SECTION FOUR

EMPLOYMENT, JUSTICE SYSTEM INVOLVEMENT, AND HEALTH OUTCOMES

EMPLOYMENT, JUSTICE SYSTEM INVOLVEMENT AND HEALTH - EXPLANATION OF ANALYSES

Changes in employment, justice system involvement (including arrests and time incarcerated), and health status can serve as other indicators of changes in substance use. Descriptive data, using means and percentages for employment and justice system involvement, are presented for the past 12 months and the past 30 days before intake and at follow-up.

Changes in variables such as employment and education, justice system involvement, and health ratings are presented using the percent of clients in each category. Significance of change is examined from intake to follow-up using a z test for differences in the proportion in each category between the intake and follow-up groups. For continuous data, such as the number of arrests during the preceding 30 days, or the number of days paid for work in the past 30 days, the percent of change (increase or decrease) from intake to follow-up is presented. For these measures, statistical significance was examined using paired samples t-tests. In addition, for days of paid employment, the analysis controlled for the client's days living in a controlled environment where paid work would not be possible.

4.1 EMPLOYMENT

The following figures show significant changes in employment status and number of days paid for working, as measured for the preceding 30 day period, and changes in education/job training status at the time of the follow-up interview. The percent of clients are presented for each category of employment at intake and follow-up.

Using the z-test for proportions, significant improvements in employment were noted from intake to follow-up (**see Figures 4.1a and 4.1b**). The proportion of clients employed full-time increased significantly by 51.7%, the proportion of clients with any employment, even part-time, increased significantly by 35.5%, and the proportion of clients reporting unemployment decreased significantly by 28.4%. In addition, clients who reported working were paid for a significantly greater proportion of days of work at follow-up (38.7%) than at intake (30.5%).

Figure 4.1a. Percent of Clients in Each Employment Category (n = 888)

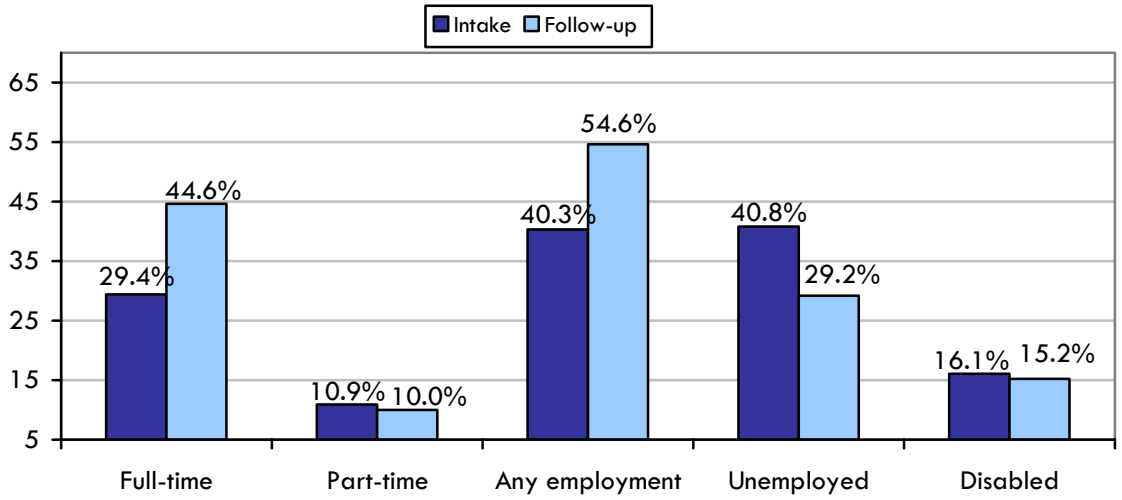
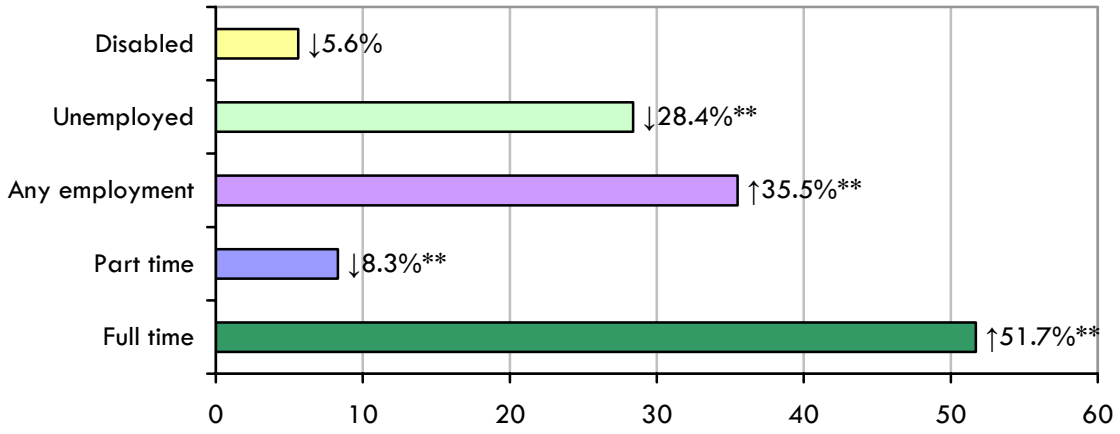


Figure 4.1b. Percent of Change in Employment from Intake to Follow-up [a]



[a] Significance established using z-test for proportions.
[b] Significance established using paired samples t-test. Includes only those who were not in a controlled living environment for 30 days in the past 30 days at intake or follow-up
*p < .01. **p < .001.

In addition to experiencing significant improvements in employment, the sample demonstrated an overall increase in school/job training enrollment (**see Figures 4.1d and 4.1e**). Using the z-test for proportions, there was a significant increase in the percent of individuals enrolled full time (37.2%), and the percent of individuals enrolled full or part time (39.7%).

Figure 4.1d. Percent of Time in School/Job Training

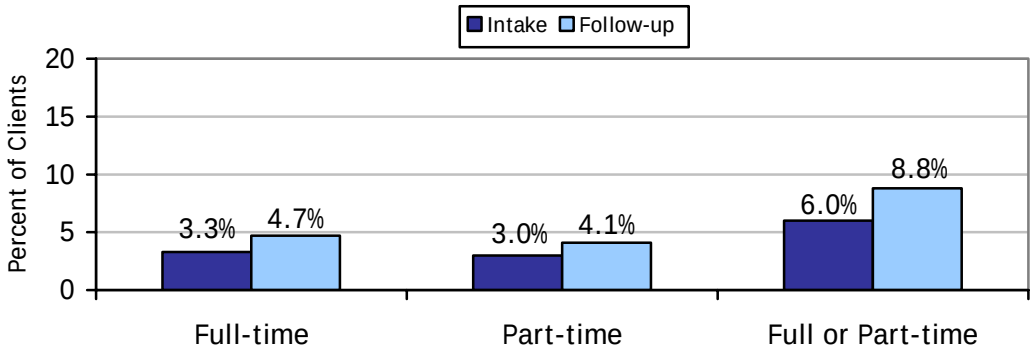
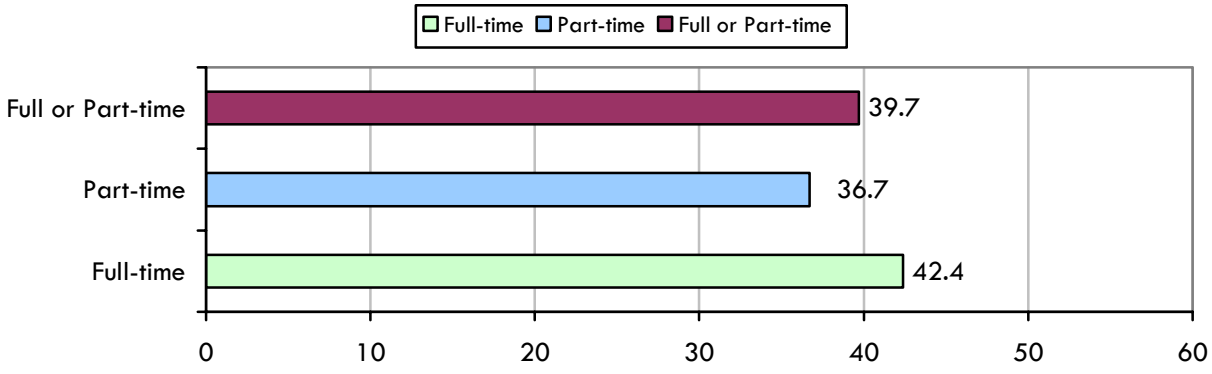


Figure. 4.1e. Percent Change in Educational Status



[a] Significance established using z-test for proportions; *p < .01. **p < .001

4.2 JUSTICE SYSTEM INVOLVEMENT

The following figures present the percent of clients arrested in the past 12 months (see **Figure 4.2a**) and past 30 days (see **Figure 4.2b**) before intake and at follow-up, as well as the percent of change from intake to follow-up in self-reported arrests (see **Figure 4.2c**). Specifically, they show significant reductions in the proportion of clients arrested and incarcerated. For example, 59.5% of clients reported an arrest during the 12 months preceding intake, whereas only 25.3% of clients reported an arrest during the 12 months before follow-up. This is a 57.5% reduction in arrests in the past 12 months on any charge. An even greater change was a 73.4% reduction in self-reported arrests in the past 30 days from intake (9.4%) to follow-up (2.5%).

Similar reductions were found in self-reported arrests on drug charges. The percent of clients reporting arrests on drug charges in the past 12 months decreased from 23.2% at intake to 8.5% at follow-up, a 63.4% reduction. The percent of clients reporting arrests on drug charges in the past 30 days decreased from 4.4% at intake to 0.6% at follow-up, an 86.4% reduction. Just over two-fifths of the clients (61.0.%) spent at least one night in jail in the 12 months before intake and 27.6% reported spending at least one night in jail in the 12 months before follow-up for a 54.8% reduction in self-reported incarceration status. The rate of change was greater for those reporting incarceration in the past 30 days with 17.9% reporting at least one night in jail in the 30 days before intake and only 3.2% reporting incarceration in the past 30 days at follow-up; thus there was a 82.1% reduction in the percent of clients reporting being incarcerated in the past 30 days.

Figure 4.2a. Percent of Clients Arrested in the Past 12 Months (n = 888)

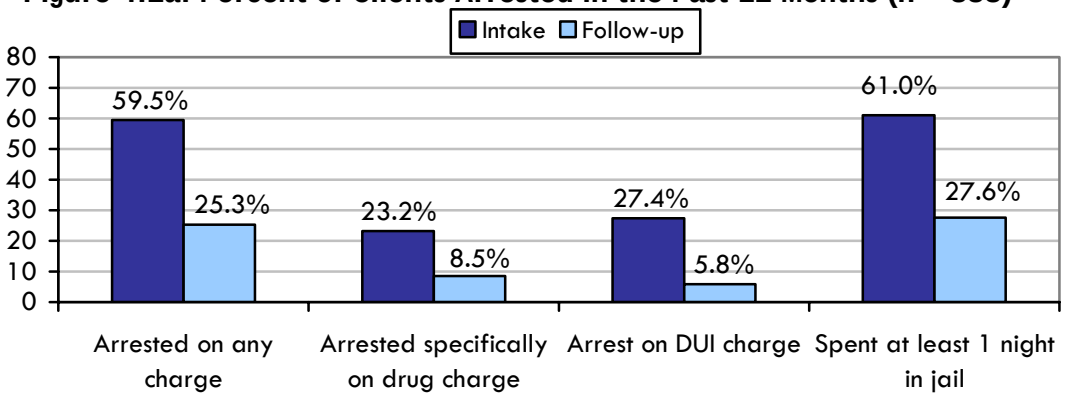


Figure 4.2b. Percent of Clients Arrested in the Past 30 Days (n = 888)

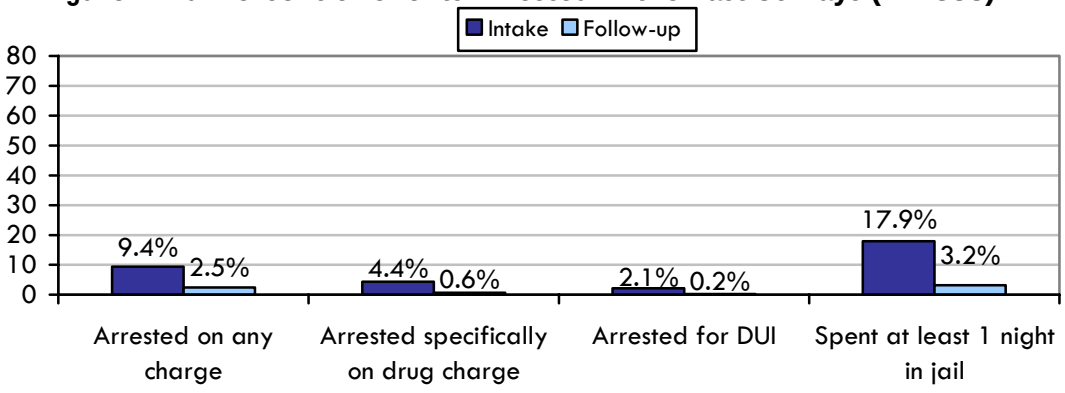
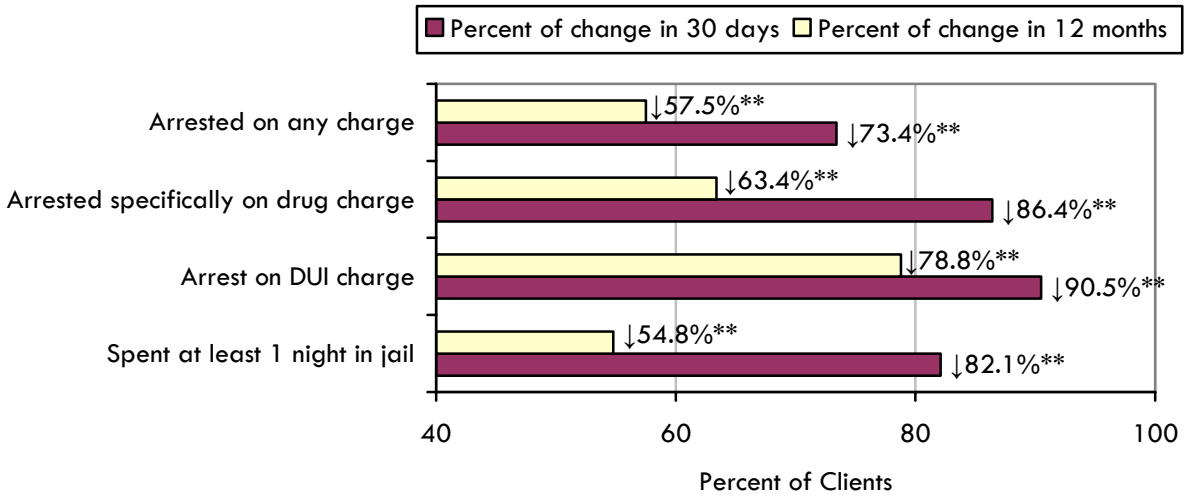


Figure 4.2c. Percent of Reduction in Arrests and Incarceration for 12 Months/30 Days



[a]Significance established using z-test for proportions.
*$p < .01$. **$p < .001$.

Table 4.2 presents changes in the mean number of self-reported arrests and nights incarcerated for the entire sample. It shows that there were significant reductions in the number of self-reported arrests 12 months after treatment. For clients arrested on any charge, there was a 66.4% reduction in the mean number of *arrests on any charge* during the preceding 12 months from intake (mean = 1.1 arrests) to follow-up (mean = 0.4 arrests). The mean number of arrests during the preceding 30 days also decreased significantly, from 0.1 at intake to 0.03 at follow-up (a 75.0% reduction). For *drug-related arrests*, the largest reduction was from the 30 days preceding intake (mean = 0.05) to the 30 days preceding follow-up (mean = 0.01 drug arrests), an 80.0% reduction.

There were significant reductions in the reported mean number of nights in jail which decreased from 37.5 nights in the 12 months before intake to 10.8 nights at follow-up for a 71.2% reduction in the nights spent in jail in the past 12 months. In addition, there was a 89.9% reduction in the mean number of nights spent in jail from intake to 30 days prior to follow-up.

Table 4.2. Changes in the Mean Number of Arrests and Nights Incarcerated

		Intake	Follow-up	Percent change[a]
Total self-reported arrests in the past -	12 months 30 days	1.1 0.1	0.4 0.03	↓66.4%** ↓75.0%**
Self-reported arrests on drug charges in the past -	12 months 30 days	0.4 0.05	0.1 0.01	↓70.0%** ↓80.0%**
Self-reported nights in jail in the past -	12 months 30 days	37.5 2.4	10.8 0.2	↓71.2%** ↓89.9%**

[a] Significance established using paired samples t-tests.
*$p < .01$. **$p < .001$.

4.3 PHYSICAL AND MENTAL HEALTH STATUS

Figure 4.3a presents positive changes in overall health and mental health. While reports of the overall mean health rating did not change from intake to follow-up, the percentage of clients rating their health as "excellent" increased from 11.6% at intake to 13.7% at follow-up, as did the percentage of clients rating their health "very good" (an increase from 21.8% to 26.1%). In addition, only slightly more clients reported their health at follow-up as "poor" compared to intake (8.0% and 7.0%, respectively).

Figure 4.3a. Changes in Past 12 Month Physical Health Ratings

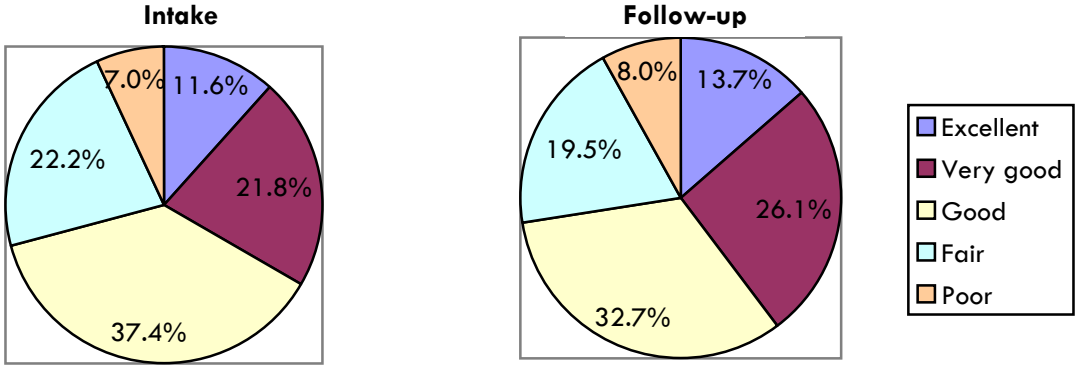
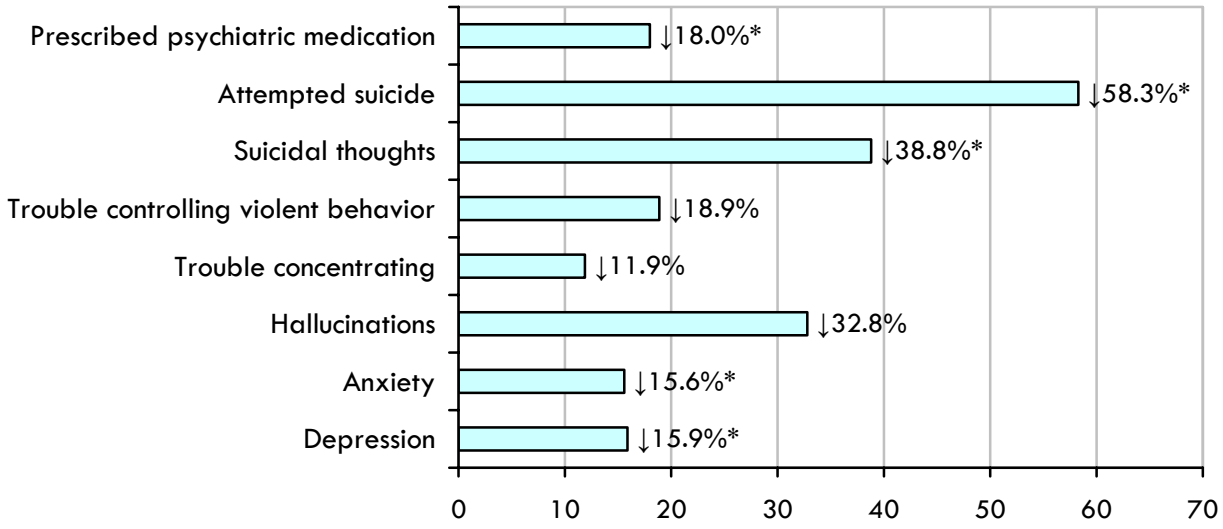


Table 4.3a and **Figure 4.3b** present changes in client mental health ratings. The greatest reduction in mental health problems from intake to follow up was found in the percent of clients reporting suicide attempts, a decrease by 58.3% from 4.8% to 2.0%. Additionally, there was a significant reduction in the percent of clients reporting suicidal thoughts, from 12.1% at intake to 7.4% at follow-up, representing a 38.8% reduction. The percentage of clients reporting serious depression decreased from 42.1% at intake to about 35.4% at follow-up, representing a 15.9% reduction. The percent of clients reporting anxiety significantly decreased from intake to follow up, 48.7% to 41.1%, representing a decrease by 15.6%. Moreover there was a significant reduction in the percent of clients who were prescribed psychiatric medications, decreasing from 31.7% at intake to 26.0% at follow up. None of the other changes from intake to follow-up were significant.

Table 4.3a. Changes in Mental Health Ratings

Past 12 months	Intake	Follow-up
Psychological problems	**N = 888**	
Serious depression	42.1%	35.4%
Serious anxiety	48.7%	41.1%
Hallucinations	5.8%	3.9%
Trouble understanding/concentrating	41.3%	36.4%
Trouble controlling violent behavior	12.2%	9.9%
Suicidal thoughts	12.1%	7.4%
Attempted suicide	4.8%	2.0%
Prescribed psychiatric medications	31.7%	26.0%

Figure 4.3b. Percent of Change in Mental Health Ratings from Intake to Follow-up[a]



[a] Significance established using z test for proportions.
*$p < .01$. **$p < .001$.

4.4 SUMMARY OF EMPLOYMENT, JUSTICE SYSTEM INVOLVEMENT, AND HEALTH

Significant changes in employment from intake to follow up, both in terms of an increased number of clients reporting part or full-time work and in terms of days of paid employment in the past 30 days, were found. In addition, clients reported a significant reduction in the number of arrests and nights in jail at follow-up when compared to intake. Decreases in several mental health problems were found. Mental health symptoms were reduced and health ratings increased, suggesting improvements among the sample at follow-up. Among these changes, the employment and justice system involvement have the greatest implications for public policy as seen in the estimated cost benefit ratio of treatment costs to reduced costs of crime and increased employment (See Section Six).