

SBIRT EVALUATION: FINAL REPORT

SUCCESSES, CHALLENGES, AND LESSONS

Reclaiming Futures' adapted SBIRT for use with youth. SBIRT is a public health protocol for identifying problematic substance use. Reclaiming Futures' SBIRT appears to be an effective assessment and referral tool, leading to decreased alcohol and substance use among participating young people.



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About Us

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THE RESEARCH AND ACTION CENTER

This report falls under the purview of the Research and Action Center. As a Center of Impact Justice, our research catalyzes community efforts to eliminate disparities and propel system change. We focus especially on the populations most impacted by disparities, including youth and adults of color, as well as members of the LGBQ/GNCT communities.

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Executive Summary

This report, written by Impact Justice's Research & Action Center, explores Reclaiming Futures' SBIRT initiative, which seeks to improve screening processes, including the development of assessments and referrals for youth before they enter the juvenile justice system. With funding from the Conrad N. Hilton Foundation, Reclaiming Futures has adapted the Screening Brief Intervention and Referral to Treatment (SBIRT) for use with young people. SBIRT is a public health protocol for identifying problematic substance use in a series of very short meetings.

From the perspective of juvenile justice reformers, this model is particularly innovative because it intentionally minimizes the number of hours that youth are being assessed for behavioral health needs and, subsequently, engaged in treatment. Such a reform promises to reduce the number of hours youth – particularly youth of color – are surveilled by the juvenile justice system, and ultimately arrested, charged, or incarcerated.

This evaluation resulted in several important findings:

- Youth referred to treatment showed lower substance use at follow-up
- Youth referred to treatment also reported small increases in arguments with parents around their substance use
 - o This suggests that at least families are talking about the issue
 - o Also suggests families could benefit from additional supports
- Boys showed greater decreases over time in substance use
 - o They also had higher "baseline scores"
- Youth referred to treatment were less likely to report using drugs/alcohol "to help me manage stress" at follow-up
 - o This could have significant implications for treating LGBQ+ youth, who were at baseline significantly <u>more</u> likely to report using substances to manage stress.
 - o Also especially important because research shows that "self-medicating" with drugs/alcohol greatly increases risk of future and escalating substance use, compared with "recreational/experimental" use

Introduction & Background

Beginning 15 years ago, the Reclaiming Futures Initiative developed and implemented a multi-agency and collaborative approach to screening and referring youth in the justice system to behavioral health services. Now a 41-site network of counties, the initiative seeks to reduce continued juvenile justice involvement for youth through improved mental health and substance assessment and referrals. Recognizing that youth of color, in particular, are vulnerable to the over-involvement of many government systems, Reclaiming Futures also seeks to minimize court involvement in treatment decisions. Key elements of the Reclaiming Futures model include: establishing a more accurate alcohol, drug use, and mental health screening and assessment protocols for juvenile courts; developing individualized care plans; training alcohol and drug abuse treatment providers in evidence-based practices; and involving community members as mentors and role models to provide the support teens need. The model relies on collaboration across mental health agencies, substance abuse agencies, probation departments as well as juvenile courts. The model also seeks to increase youth and family engagement so that treatment – if required – will be more effective.

As Reclaiming Futures expands, the initiative continually seeks ways to improve screening processes including the development of assessments and referrals for youth before they enter the juvenile justice system. One of these new assessment and referral tools is the Reclaiming Futures SBIRT. With funding from the Conrad N. Hilton Foundation, Reclaiming Futures is adapting the Screening Brief Intervention and Referral to Treatment (SBIRT) for use with youth in the juvenile justice system. SBIRT is a public health protocol for identifying problematic substance use in a series of very short meetings. Reclaiming Futures is funded to implement their SBIRT model for adolescents in pre-adjudication points at five pilot sites.

There are other SBIRT projects being funded by Hilton, but the characteristics that make the Reclaiming Futures SBIRT model potentially unique are:

- 1. Increased flexibility in session frequency (from a one-session dosage up to a five-session dosage) in order to better meet the needs of juvenile justice involved youth;
- 2. A "youth-centered" approach based on Motivational Interviewing to help make the setting more comfortable; and
- 3. Options for service providers within the Reclaiming Futures SBIRT curriculum that address any risk factors associated with youths' involvement with the juvenile justice system.

From the perspective of juvenile justice reformers, this model is particularly innovative because it intentionally minimizes the number of hours that youth are being assessed for behavioral health needs

and, subsequently, engaged in treatment. Such a reform promises to reduce the number of hours youth – particularly youth of color – are surveilled by the juvenile justice system, and ultimately arrested, charged, or incarcerated.

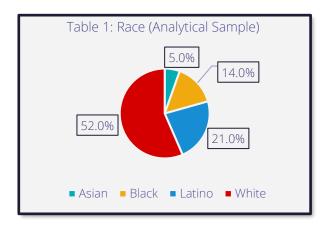
Evaluation

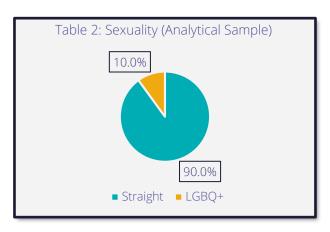
THE DATA

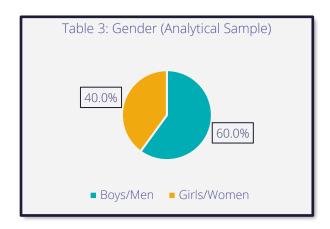
The total sample size at the completion of data collection was 339 unduplicated youth across the five sites. This number reflects the number of youth who either completed a Youth Survey, or for whom GAIN-SS or administrative data are available. Our analytical sample was limited to youth who had completed either the GAIN-SS or a Youth Survey at baseline, and then had again completed one or the other at at least one subsequent wave. Thus, the analytical sample consists of 103 unduplicated youth.

Our full sample consisted of approximately 4% Asian, 17% Black, 18% Latino, and 53% White youth. 79% reported identifying as straight and 7% identified as LGBQ+. 65% of respondents identified as boys/men, 33% as girls/women, and 1.7% as Trans or Other.

The analytical sample consisted of 5% Asian, 14% Black, 21% Latino, and 52% White youth. In the analytical sample, approximately 90% of youth identified as Straight and 10% as LGBQ+. 60% of respondents identified as boys/men and 40% identified as girls/women.







For a detailed breakdown of the demographics of survey respondents, please see Appendix 1.

Please note that across variables measuring outcomes, higher scores and averages signal worse outcomes in terms of mental health, substance use, or relational/social outcomes. When observing mean changes across time, negative scores represent a decreasing score across time, therefore indicating positive outcomes.

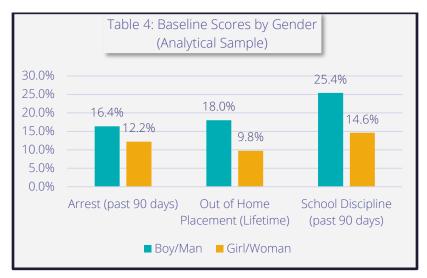
It should also be noted that we present both the baseline/full sample figures alongside those from the analytical sample. Given a high rate of attrition (i.e. we did not have a large number of matched data between at least 2 waves), we want to ensure that our analytical sample does not differ significantly from the baseline sample.

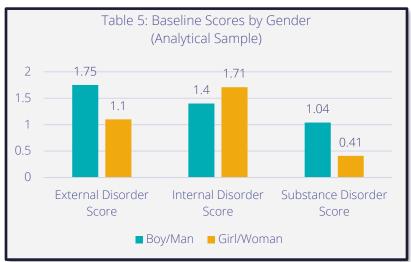
FINDINGS

Baseline Data

The baseline data provides interesting insights into the population served. Of the youth surveyed, Asian, Black, Latino and Native American all reported greater incidence of arrest, out of home placement (foster care/ group home/ homelessness), or school discipline (suspension/ expulsion) than White youth (Appendix 2: Table 2.A). However, although the proportions vary greatly in some cases (i.e. 20% of Native American youth reported out of home placement, compared to 6.6% of White youth), the differences by race were not found to be statistically significant. Similarly, although variation is observed across External Disorder, Internal Disorder, Substance Disorder, and Total Disorder scores from the GAIN-SS Screener, differences by race were not found to be statistically significant (see Appendix 2: Table 2.A). We attribute these findings to the sample size and expect that ongoing research would result in significant differences.

Impact Justice evaluators did find important differences across gender. At baseline, boys reported a much greater incidence of arrest than girls. Boys also scored significantly higher on the Substance Use screener, while girls scored significantly higher on the Internal Disorder screener (Table 2.B).





Girls are also referred to counseling at much greater rates than boys (41% compared to 28%, respectively – significant at the 0.01 level). However, despite boys scoring higher on the substance disorder screener, referrals to substance use treatment do not significantly differ by gender. A logistic regression was conducted to identify whether referral rates were disproportionate by gender and differences were not found to be statistically significant.

Significant differences were also observed by sexual orientation. LGBQ+ youth scored significantly higher on the Internal Disorder screener, while straight youth scored significantly higher on the Substance Disorder screener (Appendix 2: Table 2.C).

Given the fact that 40-50% of girls in the juvenile justice system are LGBQ+1, Impact Justice researchers cannot say if the gender differences were driving the differences across sexual orientation. Regression analyses including both sexual orientation and gender revealed that LGBQ+ youth did indeed score higher on the Internal Disorder screener, but that the effect for sexual orientation on Substance Disorder was accounted for by gender. In other words, on the Substance Disorder screener, straight youth score higher, but that is mostly due to boys (who mostly identify as straight) scoring much higher.

Other variables of interest across the whole population include self-reported alcohol and marijuana use in the past week (from the Youth Survey). Self-reported use of alcohol was very low, less than 1 drink per week. Marijuana usage was slightly higher, with an average of just over once per week. We did not find any significant differences by race, gender, or sexual orientation.

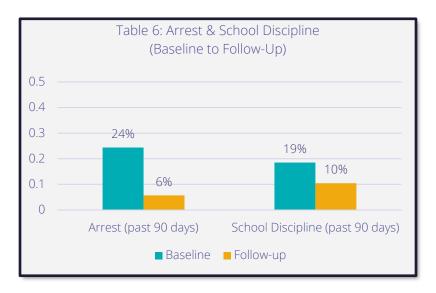
Change Over Time

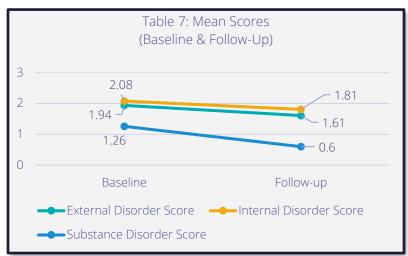
To evaluate the effect of the Reclaiming Futures SBIRT model, we considered the change in score from baseline to the most recent survey wave, across variables. Among respondents who had completed a 6-month follow up, the 6-month survey was used. Otherwise, the 3-month follow-up was considered. Individuals without a matched follow-up GAIN-SS or Youth Survey were omitted from the analytical sample. Change scores were calculated by subtracting baseline scores from the most recent score. Therefore, an improvement in a given outcome would be reflected by a decreasing score across time and a negative change value.

Across time, the results are promising: key outcome indicators either remained constant across time or decreased. Although we cannot establish causality, we do observe indications of SBIRT successfully tampering increases in substance use and related mental health symptoms (Appendix 2: Tables 4.A – 4.D).

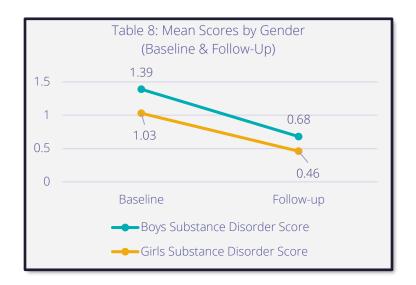
Table 4.A shows a decrease in means across arrest, school discipline, and the four measured disorder scores. Tables 4.B-4.D (Appendix 2) show that these decreases tend to hold true across almost all groups by race, sexual orientation and gender. (Note that a score of 0.00 would indicate no change between baseline and most recent survey.)

¹Irvine, Angela, and Canfield, Aisha. 2017. "Reflections on New National Data on LGBQ/GNCT Youth In the Justice System." *LGBTQ Policy Journal at the Harvard Kennedy School*, Volume VII, 2016-17.





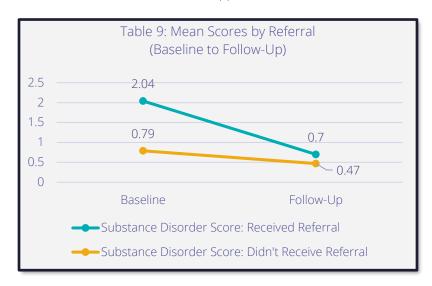
As tables shown in tables 4.B-4.D, there are very few statistically significant differences, although we do see greater decreases among boys than for girls. This doesn't necessarily mean that the program works better for boys than girls but is most likely due to boys' higher scores at baseline. I.e. they had further to go to decrease their scores.



Improvements in Mental Health and Substance Use

Again, although our analyses were limited due to small sample sizes, several noteworthy findings emerged:

• Referral to substance use treatment and/or counseling resulted in significantly lower Substance Use Disorder screener scores (Appendix 2: Table 5.A).



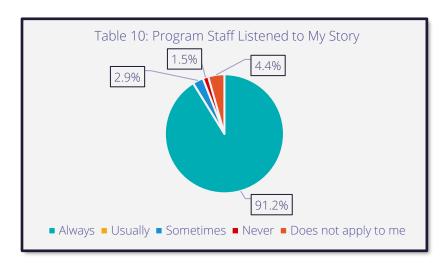
• Those who were referred to substance use treatment/counseling were significantly less likely at time two to agree with the statement "I use drugs/alcohol to help me manage stress" (Appendix 2: Table 5.B).

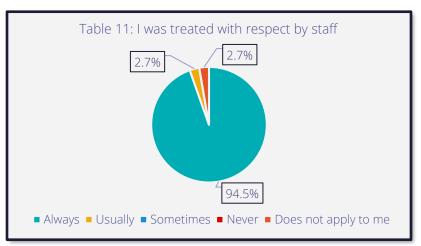
- This finding could have significant implications especially for treating LGBQ+ youth, who were significantly more likely to report that they used drugs/alcohol to manage their stress at baseline (see Appendix 2: Table 5.C).
- Youth who attended and completed substance use treatment were less likely to drink/use drugs to manage stress (Appendix 2: Table 5.B).
 - o This finding is especially notable as research shows that "self-medicating" with drugs/alcohol poses a significant risk for future and escalating substance use and abuse. This is also correlated to poorer mental health outcomes than more "recreational/experimental" substance use among youth.²
- As evidenced in the last row of table 5.B, youth who were referred to, attended, or completed substance use treatment became less reliant on drugs or alcohol to manage stress.
- Those who had been referred to substance use treatment also self-reported decreases in smoking marijuana in the past week. As shown in table 5.B below, simply receiving a referral to treatment had a significant effect, independent of whether a participant completed the treatment.
- Those referred to treatment reported a small increase in fights with parents around drug/alcohol use (Appendix 2: Table 5.B). This could suggest that these families are at least attempting to talk about potentially problematic behaviors, but perhaps could use more supports in how to address them constructively.

Youth Satisfaction

Another important outcome is youth satisfaction with the approach. Self-reported satisfaction with the program among youth was limited, with only a single youth responding to questions concerning satisfaction in the 6-month follow-up surveys. However, a significant number of youth did report satisfaction in the 3-month survey. Of 68 youth who responded to the question, 62 (91%) reported feeling that SBIRT staff "always" listened to their story (Appendix 2: Table 6.A). Of 73 youth who responded to a second question, 69 (95%) reported that they were "always" treated with respect by staff.

² E.g. Garland, E. L., Pettus-Davis, C., & Howard, M. O. (2013). Self-medication among traumatized youth: structural equation modeling of pathways between trauma history, substance misuse, and psychological distress. *Journal of Behavioral Medicine*, *36*(2), 175–185. http://doi.org/10.1007/s10865-012-9413-5





In addition, a large number of youth who completed a follow-up Youth Survey listed benefits they gained through SBIRT. Youth emphasized feeling empowered to work towards goals, an appreciation

[&]quot;... from the conversation we had I realized how capable I was of reaching my full potential and that I shouldn't let drug or alcohol use get in the way."

[&]quot;They made me feel better about myself... they helped [me] understand drugs aren't good and to be strong enough not to do them."

for the opportunity to open up without fear of judgement, in addition to an increase in understanding around alcohol, drugs, and their choices in consuming psychoactive substances.

Insights from Staff Interviews

In-depth interviews with staff members from the various SBIRT sites provided valuable insights into some of the challenges and successes staff experienced during the program. Several positive themes emerged, repeated by multiple staff members in different locations. One of these is that staff appreciate that the tools and process are strengths-based. They feel that this encourages youth to open up to a greater extent. Staff were also pleased that this process includes conversations with parents. Staff report that parents appreciate the support and the tools to talk with their child.

"I really love SBIRT, I love that youth open up so much. You really want to get to know them. I can't wait to continue it. The youth get a lot from it and it is really rewarding. The families are really appreciative."

"I think it has been beneficial, especially for the families that take advantage... they are always thankful right after the initial meetings to be able to talk to their child and to have new tools."

Staff also mentioned concerns that the approach may not suit the needs of their specific youth, with regards to cultural differences.

"I work with [the] Latino population and other parents. When I ask about challenges, culture can really shape what parents say. It is difficult for them to understand. I have to find different ways to pull out information because Latino parents aren't as open sometimes. It takes a while to get to know each other."

"The cultural barrier is something that [in] every single intervention is a difficult thing. We would have loved more guidance. The intervention seems very white-centric."

This concern may not have materialized, since we did not find any significant differences in program impact by race, but it could warrant a closer look at staff training to ensure that SBIRT is implemented in a culturally-intelligent way, depending on the needs of the local community/communities.

LIMITATIONS OF THE EVALUATION

The relatively small sample size limits the scope of our analysis and informs our approach to the data. There also appeared to be several limitations in the implementation of the program that hindered data collection. One, as discussed above, was the length and complexity of the consent/assent forms. Another limitation may be related to the briefness (by design) of the intervention itself. Because this is a key feature of the program, it may be somewhat unavoidable – youth and their families may be able to move on quickly and are thus then harder to follow-up with. It is important to note that this is a limitation of the evaluation, not of SBIRT itself. The SBIRT tool and approach does not require follow-up, this was a feature of the evaluation.

RECOMMENDATIONS FOR FUTURE RESEARCH

The mismatch between the general youth justice population and this sample of youth suggests a need for continued research. This research would increase the understanding of diversion practices by drug courts and other behavioral health professionals and allow for a determination of whether youth of color are less likely to benefit from diversion programs.

Even though the majority of respondents in this study are white, the prevalence of youth of color in the SBIRT program makes it imperative for the intervention to meet the needs of a multicultural population (including both youth and their families). During interviews with staff at the five pilot sites, a need for further training and guidance in navigating cultural barriers was voiced. Additional advice from staff encouraged emphasizing culturally affirming aspects as a part of the strengths-based screener. Among both staff and youth, connectedness to the youths' families was noted as one of the most valuable aspects of the SBIRT process. Integrating a greater multicultural groundedness into future iterations of SBIRT could further strengthen this program, although again, no significant differences by race were found (but could also be due to small sample sizes). Such an approach should encompass not only staff training, but also the format and content of all materials, screeners, and surveys.

In addition, one area that should be further explored in future implementations, is the disproportionate representation of white youth among program participants. This raises the potential concern that youth of color are still being sent to court at higher rates than their white peers instead of being diverted.

An additional recommendation is to hone the SBIRT process to encourage youth follow-ups and thorough collection of data. Several juvenile counselors voiced concerns about burdensome paperwork and an excessively long informed consent form. Shortening the informed consent and reevaluating existent data collection tools should allow for more streamlined and successful future

data collection. A further challenge, impacting both the SBIRT program as well as our analysis, is the lack of youth follow-ups. One counselor explained,

"They don't' really come back for the follow-up. We've had to struggle with that. Once their court case is done, they're done. They are first time offenders and it is a shock to the family and they say they'll come back, and they just don't."

Finally, future SBIRT evaluations might look at the benefits of doseage reduction. There wasn't any control data that would establish how many hours youth were assessed and treated outside of SBIRT. This data could have been used to determine whether lower doseages of assessment and treatment actually led to better outcomes for youth.

CONCLUSION

Overall SBIRT appears to be an effective assessment and referral tool. We found significant improvements in many areas, both in the GAIN-SS and Youth Survey data. While boys scored higher than girls on the Substance Disorder screener, they also showed larger decreases over time. This suggests that this program may be especially effective for youth with higher levels of substance use and risk.

Perhaps relatedly, we found that youth who were referred to treatment/counseling for substance use later reported small increases in fights with parents around their drug/alcohol use. This could suggest that families are trying to address problematic behaviors, but perhaps could use support in how to address them more constructively. Adding meaningful family involvement into adolescent treatment is essential. Just referring youth could actually result in harm if parents aren't guided through the process of resolving the issue. It can be destabilizing for families when someone tries to get well – families are systems and conflict can arise when systems are changed/ broken down. This struggle isn't necessarily bad, but it can be difficult to work through.

We also found that those referred to treatment/counseling were significantly less likely to report that they were using drugs/alcohol to manage stress, compared with before the program. This is especially important because self-medicating is linked to escalating substance use/abuse and increased psychological distress. This could also have a significant impact for LGBQ+ youth, who were also more likely to report using drugs/alcohol to manage stress at baseline.

We found that both staff and participants were pleased with the program. Staff reported that the strength-based tool helped them connect with youth and their families, and that this approach also helped families feel comfortable to "open up." The vast majority of youth reported that staff "always" listened to them, and "always" treated them with respect (91% and 95%, respectively).

Although staff struggled to follow up with youth, participants who did return for follow-ups generally spoke positively about SBIRT and the relationships formed with staff. The program succeeds in ensuring that youth feel heard, that staff have their best interests in mind, and that resources exist to support them in attaining their goals. As summed up by one youth, "they looked at things from my perspective."

Several aspects of the implementation of SBIRT have potential for improvement. Two of these are related to implementation: one concern voiced repeatedly was the length and complexity of the consent/assent forms, which hindered the administration of the intervention. A second concern was the difficulty in following-up with youth and families after the completion of the program. Another area was related to program content: several staff raised concerns that the approach of the intervention was "white-centered" and needed to be adapted in order to be used effectively with Latino and immigrant parents.

Appendix 1: Notes on the Data

The total sample size at the completion of data collection was 339 unduplicated youth across the five sites. This number reflects the number of youth who either completed a Youth Survey, or for whom GAIN-SS or administrative data are available. Administrative data was collected at baseline and updated at each subsequent wave and was collected for all 339 youth. The number of GAIN-SS surveys collected for each wave of collection was 275, 76, and 27, respectively; for the Youth Surveys, there were 284, 79, and 57. This decline in responses is discussed in more detail on page 9 in the findings from staff interviews.

Our analytical sample was limited to youth who had completed either the GAIN-SS or a Youth Survey at baseline, and then had again completed one or the other at at least one subsequent wave. Thus, the analytical sample consists of 103 unduplicated youth (Table 1.A). Please note that in this table, and throughout, figures referencing the Full Sample are marked as (FS), and those referencing the Analytical sample are annotated by (AS).

Table 1.A: Sample Size

| Table 17.1. Sample Size | | | | | | | |
|-------------------------|------------------|------------------------|--|--|--|--|--|
| | Ν | n | | | | | |
| · | Full Sample (FS) | Analytical Sample (AS) | | | | | |
| Sample Size | 339 | 103 | | | | | |
| (Individuals) | 339 | 103 | | | | | |

Due to small subcategory sample sizes, we consolidated race/ethnicity and sexual orientation. The categories of Asian, Black, Latino, Native American, White, Other, and Multiple Identities were coded into White, Black, Latino and Other (Table 1.B). In both the full sample and the analytical sample, slightly more than half of the respondents were white. This is similar to the demographics for many youth drug courts where white youth are more likely to be diverted into alternative programming. It also goes against national trends in the general youth justice population wherein the vast majority of youth in formal court proceedings are youth of color.

Table 1.B: Race

| | | Frequency (FS) | % (FS) | Frequency (AS) | % (AS) |
|-------|---------------------|-------------------|-----------|-------------------|-----------|
| | Asian | 12 | 4.1 | 5 | 4.9 |
| | Black | 49 | 16.6 | 14 | 13.6 |
| | Latino | 55 | 18.6 | 22 | 21.4 |
| | Native American | 10 | 3.4 | 6 | 5.8 |
| | White | 156 | 52.7 | 53 | 51.5 |
| | Other | 4 | 1.4 | 1 | 1.0 |
| | Multiple Identities | 10 | 3.4 | 2 | 1.9 |
| | Total | 296 | 100.0 | 103 | 100.0 |
| | Missing | 43 | | | |
| Total | | 339 | 100.0 | 103 | 100.0 |

Sexual identities of Straight, Lesbian/Gay, Bisexual, Questioning, and Other were dichotomized into Straight and LGBQ+ (Table 1.C). Our analytical sample did not include individuals with gender identities other than boy/man or girl/woman (Table 1.D). Please note that this information mostly comes from the Youth Survey, as sites were not required to inquire about sexual orientation.

Table 1.C: Sexual Orientation

| | | Frequency | % | Frequency | % |
|-------|-------------|-----------|-------|-----------|-------|
| | | (FS) | (FS) | (AS) | (AS) |
| | Straight | 268 | 79.1 | 93 | 90.3 |
| | Lesbian/Gay | 3 | .9 | 2 | 1.9 |
| | Bisexual | 13 | 3.8 | 7 | 6.8 |
| | Questioning | 4 | 1.2 | 1 | 1.0 |
| | Other | 2 | .6 | 0 | |
| | Total | 290 | 85.5 | 101 | 100 |
| | Missing | 49 | 14.5 | | |
| Total | | 339 | 100.0 | 101 | 100.0 |

Table 1.D: Gender

| | Frequency | % | Frequency | % |
|--------------|-----------|-------|-----------|-------|
| | (FS) | (FS) | (AS) | (AS) |
| Girl/ Woman | 100 | 33.0 | 41 | 39.8 |
| Boy/ Man | 198 | 65.3 | 62 | 60.2 |
| Trans/ Other | 5 | 1.7 | 0 | 0.0 |
| Total | 303 | 100.0 | 103 | 100.0 |

Although the administrative data recorded referrals to family counseling, the GAIN-SS and Youth Surveys only record referrals to Individual Counseling and Substance Use Treatment/Counseling. Due to this, and the fact that only a small number of youth (n=12 in the analytical sample) were recorded as referred to family counseling in the administrative data, only individual counseling and substance use counseling referrals are considered in the analysis.

Please note that across variables, higher scores and averages signal worse outcomes in terms of mental health, substance use, or relational/social outcomes. When observing mean changes across time, negative scores represent a decreasing score across time, therefore indicating positive outcomes.

It should also be noted that we chose to present both the baseline/full sample figures alongside those from the analytical sample. This is because there was such high attrition (i.e. we did not have a large number of matched data between at least 2 waves), we wanted to make sure that our analytical sample did not differ significantly from the baseline sample.

Several challenges also emerged from interviews with SBIRT staff. The most-often repeated complaint was that the consent form was too long and was too confusing. One staff member said that this long consent form introduced a different dynamic that was not necessarily conducive to building a relationship with the youth and their parents.

"It is a laborious process... The weight of the front end made it difficult to begin the process. It was restrictive and inhibitive... This population is under stress already, the documentation enhanced the stress."

The biggest drawback that I heard was the paperwork around the research... That was the only complaint. It was a burden and it got in the way of doing more."

Another common issue that was reported was the difficulty in following up with youth at the three- and six-month intervals. While certainly not unique to research projects in general, the nature of the SBIRT-JJ goals of having minimal contact with youth perhaps made this even more difficult, although at least somewhat understandable.

Appendix 2: Additional Tables

Table 2.A: Baseline by Race

| | <u>Full Sample</u> | | | <u>Analytical Sample</u> | | | | |
|--------------------------|--------------------|--------|--------|--------------------------|--------|--------|--------|--------|
| | White | Black | Latino | Other | White | Black | Latino | Other |
| Arrest | 16.56% | 33.33% | 30.61% | 37.14% | 9.43% | 14.29% | 23.81% | 21.43% |
| (past 90 days) | (0.37) | (0.48) | (0.47) | (0.49) | (0.30) | (0.36) | (0.44) | (0.43) |
| Out of Home | 6.58% | 10.42% | 18.37% | 14.29% | 13.21% | 7.14% | 23.81% | 14.29% |
| (Lifetime) | (0.25) | (0.31) | (0.39) | (0.36) | (0.34) | (0.27) | (0.44) | (0.36) |
| School Discipline | 12.00% | 31.25% | 20.83% | 25.71% | 17.31% | 42.86% | 10.00% | 28.57% |
| (past 90 days) | (0.33) | (0.47) | (0.41) | (0.44) | (0.38) | (0.51) | (0.31) | (0.47) |
| External Disorder Score | 1.12 | 1.63 | 1.28 | 1.66 | 1.27 | 1.77 | 1.71 | 1.62 |
| (past 30 days) | (1.26) | (1.18) | (1.37) | (1.37) | (1.39) | (1.24) | (1.46) | (1.33) |
| Internal Disorder Score | 1.33 | 1.33 | 1.14 | 1.93 | 1.37 | 1.77 | 1.43 | 2.08 |
| (past 30 days) | (1.41) | (1.19) | (2.60) | (1.46) | (1.44) | (1.17) | (1.66) | (1.75) |
| Substance Disorder Score | 0.54 | 0.93 | 1.02 | 1.04 | 0.47 | 1.38 | 1.10 | 0.85 |
| (past 30 days) | (0.95) | (0.96) | (1.34) | (1.20) | (0.92) | (1.12) | (1.34) | (1.35) |
| Total Disorder Score | 3.02 | 3.93 | 3.47 | 4.75 | 3.12 | 4.92 | 4.24 | 4.54 |
| (past 30 days) | (2.76) | (2.37) | (2.84) | (2.91) | (2.79) | (2.87) | (3.19) | (3.15) |

Note: No statistically significant differences between groups

Table 2.B: Baseline by Gender

| | <u>Full Sample</u> | | | <u>Anal</u> y | <u>rtical Sample</u> | |
|--------------------------|--------------------|---------|---------|---------------|----------------------|---------|
| | Girl/Woman | Boy/Man | t-value | Girl/Woman | Boy/Man | t-value |
| Arrest | 16.16% | 28.80% | -2.38* | 12.20% | 16.39% | -0.60 |
| (past 90 days) | | | | | | |
| Out of Home | 12.12% | 9.19% | 0.75 | 9.76% | 18.03% | -1.15 |
| (Lifetime) | | | | | | |
| School Discipline | 17.17% | 19.23% | -0.43 | 14.63% | 25.42% | -1.30 |
| (past 90 days) | | | | | | |
| External Disorder Score | 1.17 | 1.40 | -1.37 | 1.10 | 1.75 | -2.39* |
| (past 30 days) | | | | | | 4 |
| Internal Disorder Score | 1.85 | 1.13 | 4.04*** | 1.71 | 1.40 | 0.99 |
| (past 30 days) | | | | | | |
| Substance Disorder Score | 0.49 | 0.88 | -2.79** | 0.41 | 1.04 | -2.73** |
| (past 30 days) | | | | | | |
| Total Disorder Score | 3.52 | 3.47 | 0.14 | 3.22 | 4.19 | -1.61 |
| (past 30 days) | | | | | | |

^{*}p<.05 **p<.01 ***p<.001

Table 2.C: Baseline by Sexual Orientation

| | <u>Full Sample</u> | | | <u>Anal</u> | <u>ytical Sample</u> | |
|--------------------------|--------------------|----------|---------|-------------|----------------------|---------|
| | LGBQ+ | Straight | t-value | LGBQ+ | Straight | t-value |
| Arrest | 18.18% | 24.90% | -0.76 | 20.00% | 14.13% | 0.43 |
| (past 90 days) | | | | | | |
| Out of Home | 4.55% | 10.69 | -0.91 | 10.00% | 15.22% | -0.49 |
| (Lifetime) | | | | | | |
| School Discipline | 18.18% | 18.53% | -0.40 | 40.00% | 18.89% | 1.558 |
| (past 90 days) | | | | | | |
| External Disorder Score | 1.38 | 1.30 | 0.28 | 1.10 | 1.52 | -0.98 |
| (past 30 days) | | | | | | |
| Internal Disorder Score | 2.33 | 1.28 | 2.934** | 2.30 | 1.44 | 1.528 |
| (past 30 days) | | | | | | |
| Substance Disorder Score | 0.29 | 0.79 | -2.06** | 0.20 | 0.84 | -1.69 |
| (past 30 days) | | | | | | |
| Total Disorder Score | 4.00 | 3.41 | 0.99 | 3.60 | 3.81 | -0.21 |
| (past 30 days) | | | | | | |

^{*}p<.05 **p<.01 ***p<.001

Table 4.A: Change from baseline to most recent survey

| | Mean/SD | Range |
|--------------------------|---------|----------|
| Arrest | -0.18 | (-1 – 1) |
| (past 90 days) | (0.39) | |
| School Discipline | -0.09 | (-1 – 1) |
| (past 90 days) | (0.42) | |
| External Disorder Score | -0.33 | (-4 – 2) |
| (past 30 days) | (1.39) | |
| Internal Disorder Score | -0.27 | (-3 – 3) |
| (past 30 days) | (1.39) | (3 3) |
| Substance Disorder Score | -0.66 | (-4 – 2) |
| (past 30 days) | (1.15) | |
| Total Disorder Score | -1.55 | (-8 - 4) |
| (past 30 days) | (2.85) | |

Table 4.B: Change from baseline to most recent survey by race

| | White | Black | Latino | Other | Overall |
|--------------------------|--------|--------|--------|--------|---------|
| Arrest | -0.08 | -0.08 | -0.14 | -0.14 | -0.10 |
| (past 90 days) | (.33) | (0.28) | (0.57) | (0.36) | (0.39) |
| School Discipline | -0.12 | -0.23 | 0.00 | -0.29 | -0.13 |
| (past 90 days) | (0.38) | (0.44) | (0.46) | (0.47) | (0.42) |
| External Disorder Score | -0.50 | -1.23 | -0.79 | -0.11 | -0.65 |
| (past 30 days) | (1.26) | (1.17) | (1.72) | (1.27) | (1.39) |
| Internal Disorder Score | -0.41 | -0.69 | -0.37 | -0.44 | -0.45 |
| (past 30 days) | 1.42 | (1.38) | (1.46) | (1.33) | (1.39) |
| Substance Disorder Score | -0.35 | -1.23 | -0.47 | -0.67 | -0.57 |
| (past 30 days) | (1.04) | (1.24) | (1.02) | (1.50) | (1.15) |
| Total Disorder Score | -1.12 | -3.15 | -1.37 | -1.22 | -1.55 |
| (past 30 days) | (2.64) | (2.99) | (2.73) | (3.31) | (2.85) |

Table 4.C: Change from baseline to most recent survey by sexual orientation

| | LGBQ+ | Straight | Overall |
|--------------------------|--------|----------|---------|
| Arrest | 0.00 | -0.11 | -0.10 |
| (past 90 days) | (0.47) | (0.38) | (0.39) |
| School Discipline | -0.20 | -0.13 | -0.13 |
| (past 90 days) | (0.63) | (0.40) | (0.42) |
| External Disorder Score | -0.14 | -0.71 | -0.65 |
| (past 30 days) | (0.90) | (1.43) | (1.39) |
| Internal Disorder Score | 0.29 | -0.53 | -0.45 |
| (past 30 days) | (1.25) | (1.39) | (1.39) |
| Substance Disorder Score | -0.14 | -0.62 | -0.57 |
| (past 30 days) | (0.38) | (1.19) | (1.15) |
| Total Disorder Score | 0.00 | -1.71 | -1.55 |
| (past 30 days) | (1.73) | (2.90) | (2.85) |

Note: No statistically significant differences between groups

Table 4.D: Change from baseline to most recent survey by gender identity

| | Girl/Woman | Boy/Man | t-statistic | Overall |
|--------------------------|------------|---------|-------------|---------|
| Arrest | -0.05 | -0.14 | 0.27 | -0.10 |
| (past 90 days) | (0.38) | (0.39) | | (0.39) |
| School Discipline | -0.10 | -0.16 | 0.47 | -0.13 |
| (past 90 days) | (0.37) | (0.45) | | (0.42) |
| External Disorder Score | -0.04 | -1.02 | 3.22** | -0.65 |
| (past 30 days) | (1.23) | (1.36) | | (1.39) |
| Internal Disorder Score | -0.29 | -0.55 | 0.80 | -0.45 |
| (past 30 days) | (1.41) | (1.38) | | (1.39) |
| Substance Disorder Score | -0.57 | -0.71 | 2.36** | -0.57 |
| (past 30 days) | (0.98) | (1.19) | | (1.15) |
| Total Disorder Score | -0.36 | -2.26 | 2.93** | -1.55 |
| (past 30 days) | (2.11) | (3.01) | | (2.85) |

*p<.05 **p<.01 ***p<.001

Table 5.A: Change from baseline to most recent by referral to Substance Use Treatment/Counseling

| | Referred to Sub Use Treatment | Not referred to Sub Use Treatment | t-statistic Referred | Attended Sub Use Treatment | Did not Attend Sub Use Treatment | t-statistic Attend | Completed Sub Use Treatment | Did not complete Sub Use Treatment | t-statistic Complete |
|--|-------------------------------------|--|-------------------------|----------------------------------|---|-----------------------|-----------------------------------|---|-------------------------|
| Arrest (past 90 days) | -0.09 (0.42) | -0.11 (0.37 | -0.25 | -0.09 (0.42) | 0.00 (0.23) | 1.05 | -0.09 (0.44) | 0.03 (0.16) | 1.53 |
| School Discipline (past 90 days) | -0.21 (0.52) | -0.07 (0.33) | 1.52 | -0.18 (0.50) | -0.08 (0.36) | 0.92 | -0.10 (0.45) | -0.11 (0.39) | -0.07 |
| External Disorder Score (past 30 days) | -0.79 (1.61) | -0.47 (1.02) | 0.99 | -0.60 (1.73) | -0.65 (0.98) | -0.12 | -0.42 (1.61) | -0.77 (1.19) | -0.80 |
| Internal Disorder Score (past 30 days) | -0.47 (1.47) | -0.44 (1.29) | .086 | -0.85 (1.09) | -0.39 (1.37) | 1.22 | -0.79 (1.13) | -0.41 (1.37) | 0.96 |
| Substance Disorder Score (past 30 days) | -1.34 (1.24) | -0.32 (0.89) | 2.83** | -0.55 (1.10) | -0.70 (1.33) | -0.39 | -0.47 (1.07) | -0.64 (1.18) | -0.46 |
| Total Disorder Score (past 30 days) | -1.93 (3.25) | -1.03 (2.15) | 1.44 | -1.75 (3.13) | -1.74 (2.67) | 0.01 | -1.42 (2.95 | -1.82 (2.72) | -0.45 |

*p<.05 **p<.01 ***p<.001

Table 5.B: Change from baseline to most recent by referral to Substance Use Treatment/Counseling

| | Referred to Sub Use Treatment | Not referred to Sub Use Treatment | t-statistic Referred | Attended Sub Use Treatment | Did not Attend Sub Use Treatment | t-statistic Attend | Completed Sub Use Treatment | Did not complete Sub Use Treatment | t-statistic Complete |
|--|-------------------------------------|--|-------------------------|----------------------------------|---|-----------------------|-----------------------------------|---|-------------------------|
| When I drink, I get drunk | -0.05 (0.88) | 0.26 (0.83) | 1.61 | -0.11 (0.96) | 0.19 (0.74) | 1.17 | -0.06 (0.99) | 0.14 (0.76) | 0.77 |
| Fight with parents about drug/alcohol use | 0.16 (0.97) | -0.21 (0.66) | -1.93* | 0.25 (1.07) | 0.04 (0.60) | -0.79 | 0.12 (1.05) | 0.14 (0.71) | 0.09 |
| Parents wish I'd drink/ get stoned less | 0.26 (1.18) | -0.04 (0.87) | -1.18 | 0.42 (1.30) | 0.33 (0.91) | -0.24 | 0.47 (1.37) | 0.26 (0.87) | -0.55 |
| I can talk to my parents about drug/ alcohol use | -0.05 (0.86) | 0.56 (0.71) | 0.57 | 0.00 (1.03) | 0.04 (0.81) | 0.14 | -0.06 (1.06) | 0.07 (0.83) | 0.46 |
| Drug/ alcohol use helps me manage stress | -0.44 (1.00) | 0.32 (0.59) | 4.09*** | -0.67 (1.02) | 0.16 (0.80) | 3.09** | -0.67 (1.09) | 0.12 (0.82) | 2.59* |

^{*}p<.05 **p<.01 ***p<.001

Table 5.C: Baseline by Sexual Orientation

| | <u>Full Sample</u> | | | <u>Analytical Sample</u> | | |
|-----------------------------|--------------------|----------|---------|--------------------------|----------|---------|
| | LGBQ+ | Straight | t-value | LGBQ+ | Straight | t-value |
| When I drink, I get drunk | 2.60 | 2.37 | 1.16 | 2.43 | 2.36 | 0.17 |
| | (0.74) | (0.89) | | (0.54) | (1.01) | |
| Fight with parents about | 3.06 | 3.26 | -0.84 | 3.13 | 3.33 | -0.67 |
| drug/alcohol use | (0.93) | (0.85) | | (0.83) | (0.85) | |
| Parents wish I'd drink/ get | 2.40 | 2.23 | 0.65 | 2.57 | 2.33 | 0.54 |
| stoned less | (0.99) | (1.04) | | (1.13) | (1.17) | |
| I can talk to my parents | 2.73 | 2.66 | 0.24 | 2.71 | 2.76 | -0.01 |
| about drug/ alcohol use | (1.16) | (0.97) | | (1.11) | (0.94) | |
| Drug/ alcohol use helps me | 2.67 | 2.25 | 1.72 | 3.00 | 2.21 | 2.41* |
| manage stress | (0.90) | (0.94) | | (0.82) | (0.98) | |

^{*}p<.05 **p<.01 ***p<.001

Table 6.A: Youth Satisfaction – Wave 2

| | Program Staff Listened to my Story | Program Staff Listened to my Story | I was treated with respect by staff | I was treated with respect by staff |
|---------------------|------------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|
| | (Frequency) | (%) | (Frequency) | (%) |
| Always | 62 | 91.2 | 69 | 94.5 |
| Usually | 0 | 0.0 | 2 | 2.7 |
| Sometimes | 2 | 2.9 | 0 | 0.0 |
| Never | 1 | 1.5 | 0 | 0.0 |
| Doesn't apply to me | 3 | 4.4 | 2 | 2.7 |
| Total | 68 | 100.0 | 73 | 100 |