

**SECTION FIVE**

**TREATMENT SERVICES**

Clients entering treatment in Kentucky's publicly funded substance abuse treatment programs can receive a wide range of services including non-medical or medical detoxification, residential, intensive outpatient, case management, outpatient group and individual therapy, as well as rehabilitation services for persistent co-occurring mental health problems. With the exception of residential and intensive outpatient, services are rarely provided as a standard program with a clear treatment discharge. Since the predominant form of treatment is outpatient, the services may be used by clients episodically.

### 5.1 DESCRIPTION OF OVERALL SERVICE USE

For this study, service data were collected from the Client Event Data Set from the University of Kentucky Research and Data Management Center, which manages all client data, event data, and provider information for the Kentucky Department of Mental Health and Mental Retardation. Client service events were selected for all services for 364 days after the KTOS intake date. Data were selected by service type for each client. It is important to note that these data do not necessarily constitute a count of client treatment "episodes", but a count of all services received 12 months from intake data collection. The exact boundary of outpatient episodes or episodes consisting of combined residential and outpatient services is difficult, if not impossible, to determine. Clients in the state funded system of care use services in a variety of patterns. There are no clear treatment 'episodes' among the clients in the KTOS study. Since many clients intend to enter, exit, and re-enter treatment, all services within the 12 months post-intake are examined. While utilization data were analyzed for total amount of treatment received, there were no statistically significant differences in treatment outcome related to length of treatment or amount of services received, though there were significant differences between clients using self help and those not using self help.

In Kentucky's system of substance abuse treatment, clients may receive a wide array of services rather than just one modality or service type. Many clients receive a variety of services within the categories listed below. For example, under "outpatient therapy" a client could receive psychiatric individual sessions as well as group counseling for substance abuse. The service data presented for clients excludes non-treatment events such as education groups on substance abuse for DUI offenders.

**Table 5.1** presents the utilization of types of services clients received that were reported to the state. The entire list of services includes over 70 types and they were analyzed by combining them into classes of services. The percent of clients in the seven broad categories is greater than 100% because clients could have received services in more than one category.

Outpatient therapy was the largest portion of services (72.7%), followed by residential treatment (31.2%) and assessment/diagnostic services (27.0%). For those receiving any services, the largest number of services provided was in residential treatment (108.3 services), followed by residential treatment (24.1 services) and intensive outpatient (20.0 services). Outpatient clients received an average of 11.4 sessions within the 12 months after intake.

**Table 5.1. Percent of Clients Receiving Major Types of Substance Abuse Treatment**

Treatment Modality	% Received <sup>1</sup>	Mean (SD) services for those who received
Assessment/diagnostic services	27.0%	1.7 (2.1)
Outpatient therapy	72.7%	17.0 (19.1)
Residential treatment	31.6%	24.2 (14.5)
Long-term residential	4.1%	108.3 (97.6)
Intensive outpatient	11.3%	20.0 (22.3)
Case management	16.8%	12.5 (20.6)
Any service	100.0%	31.4 (43.5)

<sup>1</sup> Percents do not add to 100 since clients can be in multiple treatment modalities

## 5.2 EFFECTS OF RECOVERY SUPPORT AND TREATMENT MODALITY ON SUBSTANCE USE OUTCOMES

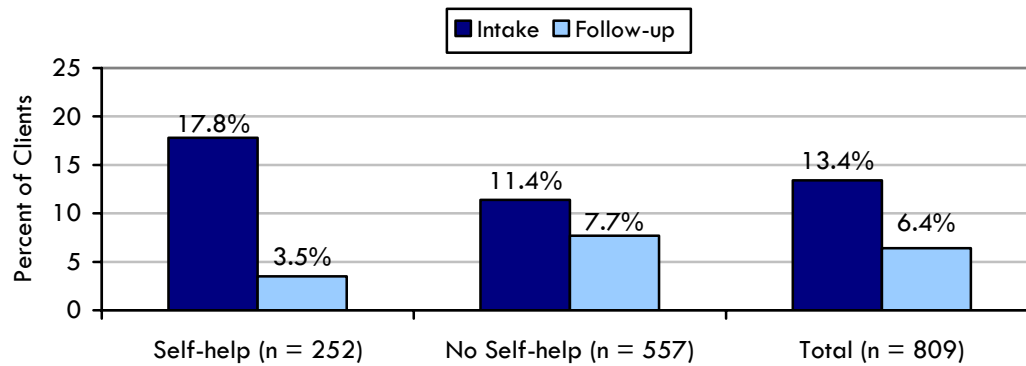
In addition to clinical services that are reported to the state in the Client Data Set, clients self-reported participation in other self-help activities that contribute to recovery. Clients reported participating in Alcoholics Anonymous, Narcotics Anonymous, and other self-help groups. Overall, data on self-help participation were available for 850 clients with 30.2% (257) of all clients reporting self-help as part of their recovery.

### Outcomes for Clients Reporting Self-Help and No Self-Help

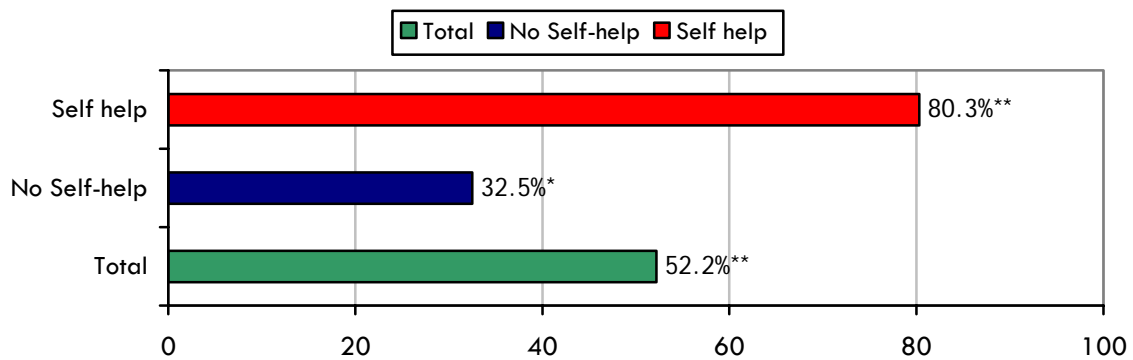
Clients who reported using self-help had more positive treatment outcomes when compared to clients who reported not using self-help. As with other variables, the analysis of days of reported substance use controlled for days of living in a controlled environment. **Figures 5.2a to 5.2n** present data on alcohol use, alcohol use to intoxication, overall illegal drug use, marijuana use, tranquilizer use, opiate use, and cocaine use for the two groups. These differences are evident both at intake and follow-up.

As indicated in Figures 5.2a and 5.2b, clients who reported using self-help reported a greater number of days of alcohol use at intake than clients who reported not using self-help. The self-help group reported alcohol use for 17.8% of days in the past 30 days at intake and the clients who reported not using self-help groups reported alcohol use for 11.4% of the past 30 days. Most importantly, the rate of reductions in the proportion of days using alcohol were greater for those using self-help (80.3%) than for those not using self-help (32.5%).

**Figure 5.2a. Proportion of Past 30 Days that Alcohol was Used By Self-help Groups**



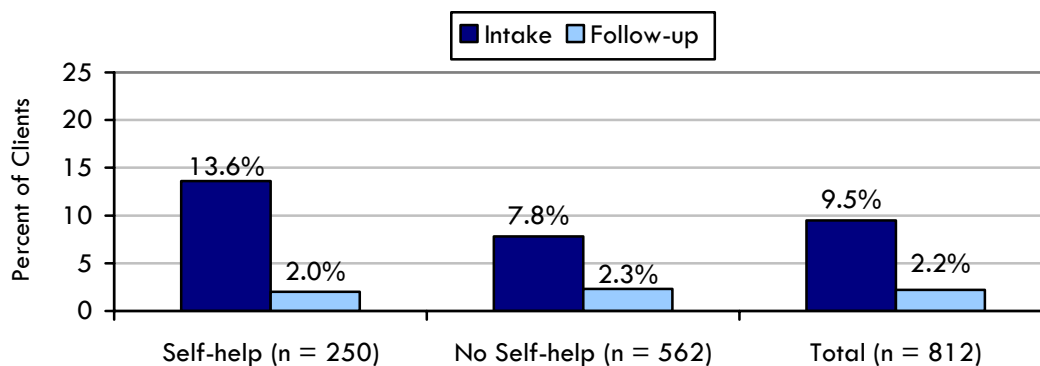
**Figure 5.2b. Percent of Reduction in Proportion of Days of Alcohol Use in the Past 30 Days By Self-help Groups <sup>a</sup>**



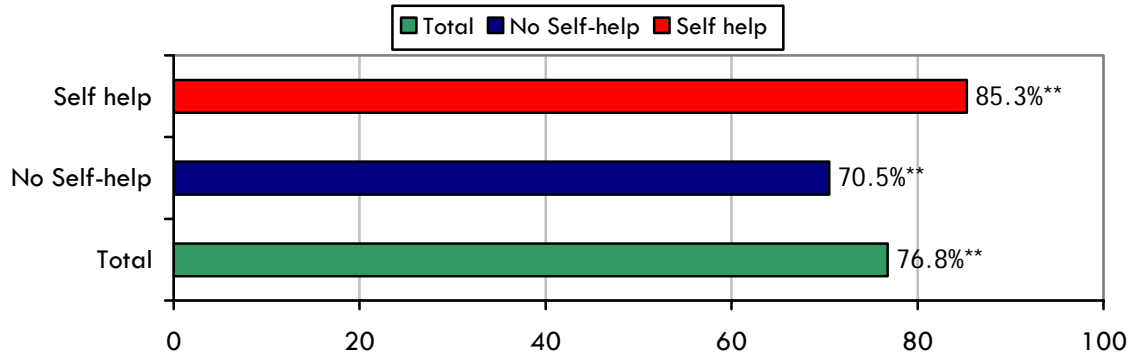
<sup>a</sup> Significance established using paired-samples t-tests.  
 \*p < .01. \*\*p < .001

The change scores for self-help clients versus the no self-help clients were different for alcohol use to intoxication with the self-help user group reporting an 85.3% reduction at follow-up compared to a 70.5% reduction for the no self-help group (see **Figures 5.2c** and **5.2d**).

**Figure 5.2c. Proportion of Past 30 Days that Alcohol was Used to Intoxication By Self-help Groups**



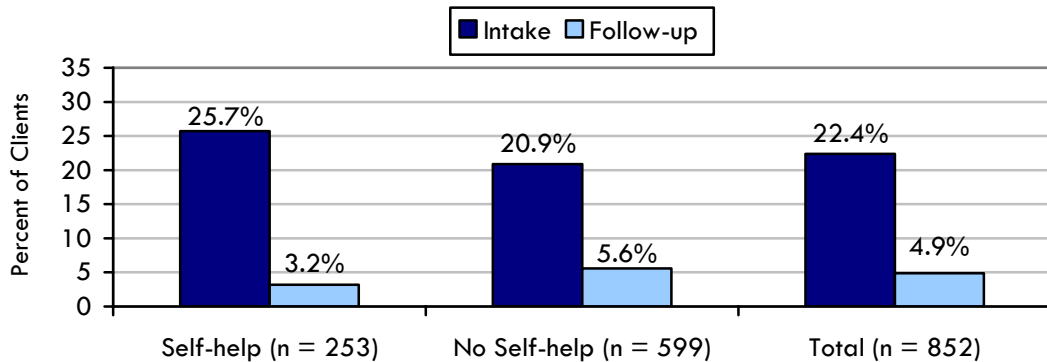
**Figure 5.2d. Percent Reductions in Proportion of Past 30 Days Alcohol was Used to Intoxication By Self-help Groups <sup>a</sup>**



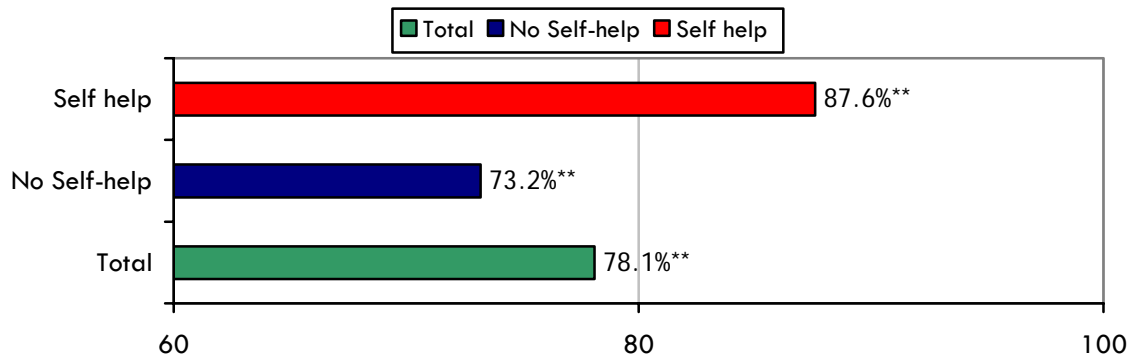
<sup>a</sup> Significance established using paired-samples t-tests.  
 \*p < .01. \*\*p < .001

As **Figures 5.2e** and **5.2f** illustrate, 25.7% of clients who reported using self-help also reported illicit drug use compared to 20.9% of clients with no self-help. Self-help clients, however, had greater reductions in reported days of use of illegal drugs at follow-up (87.6%) when compared to clients who did not use self-help (73.2%).

**Figure 5.2e. Proportion of Past 30 Days Illicit Drugs were Used By Self-help Groups**



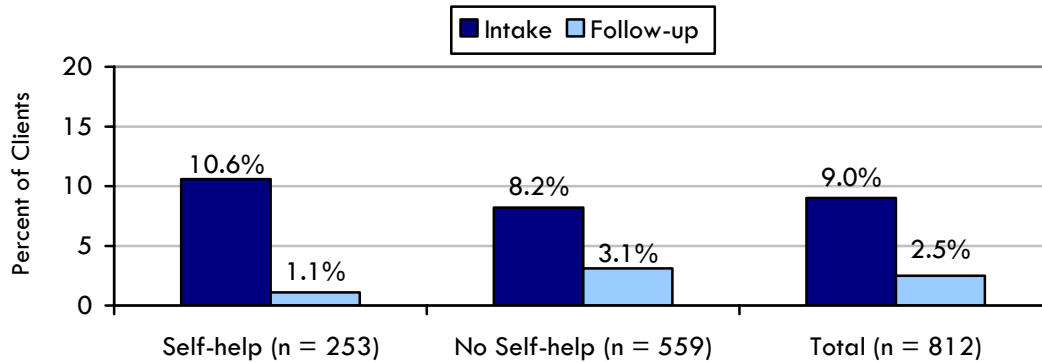
**Figure 5.2f. Percent Reductions in Proportion of Past 30 Days Illicit Drugs were Used By Self-help Groups <sup>a</sup>**



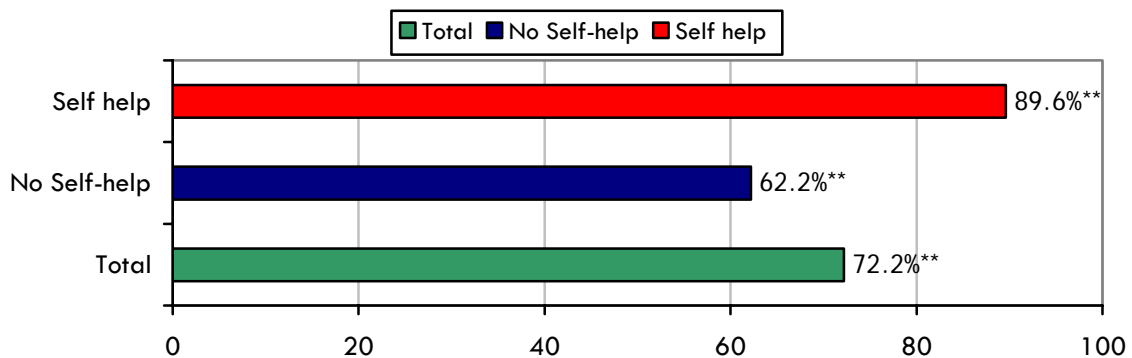
<sup>a</sup> Significance established using paired-samples t-tests.  
 \*p < .01. \*\*p < .001

**Figure 5.2g** shows that the proportion of days of marijuana use at intake and follow up were similar between the self-help group and the no self-help group (10.6% and 8.2%, respectively). The percent reduction in days of marijuana use was somewhat higher for clients who used self-help (89.6%) compared to clients who did not use self-help (62.2%) (see **Figure 5.2h**).

**Figure 5.2g. Proportion of Past 30 Days Marijuana was Used By Self-help Groups**



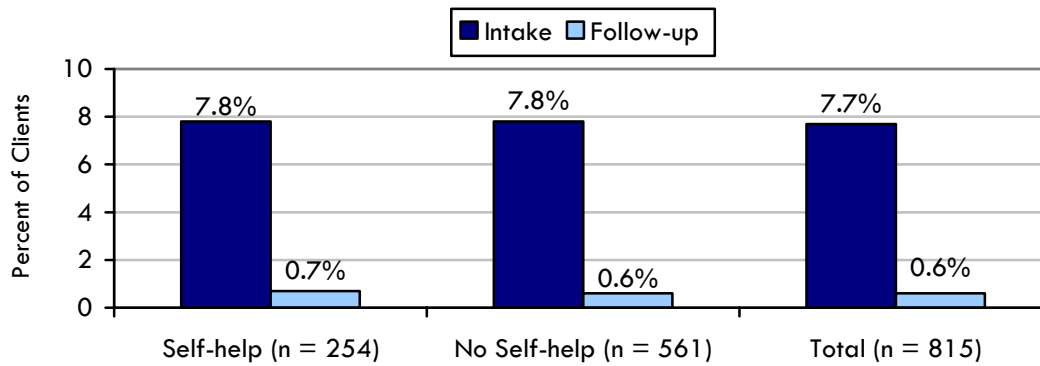
**Figure 5.2h. Percent Reductions in Proportion of Past 30 Days Marijuana was Used By Self-help Groups <sup>a</sup>**



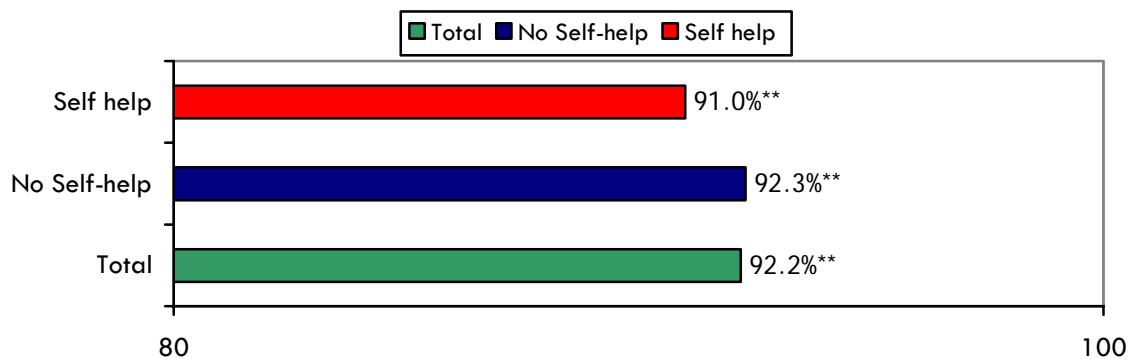
<sup>a</sup> Significance established using paired-samples t-tests.  
 \*p < .01. \*\*p < .001

The proportion of days of use and the percent reduction in days of use of tranquilizers, opiates, and cocaine were similar between the self-help group and the no self-help group. Both groups of clients reported similar use of tranquilizers at intake and follow-up (see **Figure 5.2i**). Likewise, the percent of reduction in proportion of the number of days tranquilizers were used between the between reduction of tranquilizer use from intake to follow-up of 92.2% (see **Figure 5.2j**).

**Figure 5.2i. Proportion of Past 30 Days Tranquilizers were used By Self-help Groups**



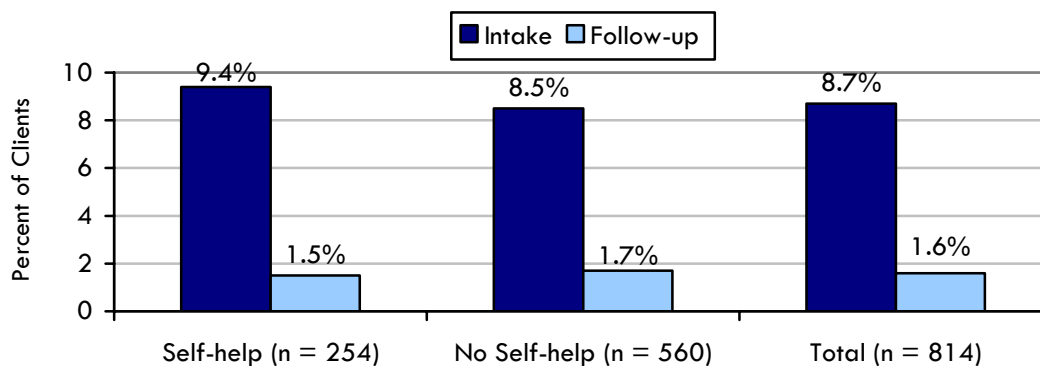
**Figure 5.2j. Percent Reductions in Proportion of Past 30 Days Tranquilizers were Used By Self-help Groups <sup>a</sup>**



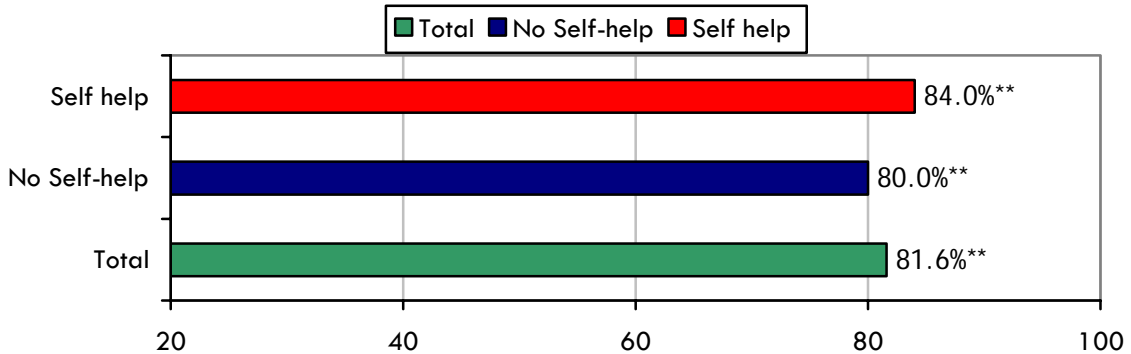
<sup>a</sup> Significance established using paired-samples t-tests.  
 \*p < .01. \*\*p < .001

Like reported tranquilizer use, the proportion of days opiates were used (see **Figure 5.2k**) and the percent of reduction in the proportion of days used (see **Figure 5.2l**) was similar for both groups of clients.

**Figure 5.2k. Proportion of Past 30 Days Opiates were Used By Self-help Groups**



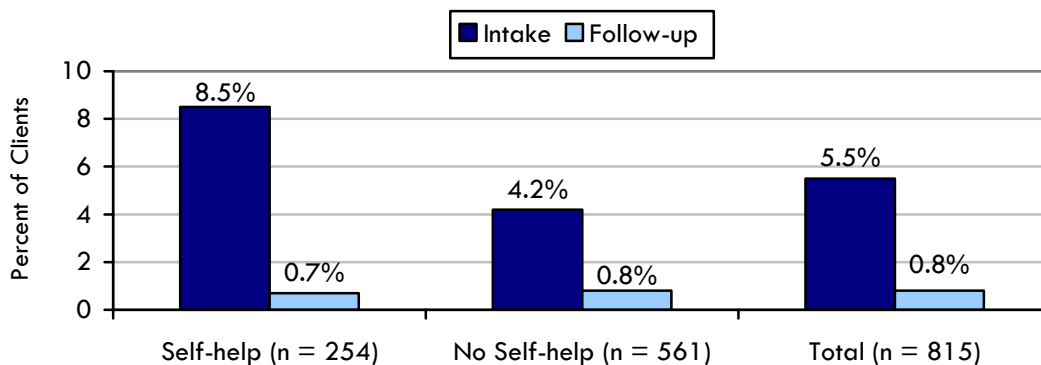
**Figure 5.2l. Percent Reductions in Proportion of Past 30 Days Opiates were Used By Self-help Groups <sup>a</sup>**



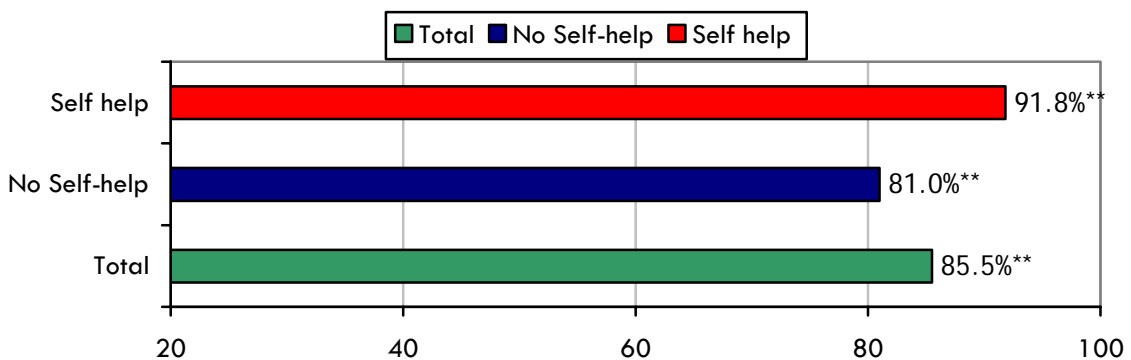
<sup>a</sup> Significance established using paired-samples t-tests.  
 \*p < .01. \*\*p < .001

According to **Figure 5.2m**, clients who reported using self-help reported a greater number of days of cocaine use at intake than clients who reported not using self-help. The self-help group reported alcohol use for 8.5% of days in the past 30 days at intake and the clients who reported not using self-help groups reported alcohol use for 4.2% of the past 30 days. These changes in days of cocaine use represent a 91.8% reduction in the proportion of days cocaine was used by the self-help group, and 81.0% reduction for the group who reported no self-help (see **Figure 5.2n**).

**Figure 5.2m. Proportion of Past 30 Days Cocaine was Used By Self-help Groups**



**Figure 5.2n. Percent Reductions in Proportion of Past 30 Days Cocaine was Used By Self-help Groups <sup>a</sup>**



<sup>a</sup> Significance established using paired-samples t-tests.  
 \*p < .01. \*\*p < .001