

Changes in Behavioral Health Outcomes for Marginally Housed Youth in Dayton, OH

Kevin M. Kissell, Ray Gaddis, Leon Hardin, Tena McNeil & Jo Ann Ford

Substance Abuse Resources & Disability Issues (SARDI) Program, Boonshoft School of Medicine, Wright State University

Introduction

Runaway and homeless transitional aged youth in Dayton, Ohio are an underserved population. These youth have a high prevalence of substance use disorders (SUD) with 70% having a history of drug use and 60% having a diagnosed mental illness.¹ At present, most of these youth are not screened or assessed for SUD. Additionally, studies show that common substance abuse strategies don't resonate with young adults whose substance use tends to be shaped by the following: where they live; socio-cultural beliefs; experiences with peers; and their perceived benefit from substance use.³ Instead of a "one-size-fits-all" treatment process, the DayTREE program was created to address the crucial need for services and to address service gaps for this population utilizing harm reduction strategies that are tailored to young people.

Methods

Procedure: The DayTREE program has partnered with Daybreak, a shelter for runaway and homeless youth, to provide SUD and mental health screening and treatment, tobacco cessation, SUD education, HIV/hepatitis risk reduction and testing, case management, and other recovery support. Participants were screened for SUD and mental health disorders; those with service needs were enrolled in the program, connected to formal treatment and engaged with harm reduction strategies. Outcome measures, including substance use and mental health symptoms, were obtained from self-reported data at baseline and six-month follow-up. Paired samples t-tests were used to measure change in outcome measures from baseline to follow-up.

Participants: The DayTREE program screened 135 individuals. Of those screened, 51.9% were male and 47.4% were female. Nearly all of the participants were either African American (54.1%) or white (29.6%). The other 16.3% of individuals identified as multi-racial, American Indian, Native Hawaiian/Pacific Islander or "other". Additionally, nearly 16% of individuals identified themselves as Hispanic/Latinx. Ages of those enrolled ranged from 18 to 24 with fairly even distribution between the ages.

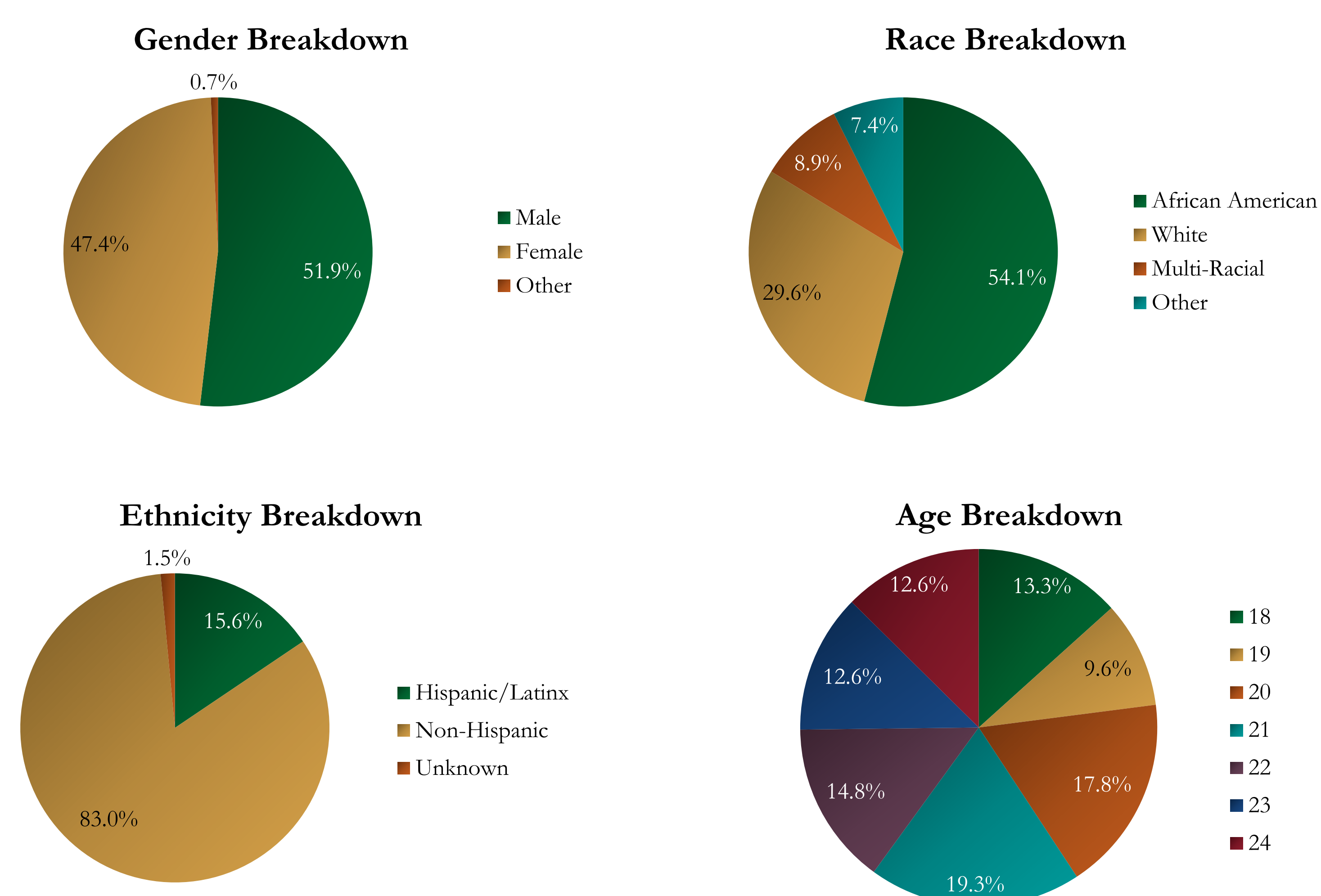


Figure 1: Demographic profile of screened individuals in the DayTREE program.

Substance Use and Mental Health at Baseline

To accurately assess lifetime substance use history, the program utilizes the *Alcohol, Smoking and Substance Involvement Screening Test* (ASSIST). The ASSIST was developed for the World Health Organization (WHO) and asks questions about specific substances individually.² Mental health questions are from the CSAT GPRA interview instrument and ask individuals to reflect on the 30 days prior to their baseline interview.

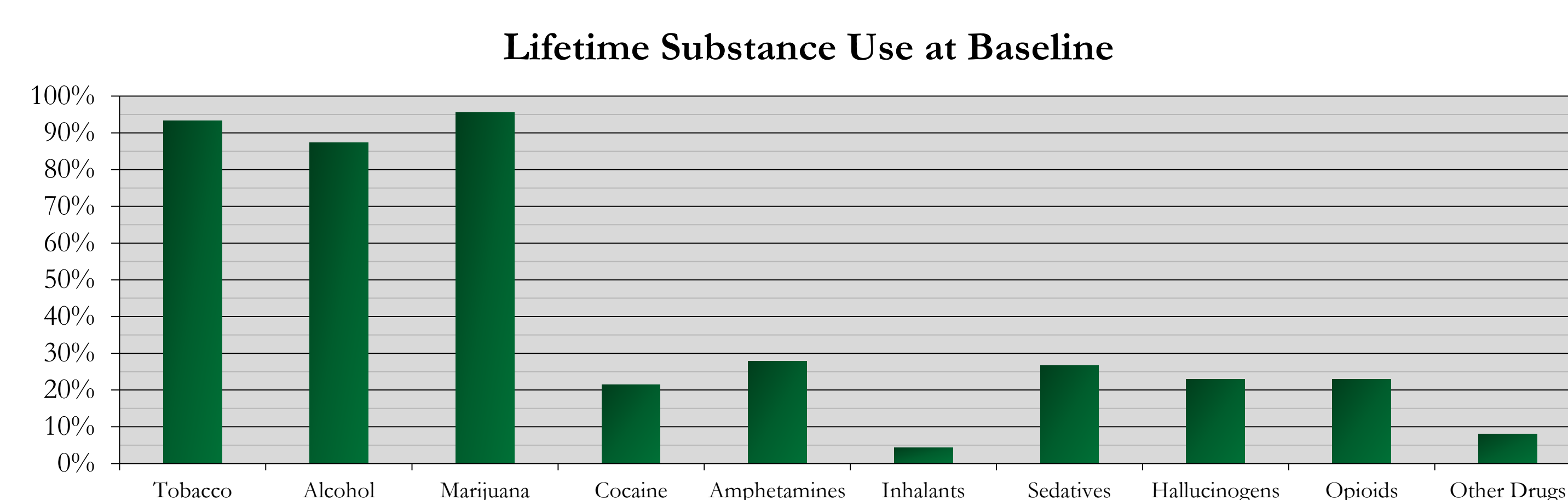


Figure 2: Substance use history is extensive with this population. When asked about lifetime use of various substances, nearly all individuals reported having used tobacco products (93.3%), alcohol (87.4%) and marijuana (95.6%).

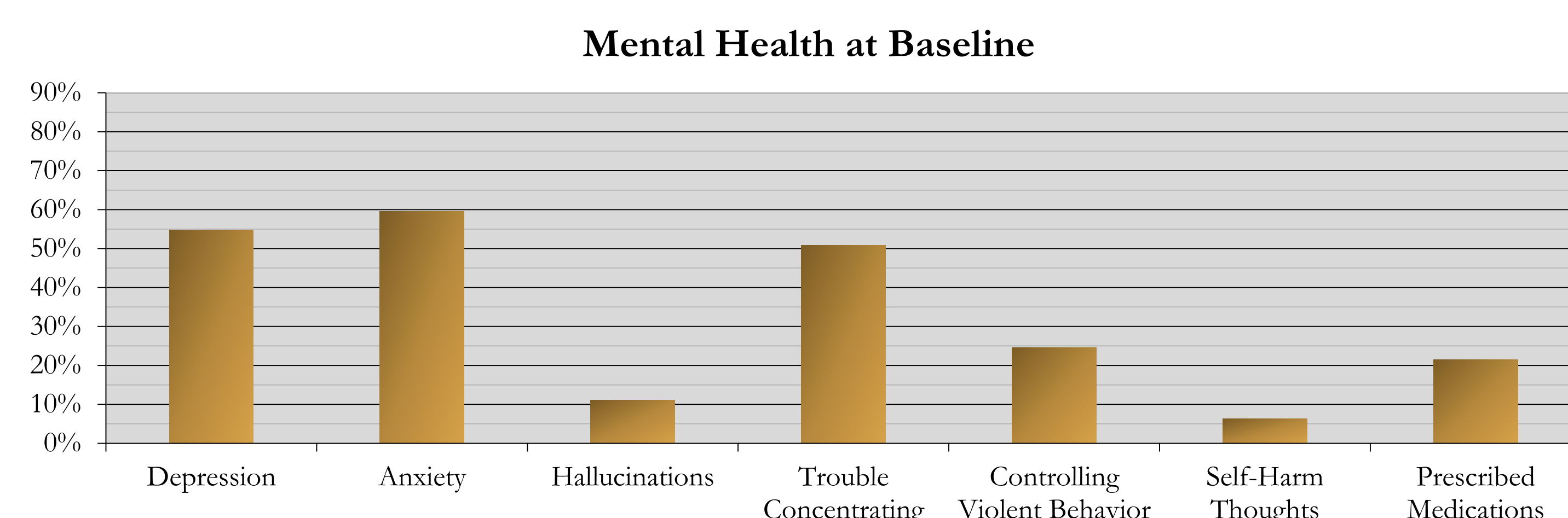


Figure 3: At baseline, individuals reported high numbers of recent mental health issues. In the 30 days prior to their baseline interview, 54.8% reported depression, 59.5% reported experiencing anxiety, 50.8% had trouble concentrating or understanding, 24.6% had trouble controlling violent behaviors, 11.1% had hallucinations, and 6.3% had self-harm thoughts. Of those with a mental health issue, 21.4% had been using prescribed medication for psychological/emotional problems within the 30 days prior to their baseline interview.

Results

The DayTREE program has 108 individuals who have completed both a baseline and six-month follow-up interview. The following analysis utilizes questions asked as part of the CSAT GPRA interview. All questions asked the individual to reflect on the 30 days prior to their interview.

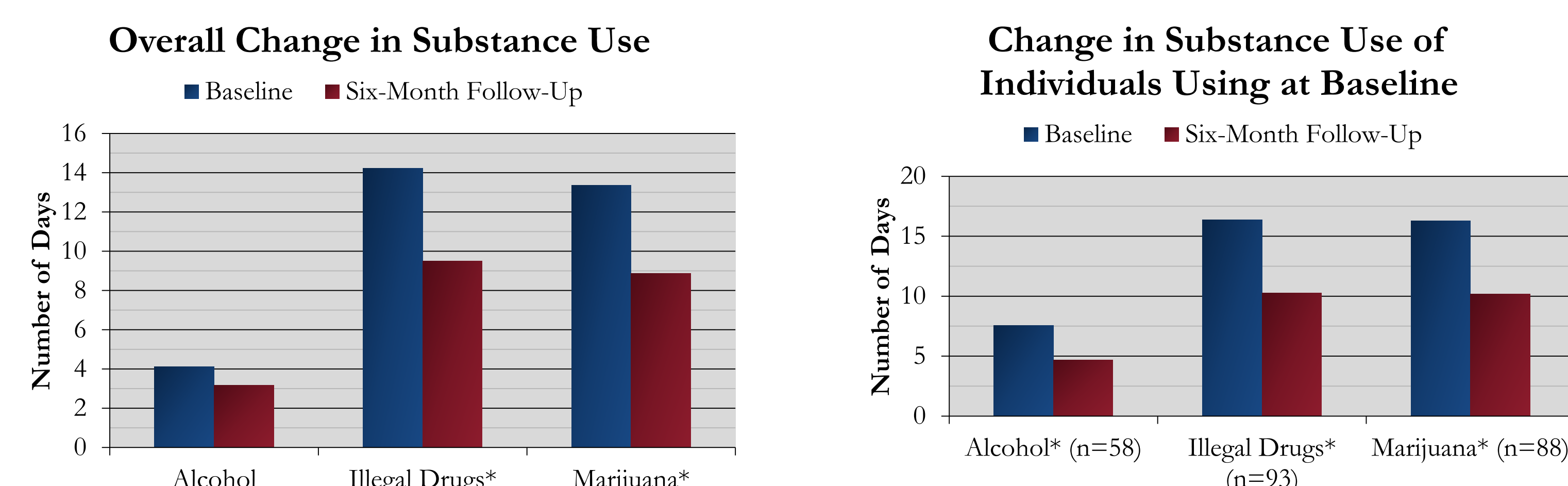


Figure 4: The graph on the left depicts the change in substance use for all individuals with a baseline and follow-up interview. Paired samples t-tests showed statistically significant reductions in illegal drug use in general as well as marijuana use specifically from baseline to follow-up ($p < 0.001$). Alcohol use also reduced but the reduction was not statistically significant ($p = 0.119$). The graph on the right shows the change in substance use for individuals who reported having used each substance within the 30 days prior to their baseline interview; the n for each substance is shown next to the substance. Paired samples t-tests demonstrated statistically significant reductions for alcohol ($p = 0.004$), illegal drug use in general and marijuana specifically ($p < 0.001$) from baseline to six-month follow-up.

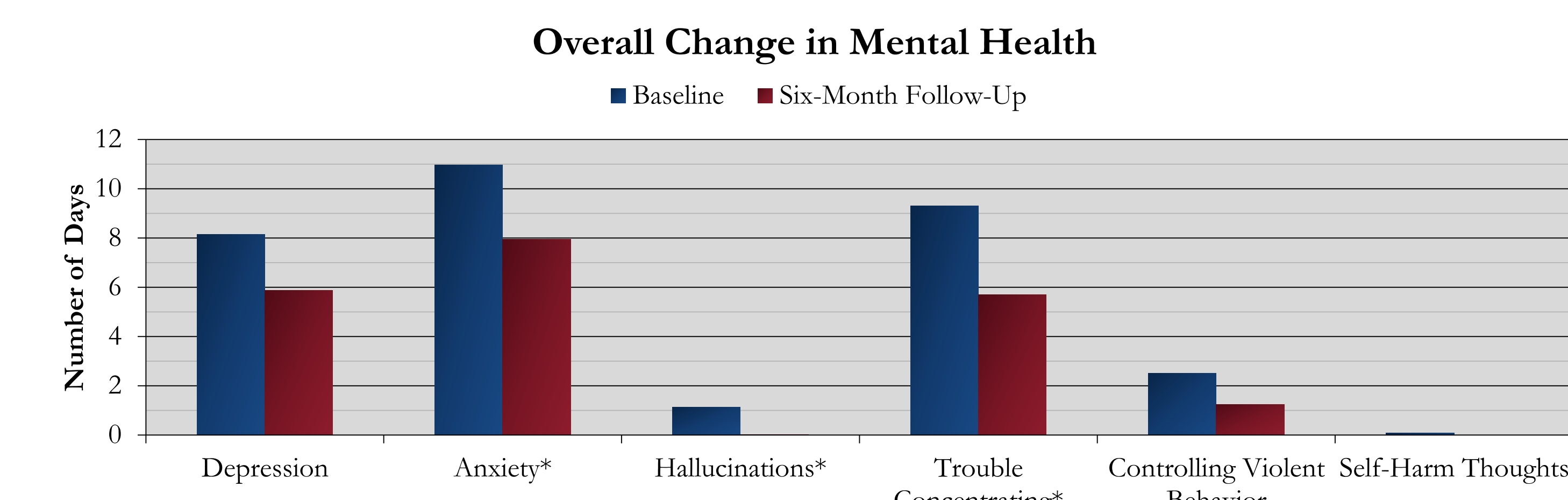


Figure 5: Overall, individuals reported fewer days struggling with mental health issues from baseline to six-month follow-up. Mean number of days experiencing depression reduced from eight to less than six from baseline to follow-up ($p = 0.070$), anxiety decreased from nearly 11 to eight ($p = 0.027$), and trouble concentrating reduced from over nine to less than six days ($p = 0.010$). Minor reductions were also noted in experiencing hallucinations, trouble controlling violent behavior and self-harm thoughts from baseline to six-month follow-up.

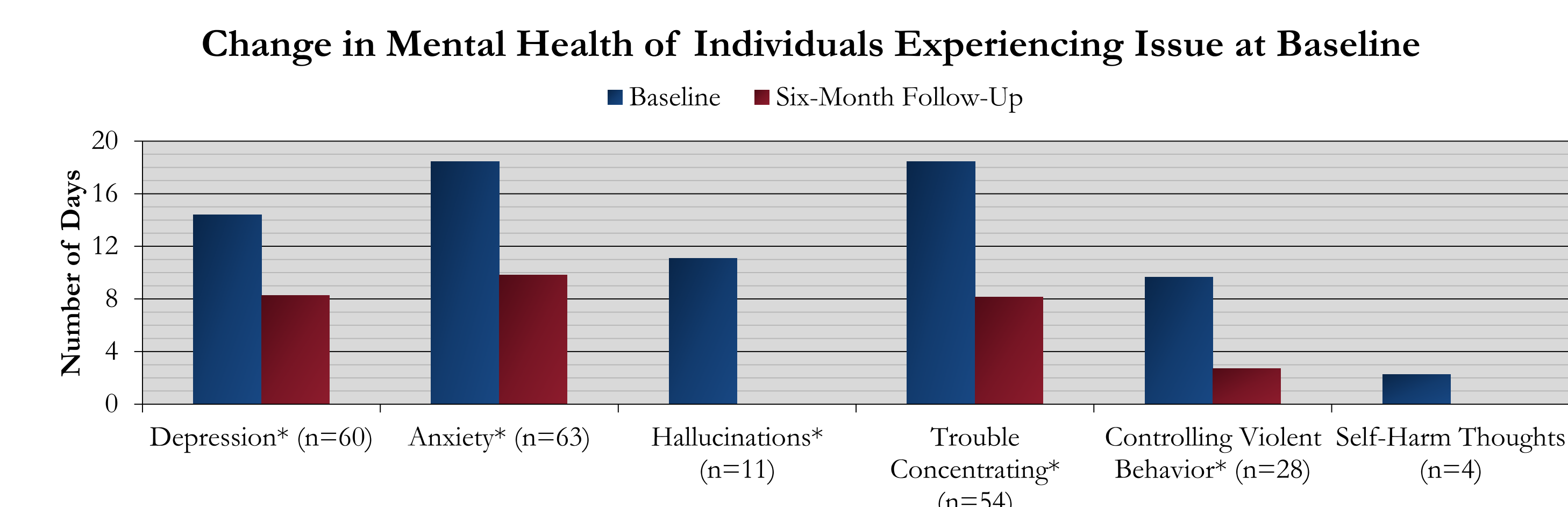


Figure 6: Greater reductions in experiencing mental health issues were evident when comparing baseline and follow-up data of only those individuals who reported experiencing each issue at baseline. The n for each subgroup is depicted next to each issue. Paired samples t-tests demonstrated statistically significant reductions for all mental health issues with the exception of self-harm thoughts where the n was too small. Days experiencing depression reduced from 14 to eight ($p = 0.002$), anxiety decreased from 18 to ten ($p < 0.001$), hallucinations reduced from 11 to zero ($p = 0.017$), trouble concentrating reduced from 18 to eight ($p < 0.001$), trouble controlling violent behavior reduced from nine to three days ($p = 0.002$), and self-harm thoughts went from two to zero ($p = 0.170$).

Conclusions

The DayTREE program is positively affecting the lives of its participants through the provision of harm reduction strategies, recovery services and referrals to formal treatment. Transitional aged youth at high risk for SUD and mental health disorders are being screened and referred to a variety of services and are demonstrating reductions in their substance use and improvements in mental health.

Literature Cited

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