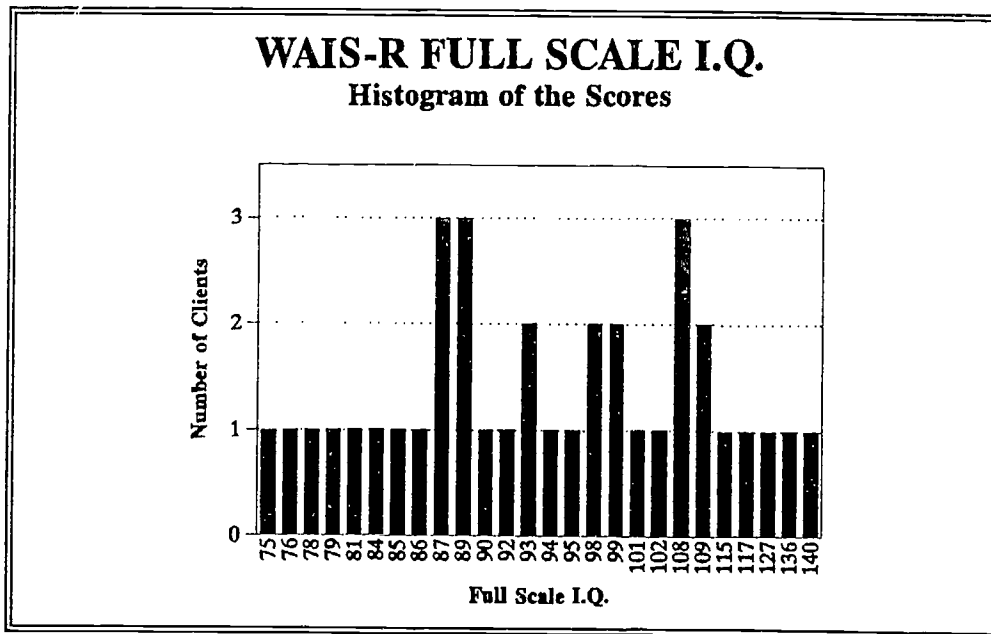


Figure 21

### THE WAIS-R PREDICTORS

While the above discussion has hopefully added to an understanding of this homeless sample, one final question of interest remains; namely, do the WAIS-R scores relate to a successful completion of work experience? Groth-Marnat (and others) suggests that the WAIS-R is very limited with regard to vocational issues and he also decries the lack of validity studies:

The Wechsler scales, like other tests of intelligence, are limited in the scope of what they can measure. They do not assess such important factors as need for achievement, motivation, success in dealing with people, or creativity. As a result, the scales tend to be relatively poor in predicting factors such as occupational success. Perhaps the most significant criticism leveled at the Wechsler scales has been the lack of a sufficient amount of data on their validity.<sup>88</sup>

The question of validity focuses on whether the WAIS-R measures what it purports to measure. If, as an I.Q. test, the WAIS-R measures academic achievement and cognitive abilities, then the evidence seems overwhelming in its favor. But is there any evidence of the WAIS-R measuring non-academic behavior outside of the test itself?

All the "above-mean/below-mean" WAIS-R scores were crosstabulated with WETERM--the variable designating a positive or negative termination from work experience.<sup>89</sup> The Full Scale I.Q. is generally considered the most reliable and valid score, but no statistically significant association exists with WETERM. Likewise, Performance I.Q. and Verbal I.Q. fail the criteria for significance. However, two subtests are associated with termination from work experience.

Similarities measures the ability to categorize and generalize about day-to-day existence. Fifteen participants scored below the sample mean and 21 scored above the mean. However, 73.3% of the below-mean scorers were negative terminations, compared to 38.1% of the above-mean scorers. The  $X^2$  statistic is moderate at 4.36 (significance = .037) and the Pearson's R is weak at -.348. Therefore, these results should be viewed cautiously.

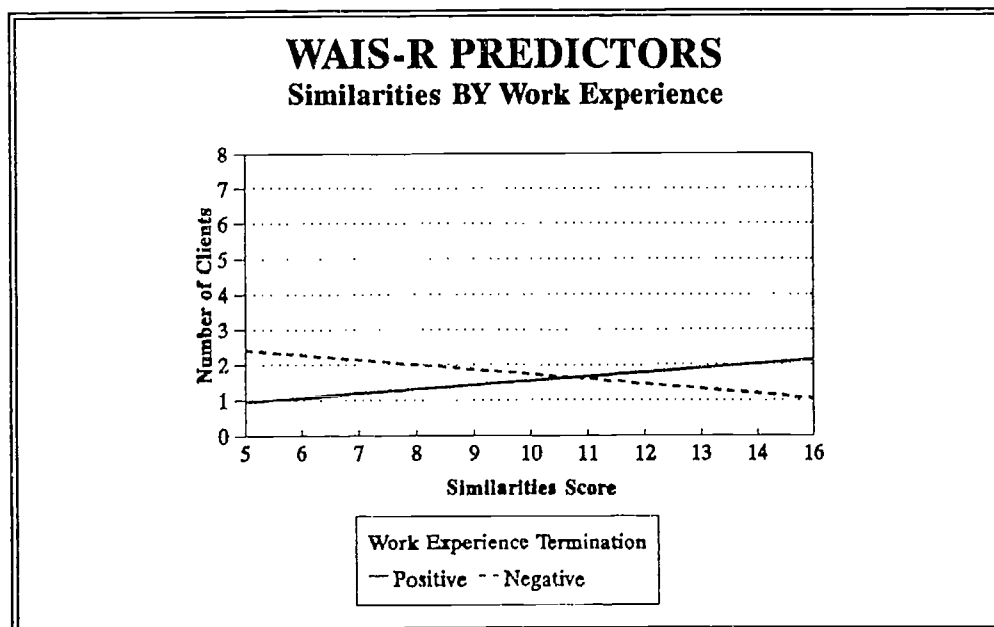


Figure 22

Vocabulary may be the best single indicator of general intelligence and it is clearly also the best predictor of success or failure in work experience. Sixteen clients scored below the sample mean and 20 scored above the mean. This fairly even distribution is the case even though the sample mean for Vocabulary (10.53) is second highest only to Comprehension (10.69). However, 81.3% of those individuals scoring below the mean termed negatively. Only 30.0% of those who scored above the mean were negative terminations. The  $X^2$  statistic is 9.37 (significance = .0022) and the Pearson's R is -.510. Another indication of the difference between these two groups is the subsample mean scores. The mean for negative terminations is 9.12 and for positive terminations is 12.12. *This association is modest, but is the strongest correlation in the analysis between any WAIS-R score and an external variable.*<sup>90</sup>

The Vocabulary subtest may, at the same time, measure verbal intelligence, intellectual efficiency, variety of interests, educational background, and broad experiences. This is a large spectrum to consider, but the practical implications seem clear. Remediation activities during work experience might be appropriate for some participants, and Vocabulary can serve as a warning, a checkmark, regarding clients that may need special services and more intensive case management attention.

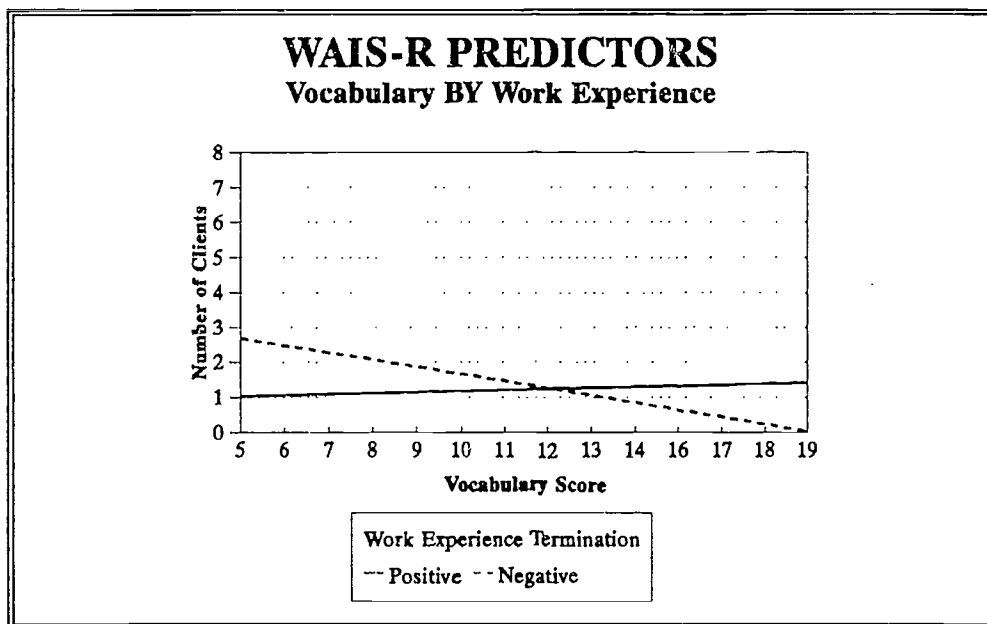


Figure 23

### CONCLUSION

Psychological evaluations provide invaluable information for client referrals and enhance case manager effectiveness. Reliability analysis has shown that the WAIS-R scales have a high reliability for this sample. Aside from the Digit Symbol subtest, the sample means show a fairly normal dispersion around the test means. These sample scores are decidedly *not* aberrant or deviant, but indicate a "normal" group attending to business. But the usefulness of the WAIS-R in predicting success or failure in work experience is very limited. Certainly results from the Vocabulary subtest are highly suggestive and demand further study, but the predictability issues pales next to the profile of a "normal" homeless sample engaged in work experience and striving toward self-sufficiency.

## THE RAISE

Consistent with the entire program as described in the program overview, the work experience component is designed with several stages. During the work experience orientation week participants are scheduled for an interview at a potential worksite. If hired by the worksite supervisor, most workers begin their full-time subsidized employment the following day. The next benchmark occurs after about 340 hours of successful work experience.

As an incentive (and reward) mechanism during work experience, at the two month mark each individual receives a raise in pay. Although only \$.50 per hour, the net amount for most participants reaches \$40 per pay period--not a small sum. One hundred and seventy clients, or 68.8%, actually received the raise with 77, or 31.2%, failing to successfully complete the program for the required two months.<sup>91</sup> The common sense assumption would be that those workers achieving this benchmark would have an increased likelihood of a successful program completion and termination. This is the case.

An exploration of relationships between the RAISE variable and other characteristics seems appropriate. However, the persistence and tenacity necessary for sustaining two months of work experience is not easily quantifiable. Only two baseline or process variables satisfy the test of independence for statistical significance, but neither have strong enough associations for serious consideration. Observed chemical dependency behavior, for example, is inversely related to the RAISE variable, but only with a correlation of  $-.150$ .<sup>92</sup> Similarly, participants with a high school diploma or GED fared better, but the correlation is unacceptable at  $.159$ .<sup>93</sup>

One outcome characteristic, on the other hand, manifests a modest association with receiving the raise. The correlation between RAISE and termination from work experience is both positive and relatively high at  $.576$ . This does *not* imply that the Raise is causative for a positive work experience termination, only that those receiving a raise were more likely to terminate positively. Of the 247 valid cases, 129 both received a raise and were positive terminations--only 96.4 were expected. This accounts for 75.9% of all individuals who received a raise and 92.1% of all clients who were positive terminations. *These figures are quite powerful and strongly suggest that a raise in pay serves well as a program incentive and that the two-month watershed is a primary benchmark for success in the program.*

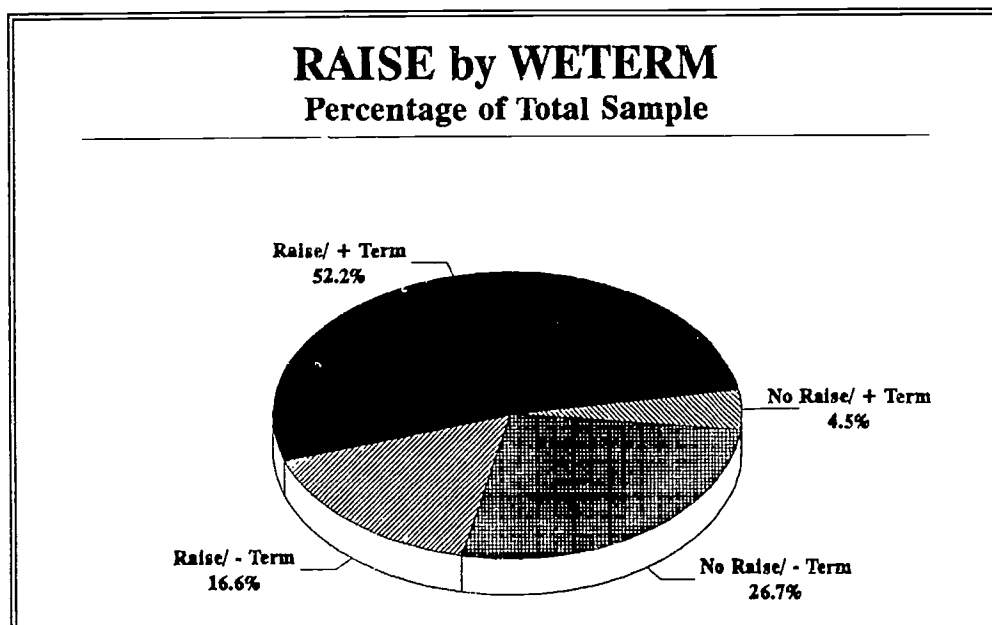


Figure 24

#### IV. OUTCOME CHARACTERISTICS

Positive anecdotal evidence and qualitative data aside, programs tend to be evaluated solely on outcome performance. The question "how well were the clients served" becomes easily transferred into "how many clients were gainfully employed and at what price?" Program apologists tend to over-emphasize the smashing success of such-and-such program component, while program critics tend to focus on strict placement percentages. Some count successes and some count heads. But in an era of decreasing program support and increasing accountability, program outcomes constitute a major concern for funders and managers alike.<sup>95</sup>

#### WORK EXPERIENCE TERMINATIONS

As of April 30, 1992, 249 clients had been terminated from work experience. One hundred and forty-one, or 56.6%, of those terminations were positive and 108, or 43.4%, were negative.<sup>96</sup> This does not imply that all 141 individuals were placed in competitive employment. Negative terminations were of two types: "refused to continue" or "administrative separation." The first value generally encompassed clients who simply disappeared or refused to comply with program objectives such as chemical dependency assessment and counseling. The second is euphemistic for "fired for cause." Positive terminations were more broadly defined and generally signified the successful completion of work experience or other program objectives. Values qualifying as positive terminations were: medical reasons, chemical dependency treatment referrals, mental health referrals, rehabilitative referrals, vocational training, full-time school, and competitive job placements. This understanding of a positive termination from work experience allows the participant a modicum of success on the way to self-sufficiency and, frankly, gives credit to the intense labors of the case managers and others in their efforts to best meet the needs of the clients.

But program connotations for positive and negative terminations can vary. One local work readiness educational program under the JTPA system, for example, recognized only two values for a positive termination: "Unsubsidized Employment" or "Attained 8th Grade Level." All other terminations were negative, even such values as "Health/Pregnancy" and "Treatment."<sup>97</sup> Obviously comparative analyses become useless with differing definitions; but more importantly for the homeless sample, some exactitude is lacking in the positive termination category. Consequently, another variable labeled TERMTYPE was devised with new values:

<u>Positive:</u>	Unsubsidized Employment
<u>Neutral:</u>	Family Care Problems Full-time School Health/Pregnancy Referred to Other Program Treatment Referral
<u>Negative:</u>	Administrative Separation Cannot Locate Refused to Continue



By utilizing this schema a more accurate picture of work experience terminations begins to surface. Ninety-nine participants, or 39.8%, attained a positive termination; 45, or 18.1%, were neutral; and 105, or 42.2%, were negative. Clearly this approach dramatically alters the positive percentages and results in a positive to negative ratio of "1 to 1.1." However, even a 40%/20%/40% split for this homeless sample should be no embarrassment.

In the original program definitions, 68.8% of the positive terminations were placed in competitive full-time jobs. The average starting salary was \$6.76 per hour with 61.2% of the positions involving benefits (usually medical) at the time of placement.<sup>96</sup> The range of the salaries was from \$4.00 to \$16.32 per hour, but the extremes at the top of the scale skew the data and some adjustment is necessary.<sup>97</sup> A 5% trimmed mean results in \$6.50 per hour, but an adjusted mean wage of \$6.30 per hour is more realistic and usable.<sup>98</sup>

Two characteristics of this sample are associated with the WAGE variable and both provide insights for job placement efforts. First, with WAGE as the dependent variable ( $Eta = .206$ ), those individuals self-reporting chemical dependency issues were more likely to receive a higher wage at placement. This is consistent with the highly motivational character of individuals in recovery. Second, WAGE and MONTHJOB were inversely related ( $-.239$ ). This suggests that as months since a full-time job increased, the wage at placement decreased.

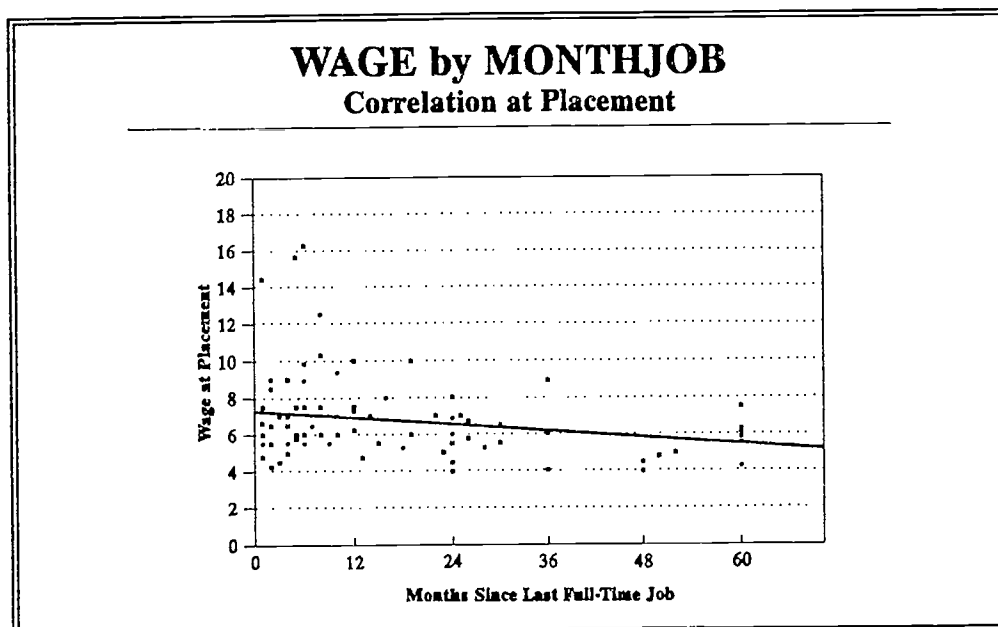


Figure 25

In general, the \$6.30 per hour average for wages (plus benefits) and the 70.0% job placement rate for positive terminations represent a conscientious jobs and training program for any targeted population. The fact that these results were obtained from a homeless sample involved in work experience only heightens that success.

## PREDICTORS OF SUCCESS OR FAILURE

Discriminant analysis is a sophisticated statistical procedure used primarily to distinguish between groups having a dichotomous (or trichotomous) outcome and subsequently to predict further group membership. This procedure continues by assigning each case in the database a prior probability, conditional probability, and posterior probability that it belongs to a particular group (or outcome). If a "stepwise" method is employed only those variables that meet certain tolerance levels (usually .001 with a F-to-enter at 1.0) are entered into the analysis. An "expected misclassification rate" is then calculated to determine what percentage of the cases have been classified correctly. Chance classification would have an expected misclassification rate of 50.0%; therefore, the Discriminant analysis must perform, at the minimum, better than chance alone.<sup>101</sup>

A conclusive Discriminant analysis is a balancing act based upon three criteria:

1. Parsimonious: Without sacrificing either of the other two criteria, the number of variables should be reduced. The stepwise method is particularly useful for this purpose.
2. Variability: Between-group variability should be as high as possible without compromising the other two criteria. This condition can be gauged from three statistics: an Eigenvalue above .50, a Canonical Correlation above .50, and a Wilks'  $\lambda$  below .70.
3. Classification: The percentage of cases correctly classified by the procedure should be as large as possible without violating the other two criteria.

All the variables were entered into Discriminant analysis using the Wilks' stepwise method in order to classify the cases with respect to the strictest outcome definitions of work experience, that is, positive and negative. Variables remaining in the equation, then, can be assumed to be "good" predictors of the outcome. In the initial analysis ten variables passed the test of tolerance. Both the criteria of variability and classification are satisfied, but obviously the number of variables is excessive. By systematically reducing the allowable number of steps and comparing the findings, the number of variables is reduced accordingly. In the sixth analysis, five variables passed the tolerance test and the requirements for variability with a classification rate of 78.95%.<sup>102</sup> In subsequent analyses the correct classification percentage changed little. However, in the tenth analysis the Eigenvalue dropped from .587 to .496, but with only one variable remaining. *The reason that the statistics of variability and the correct classification percentage change so little following the initial analysis is dependent solely upon the powerful influence of the RAISE variable.*

The ninth analysis, then, with only the RAISE and CDOBSERV variables, an Eigenvalue of .587, a Canonical Correlation of .608, a Wilks'  $\lambda$  of .630, and a classification rate of 78.9% meets all three criteria.<sup>103</sup> In the strictest terms this is the best model, but for comparative purposes the five variable model is as follows in ascending order of importance: HOME, OUTSIDE, MHOBSERV, CDOBSERV, and RAISE.<sup>104</sup>

#### HOME

Included at Step 5, the F-ratio-to-enter of this predictor is 33.85. In the baseline characteristics of this sample, "Months Homeless at Intake" showed a surprising result with 71.0% of the sample having been homeless for less than one year. HOME also manifests a low modest association with MONTHJOB revealing a direct relationship. *Although included in the five variable model, the usefulness of this predictor is limited.*

#### OUTSIDE

The F-ratio-to-enter is slightly higher here at 41.45. "Out of State Prior to Saint Paul" is one of the few variables that rejected the null hypothesis of no difference between Decisions I and Decisions II. *While this variable does show up in Step 4, its importance as a predictor seems limited by shifting demographic patterns and programmatic intentions.*

#### MHOBSERV

Included at Step 3, the F-ratio-to-enter is 52.93. *Clearly 17.3% of the sample exhibited mental health concerns during work experience, even after the screening of the work evaluation period, and the importance of this variable remains evident.*

#### CDOBSERV

This variable has a F-ratio-to-enter of 71.59 and also satisfied all criteria for inclusion into the two model analysis. Chemical dependency behavior that impaired work experience affected 35.7% of the sample. *Here again, issues of substance abuse, which is so important from the first Intake through the work evaluation and into work experience, plays a primary role in the life of the homeless program--and in the lives of so many of the program's participants.*

#### RAISE

The F-ratio-to-enter for this variable was a sizeable 121.52 and it almost stands alone as *the* predictor for work experience. Of the total sample, 68.8% actually reached the benchmark of two-months in work experience and of those individuals 75.9% were positive termination. *This powerful characteristic of the program overshadows all other considerations.*

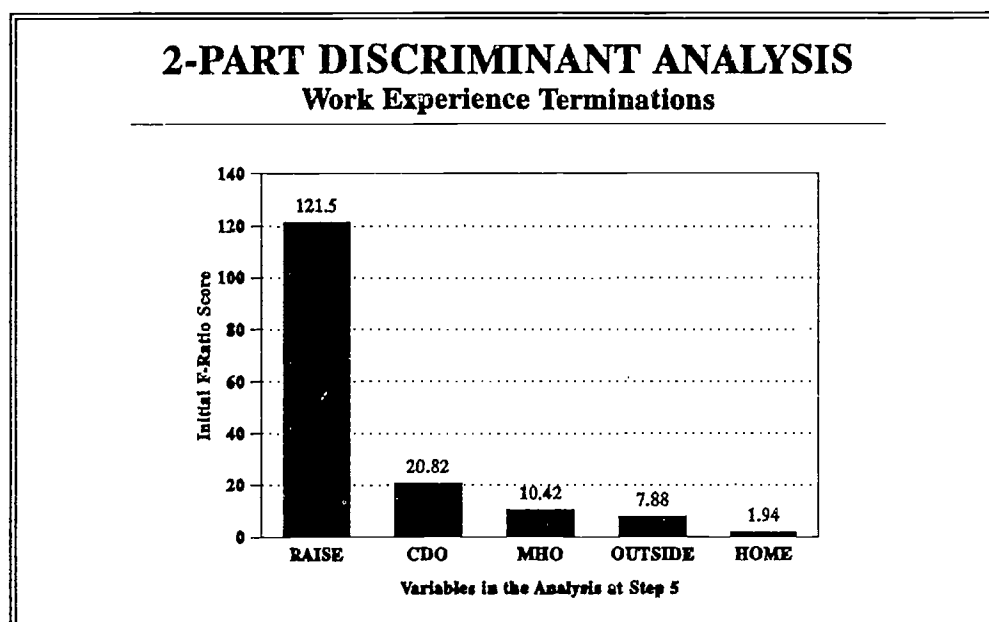


Figure 26

Discriminant analysis also can differentiate between groups with trichotomous values. Thus, the procedure was run using the positive, neutral, and negative termination values. In the initial analysis, after entering all the variables, again ten variables passed the tests of tolerance.<sup>105</sup> Following the parsimonious criterion, the fifth analysis, with six variables, seemed to present the most appropriate model.<sup>106</sup> Subsequent analyses, however, mirrored the results from the two-part approach. With the strength of the RAISE characteristic, the statistics of variability or the classification percentage changed little until the tenth analysis when the Eigenvalue dropped below .50. The RAISE and CDOBSERV variables remained.<sup>107</sup> Again, while this may be the best model, the six variable model is offered for comparative purposes.

For most of the study, ex-offender status plays no role. With a F-to-enter ratio of 12.96 it is included in the analysis at Step 6. The predictive value is extremely limited. "Receiving Assistance at Intake" is associated with the AGE and CD variables. As a predictor at Step 5, however, ASSIST is limited with an F-to-enter ratio of 15.29. With the GRADE variable, entered with a F-to-enter ratio of 18.74 at Step 4, the level of education (and literacy) becomes a minor consideration. The F-to-enter ratio for MHOBSEV is 24.05 and the inclusion of this variable at Step 3 is not surprising. Again the issue of observed chemical dependency problems surfaces with a F-to-enter ratio of 32.30 and as a part of the two variable model. While not as differentiated from the other variables in the three-part analysis with "only" a F-to-enter ratio of 60.82, the RAISE variable once again remains primary.

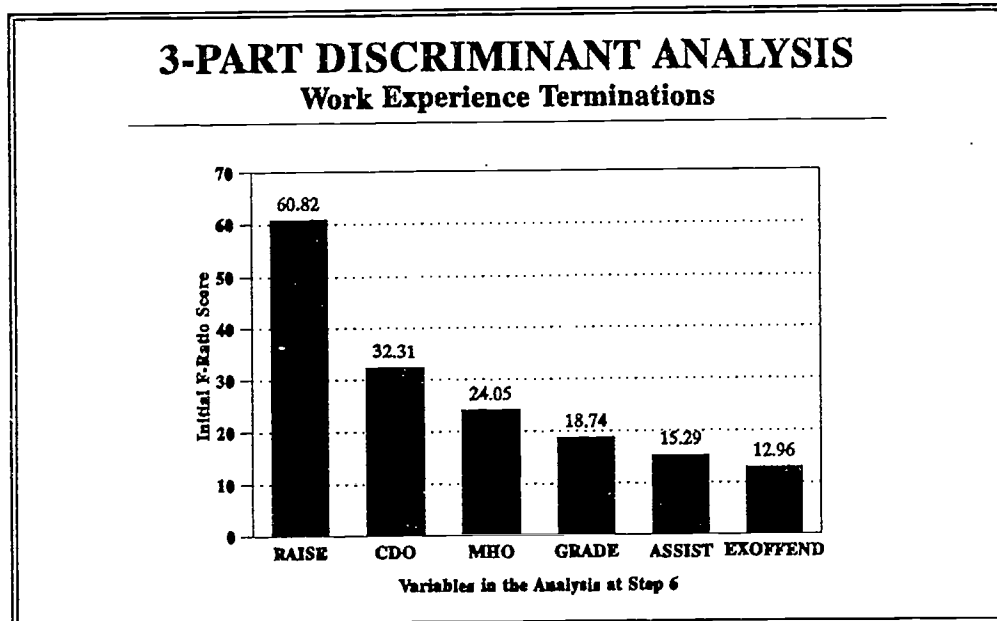


Figure 27

*After running multiple procedures, satisfying the three criteria, balancing the results, and considering both the dichotomous and trichotomous approaches to the data, one genuine, and very meaningful, conclusion remains. Reaching the two-month mark in work experience is unequalled as a predictor of success for this sample--and for this component of the program.*

## V. CONCLUSION OF THE STUDY

This program works. An important human service has been delivered in an imaginative, mutable, caring, and forthright manner that deserves replication. Work experience works. A crucial aspect of this program has been the time, training, and payroll provided through six months of guaranteed employment. A return to the items identified by the National Commission as components of a successful program should help in summarizing an effort that has satisfied those items--and more.

Screening: The default funnel approach of Outreach, Intake, Second Interview, and two-week Work Evaluation helps ensure that those individuals most in need of, suited for, and desirous of work experience are enrolled. In the end, the staff does not screen the clients; rather, the clients screen themselves.

Documentation: All appropriate documentation is required: including W-4 forms, I-9 forms, picture identifications, Social Security cards, state child support declarations, and contractual program agreements. Many individuals, however, lack the proper documentation mandatory for the world of work. All participants are assisted, both logistically and financially, in obtaining birth certificates, State ID cards, Social Security cards, and other papers as needed. This not only helps the clients prepare for future employment, but also satisfies requirements for cashing payroll checks.

Housing: Housing services are available throughout the program and involve informational and financial assistance. Most local employers recognize the addresses of shelters and this supposedly simple piece of information can be a major impediment to securing a job. Thus, the housing component not only enhances stability, but also provides addresses and contacts necessary for employability.

Staff Awareness: The knowledge base for the staff from all the cooperating agencies has increased dramatically in the last three years. For example, findings from this study concerning the sociability issue have led directly to the establishment of "Life Skills" classes conducted by the case managers. In addition, the powerful impact of the RAISE characteristic has been recognized by the case managers and has helped concentrate their efforts in the first two months of work experience. Some assumptions have been shattered and some hopes adjusted, but hard lessons have been incorporated into a much improved service delivery.

Case Management: The availability and thoroughness of the case managers have been critical. Participants are not lost in a morass of people and paperwork, but understand that they have one primary advocate to contact for any reason. Also, the networking arrangements with the work experience coordinator and worksite supervisors have meant a more proactive approach to potential problems.

Rehabilitation: Alcohol, drug, and mental health (ADM) referrals have been a mainstay of the program. A participant, for example, could enter work experience, have an issue surface, be referred for an assessment and possibly treatment, and finally return to work. Clients understand that such referrals do not necessarily imply a termination, but merely an interruption.

Failings: Aside from the more prevalent barriers such as substance abuse, the fear of failure and fear of success have been substantive to the self-defeating behavior of many participants. "Second-chances" have been common. "Third-chances" have not.

Follow-Up: Even with the successful completion of work experience and the beginning of competitive employment, obstacles have not simply disappeared. Months, sometimes years, of chronic self-defeating behavior demand close follow-up and continued support.

Work experience seems ideally suited for the homeless population in that it provides sufficient time for barriers to surface and to be addressed, enhanced activities to promote practical and immediate concerns, and a remunerative structure to sustain the participants in their everyday lives. In the larger scope of this program, work experience has been supported and augmented by a clear focus, a deeper understanding of the population, and a case managed perspective with adequate resources for support services.

The results from Saint Paul bring out the best in work experience and the best in case management. No wonder that it seems to bring out the best in the participants themselves.

## VI. NOTES

1. For a good discussion of the varied approaches to employment and training programs for disadvantaged participants see Laurie Bassi and Orley Ashenfelter, "The Effect of Direct Job Creation and Training Programs on Low-Skilled Workers," in Sheldon H Danziger and Daniel H. Weinberg's Fighting Poverty: What Works and What Doesn't (Cambridge: Harvard University Press, 1986), 133-151. Bassi and Ashenfelter, it seems, make too clear of a distinction between work experience and public service employment (PSE) since many programs have been extremely localized. In Saint Paul, at least, the differences are vague and technically work experience is probably best characterized as work experience clients involved in public service employment.
2. Helping the Homeless be Choosers: The Role of JTPA in Improving Job Prospects, "Special Report No. 28," March, 1990, 7. This report presents excellent and readable materials concerning the current problem of homelessness and correctly emphasizes the need for inclusive services. Although this quote is awkward, the point is that along with (or because of) all their barriers the homeless need money--badly. This author is unaware of any studies concerning the poverty rate among homeless samples.
3. Actually 263 individuals were enrolled in work experience, but 14 of those participants were youth referrals from Lutheran Social Service. They will not be considered in this study since the data is unavailable and the concerns of the youth are somewhat dissimilar from the concerns of the adults--notably education and substance abuse issues. Also, only two clients were referrals from the YWCA. Therefore, the term "case manager" applies to the staff at Catholic Charities.
4. "Homeless" as used for eligibility purposes in the program and in this study is a technical term meaning "no permanent residency." Someone in prison, for example, or someone living with friends but paying rent would not qualify as homeless. For a discussion of the difficulties in estimating the size of the homeless population see the entire volume of Evaluation Review: A Journal of Applied Social Research, Vol. 16, No. 4, August, 1992.
5. Helping the Homeless, 15-17. One item missing from this list is a thorough evaluation of the program as an impact assessment and proposal for program modifications. In fact, literature specifically concerned with homeless employment and training programs is scarce. For example, in the work edited by Debra J. Rog, Evaluating Programs for the Homeless, New Direction for Program Evaluation, No. 52, Winter, 1991, work related issues are mostly absent. Hopefully this study can partially fulfill that requirement.
6. "Results of the Twin City Survey of Emergency Shelter Residents, February 22, 1990," Wilder Research Center, Amherst H. Wilder Foundation, July, 1990, 41, places the mean at 34.1 years and "Homeless in Minnesota: Homeless Adults and Their Children, October 24, 1991" Wilder Research Center, Amherst H. Wilder Foundation, June, 1992, 41, places the mean at 33.3 years. See also



Peter Rossi, Without Shelter: Homelessness in the 1980s (New York: 1989), 24 and Richard D. Bingham, Roy E. Green, and Sammis B. White, The Homeless in Contemporary Society, (Beverly Hills: 1987), 161. Rossi identifies the average age at 36.1 years, while James D. Wright, in his "The National Health Care for the Homeless Program," cites the median age at 33.1 years.

7. Ibid. Rossi, Without Shelter, has a comparable figure at 79.7% male and 20.3% female. In another study, a sample of the homeless population who used shelters and soup kitchens nationwide shows a 81% male/19% female breakdown, see Martha R. Burt and Barbara E. Cohen, America's Homeless: Number, Characteristics, and Programs that Serve Them (Washington, DC: July, 1989), 38. Since Wright's study deals with health care issues and since women access health care more frequently than men, his numbers are somewhat different at 68.7% male and 31.3% female, Wright, "National Health Care," Contemporary Society, 161.
8. For example, Wright, "National Health Care," 161 and Burt and Cohen, America's Homeless, 38, both have the White population at exactly 46.0%.
9. The JTPA-Eligible percentages relate to the population (economically disadvantaged) in the labor force, City of Saint Paul Job Training Plan, July 1, 1992 through June 30, 1994, 152.
10. In this instance, after breaking out the total sample into the Decisions I and Decisions II groupings, the  $X^2$  statistic was 4.998 with an observed significance level of .025. Thus, the null hypothesis that the two groups stem from the same population is *rejected*.
11. A related ethnographic question involves substrata of the same racial grouping. For example, a hypothesis could be made that Whites or Blacks from outside of the area would constitute a different ethnographic unit than those native to the metropolitan area. Only one variable rejects the null hypothesis that the groups are no different. With a very weak correlation coefficient of -.235, Blacks from outside the metropolitan area were less likely to have a high school diploma or GED, than Blacks from inside the area. This finding is consistent with the high graduation percentage for the State of Minnesota.
12. Years in Saint Paul at Intake does *not* imply living at the same residence or even attending to address changes. For example, during Decisions I a curious situation developed out of the attempt to mail W-2 tax forms to program participants: 51, or 35.4%, of the subsample had their forms returned to the Public Schor's.
13. The figures from the 1990 Shelter Board Report are surprisingly close at 39.0% and 38.9% respectively, 69. However, the results from the 1991 report change dramatically from 29.2% in the metropolitan area for 12 months or less and 49.9% for 61 months or greater, 56. Further investigation reveals differences between the "transient" and "settled" groups. Not surprisingly, the OUTSIDE variable is modestly associated in that more clients than expected who had been in Saint Paul for 12 months or less were from out of state (.555). The other relationship is peculiar. More clients than expected who had been in Saint Paul for over 61 months self-reported chemical dependency issues (-.209). An assumption might be that these individuals were products of the chemical

- dependency treatment system. Controlling for "Place of Residence at Intake," the results not only fail to support this assumption, but show that this group was more likely to be in the *shelter* system.
14. "Shelter Board Report, 1991," 51.
  15. The  $X^2$  statistic is 11.87 with an observed significance level of .0005.
  16. "Shelter Board Report," 145. This question is compared to Table 168: "Were You Ever Physically Mistreated As A Child," which cannot be combined with Table 169: "Were You Ever Sexually Mistreated As A Child," without double-counting. The Shelter Board percentages are 28.5% and 12.9% respectively. The figures from the 1991 Report are slightly different at 27.8% and 15.4%, 228-229.
  17. "Shelter Board Report, 1990," 67.
  18. No comparable statistics were available from the Shelter Board Reports. Rossi, however, shows 42.1% of the population as having had a prison or jail sentence, Without Shelter, 24.
  19. The Shelter Board Reports are similar for the "12 months or less" category: 1990, 74.8% and 1991, 69.0%, 72 and 89. This may be due, in part, to the question asked in the 1990 Report: "How Long Have You Been Without Own Housing?". The shelter sample may have considered recent incarceration or residency at a treatment center to have been their "own" housing. Burt and Cohen's figures are considerably lower with only 54% homeless for 12 months or less, America's Homeless, 41. This is somewhat understandable since they are investigating only shelter and soup kitchen users--a more traditional homeless population.
  20. The Shelter Board Report for 1991 shows that only 45.3% had a full-time job in the last 12 months. This figure is more consistent with Burt and Cohen's sample from the shelter and soup kitchens at 40%, America's Homeless, 41. Rossi's figure of 73.4%, on the other hand, not only exceeds the percentages from the shelter survey and the shelter and soup kitchen survey, but the work experience sample as well, Without Shelter, 24.
  21. Unless otherwise indicated, the statistic in parentheses is the Pearson's R correlation coefficient.
  22. Wright's combined figures for "some high school" and "high school graduates" total only 60.7%, "National Health Care," 161. Burt and Cohen's sample of shelter and soup kitchen users does little better at 71%, America's Homeless, 39. Consequently, the level of education of this work experience sample not only seems, but is, higher than expected.
  23. "Shelter Board Report, 1991," 49.

24. Both the State and National averages are based upon 1987 rates. A more recent report on graduation rates in Saint Paul places the figure at 87.3%. This percentage includes dropouts from all alternative schools and programs specifically serving dropouts.
25. For both of these variables a difference did exist between Decisions I and Decisions II with the latter registering higher percentages.
26. All of the 234 results from the Transitions program were researched and 169 valid cases were used in this comparison. A random sampling of 1,420 STRIDE clients produced a total of 122 valid cases from the 155 sampled. STRIDE is the local equivalent of the national JOBS program.
27. For comparative purposes a non-homeless staff sample of 35 individuals was administered the instrument. For this sample "Self" and "Partner" head the list with means of 2.16 and 2.67 respectively.
28. "Job" was also in first place for the staff sample with a mean of 2.45. This would seem to indicate that there is little behavioral difference between acquiring and maintaining employment.
29. For the staff sample "Health" falls to eighth place with a mean of 6.22. Lack of behavioral consistency with respect to the health issue seems uniform.
30. Although re-ordered, the exact same nine items appear in both the "priorities" and "time and energy" sections for the staff sample.
31. "Job" and "Health" were also out of balance for the staff sample. However, the difference for "Self" was only 2.04--considerably more balanced than for the homeless sample.
32. The median for the homeless sample is 36.5. The overall mean for the staff sample was 22.87. Although the number of cases is considerably smaller, this figure does suggest more balanced lifestyles.
33. For the staff sample the mean for actual recreational activities was 7.14--almost two points lower than for the homeless sample.
34. The Self-Assessment Scales used here are based upon scales originally compiled and developed by Ardythe A. Norem at the University of Minnesota (1977) from nine other instruments. Norem's scales involve seven interpretive categories, which she terms "item cluster," designed to measure self-esteem. One sample tested by Norem involved 396 white, middle-class, suburban adolescents and the results show good internal and external validation of the scales. See Ardyth A. Norem, "A Multidimensional Construct of Self-Esteem," in the Journal of Educational Psychology, 1976, Vol. 68, No. 5, 559-565. The scales in this study contain expanded Comparative and Normative sections and a reduced and reworded Reflective section in order to better measure the attitudes of the homeless sample. The SAS scales and revisions are used by permission of the author.

35. Reliability analysis determines the effectiveness of a scale in yielding results that are stable and interpretable in a range from 0 to 1 if positively correlated. The statistic employed is Cronbach's alpha with a higher figure indicating better reliability. In this instance, the coefficient of .843 indicates a reliability in the middling range. The "alpha if item deleted" statistic identifies the Naive variable as the least reliable and this is consistent with the correlation analysis below. If Naive is deleted, Cronbach's alpha increases to .853. New scales are currently being tested replacing these three variables with Humorous, Curious, and Impatient.
36. Cronbach's alpha is .766. The least reliable variables on this scale are Open and Impatient. These variables have been replaced with Friendly and Productive.
37. Cronbach's alpha is .746 and if Question 35 is deleted, it jumps to .780. Question 35, "I get upset when I do poor work," clearly does not relate well to other items and has been replaced with "I enjoy a good laugh."
38. A 5% trimmed mean disregards the smallest 5% and the largest 5% of the scores and calculates a new mean from the remaining observations. Maximum-likelihood estimators (M-estimators) include the extreme scores but assign them smaller weights. The M-estimator used in this study follows Huber and is referred to as an "adjusted" mean.
39. The same staff sample used in the "Pie of Life" Charts analysis was administered these Self-Assessment Scales for comparative purposes. Also, T-Tests were conducted on all the variables to determine any difference between Decisions I and Decisions II in the homeless sample. In the Comparative section the results for Productive, Clumsy, Intelligent, and Confident all *rejected* the null hypothesis that the two groups were from the same population. In each case the mean for Decisions II was significantly higher. Intelligent again surfaced in the results from the Normative section. The mean for Decisions II was significantly *lower* indicating that this sub-sample was extremely self-critical. Accordingly, the means from the subscores for each section were also significantly different. The findings for two statements, "I do not let others know the real me" and "I compare myself to others too often," in the Reflective section also rejected the null hypothesis. Again the means from Decisions II were higher.
40. The Lilliefors version of Kolmogorov-Smirnov is used to test for normality. While the observed significance levels for most of the variables appear to reject the null hypothesis of normality, this would generally be the case for a sample this size. More importantly, the normal probability plots show only a small departure from normality.
41. The 5% trimmed mean for the Social variable, Question 12, is .6253 and very close to the Huber M-estimator at .6294. Interestingly, the staff score for Social was lower standing at .519.
42. Again, the normal probability plots mirror the findings from the Comparative section.

43. This, in part, explains the negative and weak correlation coefficients between alike items on the Comparative and Normative scales: Mature (-.006); Reliable (-.159); Intelligent (-.183); Social (-.194); Practical (-.203); Lazy (-.280); Clumsy (-.280); Irresponsible (-.312); Kind (-.329); Naive (-.337); and Careless (-.350).
44. The staff sample, however, felt *more* of a need to deal with sociability than did the homeless sample with a mean of -.621.
45. The distribution for this variable was so highly centralized around the median that the M-estimator could not be calculated. This was also the case for "I like the real me." The results from the staff sample were even higher for the "good job" variable at 2.97 suggesting that neither group has a poor attitude toward work.
46. The staff sample scored slightly higher concerning the "real me" with a mean of 1.96 but lower on the "feel good" variable at 1.73. Group discussions during the work experience orientations and the living skills sessions appear to confirm these findings and point, rather, to the "fear of failure" and the "fear of success" as major obstacles to motivation. Case managers contend that this "feel good" aspect of self-esteem could be chemically based--a reasonable supposition. Conversely, since many of the participants are recent graduates of treatment programs, the high mean for "feel good" could be a product of the "high" experienced during recovery. Since correlations could not be drawn between the Self-Assessment Scales and other variables, no conclusions can be reached.
47. The respective scale scores for the staff sample were: Comparative, 13.48; Normative, -9.10; and Reflective, 17.97.
48. The rotation phase of Factor analysis helps with ease of interpretation by creating a simpler structure and thus better identifying the factors involved. This phase has absolutely no affect on the question of goodness-of-fit, but is executed primarily to name the factors. A Varimax method was chosen and any factor loadings under .5 are excluded.
49. The Kaiser-Meyer-Olkin measure of sampling adequacy is a test to gauge whether Factor analysis is even worthwhile for the given data. For example, if the correlations between variables cannot be explained by other variables, then no factors can be estimated. A low KMO measure suggests that the Factor analysis be abandoned. In this instance the score is .845, easily high enough to pursue the underlying factors. The possibility exists that this data may not come from a multivariate normal population and therefore the Bartlett test of sphericity is used to determine whether the data produces an identity matrix. The score must be low and in this instance it rejects the hypothesis that the sample is identical at .000. This analysis closely follows Jae-On Kim and Charles W. Mueller, Introduction to Factor Analysis, Sage University Paper Series on Quantitative Applications in the Social Sciences, series no. 07-013, Beverly Hills and London: Sage Publications.
50. Some support for the goodness-of-fit in this analysis and the three factor model can be found in two other statistics. The amount of variance explained by the three factors for each of the variables is known as communality. A larger number between 0 and 1 would show that a good deal of variance can be accounted for by the model. In this analysis the communalities are only modest

as follows: five variables over .60; six variables over .50; and two variables over .40.

51. The KMO measure remains high at .801 and the Bartlett test for sphericity is again .000. However, communalities are poor: three variables over .60; six variables over .50; three variables over .40; and three variables only over .30.
52. The KMO measure is .785, in the middling range, and the Bartlett test of sphericity is again .000. The residuals between the observed correlation matrix and the reproduced correlation matrix is of some concern. Seventy, or 45.0%, of the residuals were greater than .05, but 10 involved the problematic Need Positive variable.
53. Notice that Factor 5 is not included in the table. The reason that Factor 5, with only "I feel at ease with myself" included in the factor, even remains in the analysis is that when omitted the total variance explained fell to 52.3%.
54. Factor analysis, as expected, confirms results from the Correlation analysis and, in turn, expands on those conclusions. The Feel Close, Like Real Me, and Know Real Me variables, for example, remain unassociated. Although Factor analysis is based on the supposition that certain factors will arise out of the data and help explain the phenomenon under investigation, factors can be "forced" into the analysis. In this case an artificial factor called "Relatability" was created and contained these three variables. By selecting one factor the resultant factor matrix shows the association of the variables to Relatability--or, in other words, the factor loadings are the correlations between the three variables and the factor on a scale from 0 to 1. Again, "I do not let others know the real me," even in this limited context, does poorly.

Variable	Factor Loading	Factor Score	Communality
Feel Close	.675	.538	.456
Like Real Me	.654	.522	.428
Know Real Me	.609	.485	.370

55. "Shelter Board Report, 1991," 234-235. The figures for the 1990 Report were slightly different at 18.8% and 49.3% respectively.
56. "Shelter Board Report," 142-144. Rossi's figures are close with 34.3% rated a "chronic mentally ill," Without Shelter, 24. Wright, on the other hand, suggest that only 18% of the clients involved in Health Care for the Homeless projects had emotional, psychiatric, or mental impairments, "National Health Care," 163. E. Fuller Torrey, in this excellent work Nowhere To Go: The Tragic Odyssey of the Homeless Mentally Ill (New York: 1988), concurs with the one-third estimate, 7. Torrey convincingly argues that the deinstitutionalization of the mentally ill and the rise of community mental health centers has had dire societal consequences. Mental health care has moved from the "suffering sick" to the "worried well" and he contends throughout that twice as many seriously mentally

ill people are homeless as reside in public mental hospitals. Another, more fully documented, critique is offered by Rael Jean Isaac and Virginia C. Armat in their comprehensive endeavor, Madness in the Streets: How Psychiatry and the Law Abandoned the Mentally Ill (New York: 1990). Isaac and Armat solidly make the case that the "myth" of mental illness compounded the treatment of Torrey's "suffering sick." A chilling primary account of how this phenomenon obscured serious mental illness is provided by Mark Vonnegut in his autobiographical work, The Eden Express (New York: 1975).

57. No statistical differences were discovered between Decisions I and Decisions II with respect to self-reported or observed mental health issues.
58. Although the participants who both self-reported mental health issues and exhibited mental health problems only accounted for 4.8% of the total sample, the figures are more revealing. Only 4.1 were expected in this category and the actual count was 12.
59. The expected number of clients reporting both mental health issues and abuse was 5.4. Since both these self-reported variables deal with areas not readily disclosed by individuals, the actual numbers may be assumed to be higher.
60. Only 12.4 were expected.
61. A recent estimate is that alcohol abuse among the homeless approaches 40% with an additional 10% abusing illicit drugs. This combined percentage would seem close to figures for this sample. See Robert B. Huebner and Scott B. Crosse, "Challenges in Evaluating a National Demonstration Program for Homeless Persons with Alcohol and Other Drug Problems," in Debra J. Rog's, Evaluating Programs for the Homeless, New Directions for Program Evaluation, no. 52, Winter 1991 (San Francisco: Jossey-Bass Publishers, 1991), 33.
62. No differences were detected between Decisions I and Decisions II.
63. "Shelter Board Report," 128-132. Even with these sizeable figures only 17.9% reported having been involved in an alcohol or drug treatment program.
64. This correlation coefficient is very weak and 55 clients fit the category; only 40.8 were expected.
65. This subgroup is the key to the association since only 32.9 clients were expected and yet the actual count was 48. Even so, probably the most troubling figure is that 41 individuals denied chemical problems and yet had substance abuse impair their ability to function in work experience.
66. Extensive T-Tests and the  $X^2$  statistic were used to determine if the group referred for psychological evaluations was different from those clients not referred. No differences for any of the external variables were detected.
67. Thirty-six is not an adequate sampling size for correlation analysis or subsequent analyses based upon a correlation matrix. Nevertheless, since Factor analysis has been a preferred procedure for determining "part scores" or subscores concerning the WAIS-R, an abbreviated analysis was conducted. The results,

only suggestive, show considerable consistency with traditional factorial constructs of Verbal Comprehension, Perceptual Organization, and Memory. See the classic works by Jacob Cohen in this area: "A Factor-Analytically Based Rationale for the Wechsler Adult Intelligence Scale" and "The Factorial Structure of the WAIS between Early Adulthood and Old Age," Journal of Consulting Psychology, 1957, 21, 451-457 and 283-290 respectively.

68. The reliability of the WAIS-R is generally considered quite good. A comparison of the work experience correlation matrix with a study of 933 individuals, in fact, shows stronger results with only four of the 55 coefficients in the sample actually less than in the comparison group. While for the comparison group the Object Assembly subtest has the weakest relationship, for the work experience clients the Digit Symbol subtest assumes that position for reasons that will be discussed below. Even so, the Cronbach's *alpha* reliability coefficient stands at .926. This value is large and indicates that the scale is quite reliable. See Lewis R. Aiken, Psychological Testing and Assessment (Boston: 1985), 210.
69. This subtest combined with Vocabulary could constitute a "Hold Information" category not highly susceptible to anxiety and stress. The combined mean is 9.72.
70. In this instance the percentile ranking is 37.68%. Thus, 62.32% of the population could be expected to score *higher* than the sample. Even so, the results are considered "average."
71. This subtest combined with Arithmetic and Digit Symbol forms an "Anxiety" category. The average is 8.22--well removed from the "Hold Information" variable.
72. The percentile rank is 36.1%.
73. The percentile rank is 56.01%. Thus, only 43.99% of the population would likely score higher.
74. The combined subtests of Information and Arithmetic can show school achievement. In this case a mean of 8.93. However, with this sample, school achievement might be better represented by combining Vocabulary and Arithmetic for a mean of 9.74.
75. The percentile rank is 37.99%.
76. Two interesting sub-categories are possible with this subtest. A score of four points or more below Vocabulary can show poor judgment, while a similar difference with the Information subtest can show ineffectual use of knowledge.

Only one client, or 2.8% of the total, qualified for the first category, but with a high Vocabulary score of 16 and a Comprehension score equal to the test mean at 10. This individual's history of alcohol and cocaine dependency and less than reflective responses to worksite issues seems to fit the profile. He was eventually placed in a full-time clerical position at \$9.39 per hour with full benefits.



No client scored four points or higher on Information than on Comprehension. In fact, six people, or 16.7%, qualified for the reverse calculation. This would seem to indicate an effective use of knowledge available.

77. The percentile rank is high at 57.90%.
78. Consequently, the percentile rank is 50.00%.
76. The score breakdowns for these individuals is as follows:

Case #	Verbal I.Q.	Performance I.Q.	Termination
201	127	90	Negative
203	149	128	Positive
209	131	113	Positive
215	92	77	Positive
293	115	98	Negative
296	147	119	N/A

Although four of the six individuals had Performance I.Q. scores above the mean, *all six had chronic histories of alcohol abuse and chemical dependency*. One participant died during work experience and three of the remaining five were positive terminations.

80. The percentile score is 25.67%. Fully three-quarters of the population scores higher on Picture Completion than this sample.
81. The percentile rank is 47.79%.
82. The percentile rank is 38.31%.
83. The percentile rank is 39.26%.
84. An assumption might be that a good inverse relationship would exist between Digit Symbol and the "Hold Information" variable. This turns out not to be the case.
85. Conversely, only 13.15% of the general population would score lower.
86. The percentile rank is 40.65%.
87. The score breakdowns are as follows:

Case #	Verbal I.Q.	Performance I.Q.	Termination
235	102	130	Negative
274	82	98	Negative
283	93	110	Positive
289	82	97	Positive

- The "Hold Information" category for long-term memory has a sample mean of 9.72. Here the subsample mean is only 7.38, perhaps indicating low intellectual abilities and curiosity.
88. The percentile rank is 43.87%. The validity of the Full Scale I.Q. score diminishes when the difference between Verbal I.Q. and Performance I.Q. is large.
  89. Gary Groth-Marnat, Handbook of Psychological Assessment (New York: 1984), 66.
  90. The statistical procedure was run by dividing the WAIS-R scores into "above-below" sample mean and "above-below" test mean groups. The results showed so differences. The WAIS-R scores were also crosstabulated with the RAISE variable in order to gauge success or failure in reaching the two-month benchmark. None of the findings were statistically significant.
  91. An abbreviated Discriminant analysis utilizing only the WAIS-R scores helps to confirm the importance of Vocabulary. Using the Stepwise Wilk's method, Vocabulary, followed by Arithmetic, were the only two variables qualifying for inclusion in the analysis. Since the classification rate only increased from 69.44% to 72.22% with the inclusion of Arithmetic, Vocabulary alone satisfies the requirement for the most parsimonious design.
  92. There is no statistically significant difference between Decisions I and Decisions II with respect to receiving the raise.
  93. The expected value for clients *not* receiving the raise and manifesting chemical use issues during work experience is 27.7. Thirty-six was the actual count.
  94. One hundred thirty clients had a high school diploma or GED and received the raise. Only 121.8 were expected.
  95. Cost effectiveness is certainly another area of concern. Over the two years in this study participant wages and fringe amounted to \$320,449.10 with an additional \$61,813.95 necessary for administration for a grand total of \$382,263.05. The average total cost per client, then, was \$1,535.19. While the "value of work performed" may be difficult to estimate in some programs, the figure here is straightforward. Over \$320,000 of labor was contributed directly to the community.
  96. No differences were detected between Decisions I and Decisions II for either termination variable. This result is disconcerting. Although programmatic changes in Decisions II, perhaps, gave rise to a "harder to serve" sample, a more favorable result would have entailed differences.
  97. These understandings are typical of many JTPA programs and the outcomes for the Work Readiness Education Program were: positive, 31.0%; negative, 69.0%. Utilizing the three-group system of positive, neutral, and negative, these program results were, more understandably: positive, 31.0%; neutral, 31.0%; and negative, 38.0%. By including the Neutral group, the positive to negative

ratio for Work Readiness shifts from "1 to 2.2" with the JTPA system to "1 to 1.2" with the program system.

98. No wage differences were detected between Decisions I and Decisions II. Again, this is problematic since higher wages at placement for Decisions II would have been preferred given a full year of program experience. However, differences did surface with respect to benefits. Thirty-three clients received benefits in Decisions II and only 28.1 were expected.
99. Two extremes account for much of the skewness. The two top salaries, \$15.65 and \$16.32 per hour, were related to two individuals who lost their jobs at a local automobile plant due to crack-cocaine usage and became homeless. After successfully completing a lengthy chemical dependency treatment program and work experience at janitorial worksites, with the help of the union their jobs were re-instated.
100. Another indication that the mean should be adjusted stems from plotting the data. The normal probability plot and detrended normal probability plot (residuals) both show curvilinear constructs.
101. Actually, 50.0% would be expected if the groups were of near equal size. Only two of the cases were excluded from the analysis due to missing or out-of-range group codes and therefore 247 cases were used in the prior probability breakdown as follows: 140 positive, 107 negative. Since these groups are not of equal size the "expected" correct classification percentage would be 50.9% with a random error proportion of 49.1%. The WETERM five variable model error proportion is 21.1% (1 - 78.9%). Therefore, this model, compared to the random error model, reduced the proportion of error by 57.0%  $[(49.1\% - 21.1\%) / 49.1\%] = 57.0\%$ .
102. The actual figures for predicted group membership were as follows:

Actual Group	# of Cases	Predicted Group	
		Positive	Negative
Positive	140	122 (87.1%)	18 (12.9%)
Negative	107	34 (31.8%)	73 (68.2%)

103. Since the RAISE variable is so powerful, the same procedure was run by omitting this variable in order to gauge the predictive value of the other variables in the analysis. The results were similar; however, the Eigenvalue was .203, the Canonical Correlation was .411, and Wilks'  $\lambda$  was .831. None of these figures meet the criterion of variability.
104. Many possibilities exist for comparing the five variables and the easiest, perhaps, is to consider the F-ratio-to-enter the analysis at each of the steps. However, this number can be considerably different from the initial F-ratio since at each step fewer variables remain in the analysis. The F-ratio-to-enter, then, becomes

comparatively exaggerated. Therefore, statistics for the chart will be based upon the initial Wilks'  $\lambda$ , the U-statistic.

105. Again, 247 valid cases entered the analysis with group membership as follows: 99 positive, 44 neutral, and 104 negative. The "expected" correct classification percentage is low at 37.0% and therefore the random error proportion is 63.0%. The TERMTYPE six variable model error proportion is high at 37.2% (1 - 62.8%). This model compared to the random error model only reduced the proportion of error by 41.3%.
106. The actual results for this analysis are quite different than for the two-part discriminant procedure:

Actual Group	# of Cases	Predicted Group		
		Positive	Neutral	Negative
Positive	99	65 (65.7%)	25 (25.3%)	9 (9.1%)
Neutral	44	17 (38.6%)	23 (52.3%)	4 (9.1%)
Negative	104	12 (11.5%)	25 (24.0%)	67 (64.4%)

107. The Eigenvalue is .594, the Canonical Correlation is .611, the Wilks'  $\lambda$  is .624, and the correct classification percentage is 60.32%. With RAISE as the sole variable the Eigenvalue falls to .499. As with the two-part analysis, the procedure was run by omitting the RAISE variable. Again, the results failed to meet the criterion of variability.