Fostering Healthy Futures for Preteens: Preliminary Findings on Substance Use-Related Outcomes

An Evaluation Conducted Through the Family First Evidence-Building Hub

REPORT HIGHLIGHTS:

- **Youth with a history of out-of-home care are at heightened risk for problematic substance use, yet few preventive interventions target substance use in this population.**
- Fostering Healthy Futures for Preteens (FHF-P) is a community-based mentoring and skills training program for preadolescent children in out-of-home care.
- **FHF-P was tested in a rigorous randomized controlled trial with 270 participants.**
- Data collected six months and 1.5 years post intervention suggest that **FHF-P had an impact on risk factors for later substance use** (e.g., less affiliation with deviant and substance-using peers; greater affiliation with positive peers)
- A subset of participants was interviewed seven to 11 years post intervention when they were age 18-22. **FHF-P was found to buffer the impact of early substance use on young adult substance use.**
- These promising preliminary results suggest that **FHF-P addresses many salient factors for later problematic substance use in a population at heightened risk.**

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Abstract

Youth in out-of-home care are at high risk for problematic substance use, yet there are few preventative interventions that have been developed for this population. Fostering Healthy Futures for Preteens (FHF-P) is a nine-month community-based mentoring and skills training program for children in out-of-home care. A randomized controlled trial in Colorado enrolled 270 participants aged 9-11 years who were placed in out-of-home care within the prior year. Participants were 47.4% female, 53.0% Hispanic, 36.6% Black, and 40.9% American Indian. Post-intervention interviews, which contained questions about 1) positive and negative expectancies for substance use, 2) affiliations with deviant and positive peers, and 3) substance use (types and frequency of use), were conducted at baseline (T1), six months post intervention (T2), and 1.5 years post intervention (T3). A subset of participants (n=55) were recruited for a T4, long-term follow-up interview, conducted seven to 11 years post intervention when they were between the ages of 18 and 22.

FHF-P participants, relative to the control group, reported affiliation with more prosocial peers at T2; at T3, they reported affiliation with fewer deviant friends and were less likely to have friends using substances. Female FHF-P participants (relative to female controls) reported greater numbers of prosocial peers at both T2 and T3, fewer deviant friends at T3, and more negative expectancies for substance use at T2; they were also less likely to have friends using substances at T2 and T3. Although there was no difference in control and intervention participants' substance use at T4, early substance use was only associated with later substance use for the control group, suggesting that **FHF-P buffered the impact of early risk in this subset of participants**. Identifying potential mechanisms that might deter youth with early substance use from continued and increasing problematic substance use is crucial to prevention efforts for child welfare-involved families. The current preliminary findings suggest several such potential mechanisms of change and highlight the efficacy of FHF-P in targeting these salient risk and protective factors.

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Acknowledgements

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This project was carried out with support from Arnold Ventures and funding from the Kempe Foundation, Pioneer Fund, and Tony Grampsas Youth Services Program. We wish to express our appreciation to the youth and families who made this work possible and to the participating county departments of social services for their longstanding partnership in our joint clinical research efforts. Finally, this project would not have been possible without exceptional project managers, research assistants, project interviewers, and interns/mentors.

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Note on Gender-Inclusive Language

The Colorado Evaluation and Action Lab affirms our commitment to the use of gender-inclusive language. We are committed to honoring the unique gender identity of each study participant. When examining sex differences in the current study, we are referring to biological sex and use the terms "female" and "male" to reflect how the data were collected in the original randomized controlled trial. Throughout this report, we follow the guidance of the Associated Press Stylebook and the Chicago Manual of Style and use the gender-neutral, singular "they" when appropriate.

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Introduction

Study Description

Introduction

The Colorado Evaluation and Action Lab (Colorado Lab) serves as the Family First Evidence-Building Hub to coordinate rigorous evaluation efforts on behalf of the Colorado Department of Human Services (CDHS). In this role, the Colorado Lab coordinates the pipeline of evidence building for Family First programs/services positioned to meet the needs of children, youth, and families in Colorado. Together with cross-system prevention partners, we co-create a strategic vision for evidence building, communicated annually in our annual strategy report. We then partner with local and national researchers to build evidence for select programs/services aligned with that strategy. In doing so, the Colorado Lab helps the state align evidence-building investments, reduce evaluation burden and duplication, effectively translate findings into policy and practice actions, and more efficiently inform Colorado's evidence-based prevention continuum.

The Family First Evidence-Building Hub partnered with Dr. Heather Taussig from the University of Denver's Graduate School of Social Work to build evidence for Fostering Healthy Futures for Preteens (FHF-P). FHF-P is designated as a "supported" practice by the Title IV-E Prevention Services Clearinghouse (Clearinghouse). FHF-P was initially rated as "well-supported" by an independent systematic review (ISR) conducted by the Colorado Lab and included in the Colorado's initial Prevention Plan submission. The Clearinghouse conducted a verification review and came to a rating of *supported* in applying design standards around non-overlapping samples. The Colorado Lab has supported Dr. Taussig in communicating with the Clearinghouse to understand the differences in ratings between the ISR and the Clearinghouse. Using this guidance, Dr. Taussig is conducting an ongoing rigorous evaluation of FHF-P with the goal of building evidence toward a *well-supported* designation. There have been two randomized controlled trials (RCTs) of FHF-P which assess the impact of FHF-P on a number of well-being and permanency outcome domains. With support from the Colorado Lab, and following a preliminary report from March 2023, Dr. Taussig and colleagues published a paper on FHF-P's impact on suicide-related thoughts and behaviors from the first RCT.[1] For more information on the first RCT, see the relevant and peer-reviewed research publication, *California Evidence-Based Clearinghouse for Child Welfare*. The second RCT's findings have not yet been independently evaluated, which is the goal of the present evaluation.

> **The current study is focused on building the evidence toward a *well-supported* designation by the Clearinghouse. It examines substance use-related outcomes from the second RCT of FHF-P, so that program impacts from non-overlapping samples can be determined in order to meet the Clearinghouse's standards and contribute to the growing body of evidence on the efficacy of FHF-P for child welfare-involved youth.**

Value to the Family First Service Array

Data from the 2019 National Survey of Drug Use and Health shows that, compared to other states, Colorado ranked higher on annual average prevalence rates for past month tobacco and alcohol use, and initiation of cigarette use, among youth ages 12-17.[2] Within Colorado, there are racial/ethnic and sexual identity disparities related to patterns of substance use. Racial and ethnic minority students report greater access to substances and earlier use of substances than do White students. Sexual minority youth also report higher rates of current substance use.[3]

In numerous studies, adverse childhood experiences (ACEs; e.g., child maltreatment, parental incarceration) have been associated with substance misuse and substance use disorders.[4, 5, 6, 7, 8, 9] Notably, Elliott and colleagues[10] found that, above all other forms of childhood adversities (e.g., parental death, incarceration, divorce), child maltreatment uniquely predicted substance use dependence in adulthood.

Given high rates of maltreatment, parental substance use, and other ACEs experienced by youth in out-of-home care, as well as the overrepresentation of racial/ethnic and sexual minority youth in the child welfare system, it is not surprising that this population is at high risk for substance use.[11, 12, 13, 14] Findings from a systematic review exploring substance use among current and former youth in foster care suggest that they engage in substance use earlier than their peers, are more likely to report use of 'harder' drugs (e.g., cocaine, heroin), and experience higher levels of problems associated with substance use.[15]

> **Experiencing early life adversity or trauma can lead to chronic stress, impacting neurological, psychological, physical, and social development, all of which play a role in substance misuse.**[16, 17, 18]

Decades of longitudinal studies demonstrate malleable risk and protective factors that predict substance use and misuse.[19, 20, 21] Youth-specific salient risk factors include peer deviance and having positive expectancies for substance use, while affiliation with prosocial peers and having negative expectancies for substance use have demonstrated protective effects on later substance use.[22, 23, 24, 25, 26, 27, 28] Perceived peer use also predicts both the onset and escalation of substance use among young adolescents (e.g., ages 10-15).[29] These risk and protective factors have been found to operate similarly in studies of youth with child welfare involvement.[30, 31, 32] There are also important sex-specific differences in how these risk and protective factors are associated with youth substance use. For instance, among adolescents who had experienced maltreatment and had an open child welfare case, deviant peer affiliations were associated with a greater likelihood of substance use while positive peer affiliations were associated with a lower likelihood of substance use, but only for females.[33]

> **Early age of first use of substances is one of the strongest and most consistently documented predictors of substance abuse disorders in adulthood.**[34, 35, 36]

Study Description

This trial was pre-registered on ClinicalTrials.gov and addresses the following research questions:

> **Research Question 1: Is participation in the FHF-P program related to risk and protective factors for later substance use?**
>
> **Research Question 1a: How does FHF-P impact these risk and protective factors for females and males?**
>
> **Research Question 2: Is participation in the FHF-P program related to the more long-term outcome of substance use?**

Research Question 2a: Does baseline substance use moderate the impact of FHF-P on young adult substance use? That is, does having baseline substance use differentially predict young adult substance use for the control and intervention groups?

Baseline (pre-randomization; T1), 6 months post intervention (T2), 1.5 years post intervention (T3), and long-term follow-up interviews (when participants were 18-22; T4) were conducted.

The research questions were addressed by examining data from a second rigorously conducted randomized controlled efficacy trial of FHF-P with long-term follow-up. A total of 270 youth, ages 9-11, who were placed in out-of-home care by four Colorado communities (Denver, Adams, Arapahoe and Jefferson Counties) were randomized to control or intervention conditions. Those who were randomized to the intervention condition were offered a 30-week individualized mentoring and skills group program (i.e., FHF-P). Baseline (pre-randomization; T1), six months post intervention (T2), 1.5 years post intervention (T3), and, for a subset of participants, long-term follow-up interviews (when participants were 18-22 years old; T4) were conducted. Risk and protective factors for substance use, as well as reports of actual substance use, were collected via self-report at the different interview time points for participants in both the control and intervention groups. Statistical analyses compared the control and intervention groups on these measures at the three follow-up time points and also examined whether program effects were different for males and females and for youth who reported early substance use (i.e., at baseline, when youth were between the ages of 9 and 11).

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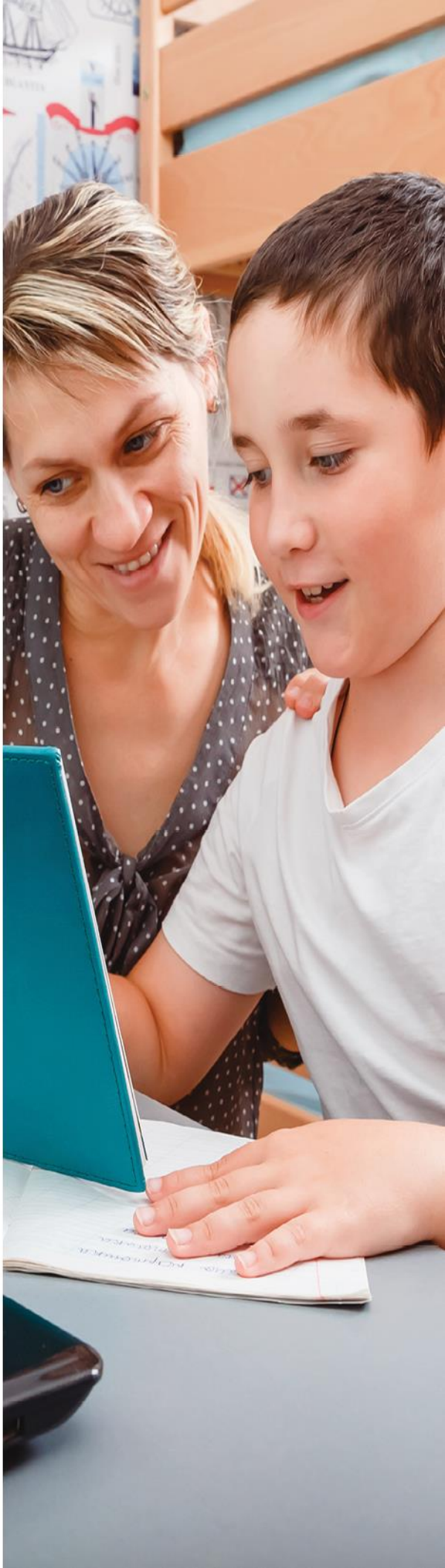
Methods

Data Sources
Methods



Methods

Participants

Eligible participants were recruited in five cohorts over five consecutive summers. Children were eligible for the study if they were between the ages of 9-11 years and a) had been placed in any type of out-of-home care (e.g., non-relative foster care, kinship care, congregate care) due to maltreatment within the preceding year in the Denver, Colorado metro area; b) had lived in their current placement setting for at least three weeks; c) resided within a 35-minute drive to the intervention group sites at the time of recruitment; d) did not have a developmental disability that would preclude them from participating in group; and e) were English speaking (caregivers, however, could be monolingual Spanish speaking). When multiple siblings were eligible, siblings were paired for randomization. Participation in the study was voluntary and could not be court-ordered.

Of the 370 eligible children and families, 89.5% (n=331) agreed to participate in the baseline (T1) interview. After the baseline interview and prior to randomization, 18.4% (n=61) of the participants were deemed ineligible for the following reasons: 29 were developmentally delayed, 27 were no longer in out-of-home care, and five had information on their child welfare records (obtained post interview) that made them ineligible (e.g., incorrect birthdate). Of the remaining 270 youth who were randomized to treatment and control groups, 86.7% were interviewed at T2 (six months post intervention), and 82.2% of youth were interviewed at T3 (1.5 years post intervention). A subset of participants (n=56) was recruited for a T4, long-term follow-up interview conducted seven to 11 years post intervention when they were between the ages of 18-22; 85.5% were interviewed.

> **Of those randomized to the intervention, 95.4% (147/154) of children started the intervention and of those, 95.2% (140/147) completed the 30-week program.**

Almost half (47.4%) of participants were female sex. The average age at each time point was:

- T1: 9.8 years
- T2: 11.2 years
- T3: 12.1 years
- T4: 19.0 years

In terms of racial/ethnic identity, 53.0% identified as Hispanic, 51.8% as White, 40.9% American Indian, and 36.6% as Black/African American (non-exclusive categories). At baseline (T1), 58.5% of participants were living in kinship care, 38.2% were living in non-relative foster care, and 3.3% were living in some type of congregate care.

Data Sources

Demographic Information

Children's age, sex, race, ethnicity, placement type (e.g., foster care, kinship care, congregate care), and parental characteristics were obtained from child welfare records and children's and caregivers' reports.

Positive and Negative Expectancies for Substance Use

> ***Positive and Negative Expectancies for Substance Use*, *Affiliation with Deviant and Prosocial Peers*, and *Peer Substance Use* were measured at the first three time points. *Substance Use* was measured at all four time points.**

The Cognitive Appraisals of Risky Events (CARE)[37] was originally developed to assess young adults' perceptions of the benefits and risks associated with involvement in risky activities (e.g., shoplifting, substance use). A 30-item subscale of the CARE called "Appraisals of Expected Risk and Expected Benefit" asks respondents to rate, on a 7-point Likert scale, the extent to which they anticipate negative or positive consequences from participation in a number of risky activities (i.e., higher scores indicate greater expectancies).

For the current study, expectancy variables were modified from the CARE questionnaire to create a 24-item measure that asked respondents to rate, on a 3-point scale, the extent to which they would anticipate negative or positive consequences if they were to participate in different risk behaviors. For the current study, we examined six items related to drug/alcohol use.

Positive Expectancies

The three items on the positive expectancy scale for substance use included, *If I used drugs or alcohol…* a) *It would be exciting and fun*, b) *I would feel good about myself*, and c) *People would think I was cool*. Response options included "Low chance," (1), "Medium chance," (2), and "High Chance" (3). A composite mean score was calculated with these three items to create a *Positive Expectancies for Substance Use* variable.

Negative Expectancies

Items on the negative expectancy scale for substance use included, *If I used drugs or alcohol… a) I would get in trouble, b) I might need to see a doctor,* and *c) I wouldn't do well in school.* The response options were the same as for positive expectancies. A composite mean score was calculated with these three items to create a *Negative Expectancies for Substance Use* variable.

> **Higher positive expectancies for substance use indicate greater risk, whereas higher negative expectancies indicate lower risk.**

Affiliation with Deviant and Prosocial Peers

Affiliation with Deviant Peers

Affiliation with deviant peers was measured using a nine-item self-report scale adapted from "Things Your Friends Have Done."[38] For each item, youth indicated whether "none" (0), "some" (1), or "most" (2) of their friends had engaged in a variety of delinquent behaviors such as stealing, property destruction, or gang involvement in the past year. A composite mean score was calculated with these nine items to create an *Affiliation with Deviant Peers* variable.

Peer Substance Use

One of the items on the *Affiliation with Deviant Peers* measure specifically asks "How many of your friends have smoked cigarettes, drunk alcohol, or used drugs?" For this item, youth indicated whether "none" (0),

"some" (1), or "most" (2) of their friends engaged in this behavior. For analyses, we dichotomized this item (0/1) to indicate whether any friends were using substances.

Affiliation with Prosocial Peers

Affiliation with prosocial peers was measured using a six-item scale from the Adolescent Risk Behavior Survey (ARBS).[39] This scale is a youth-reported measure that assesses whether "none" (0), "some" (1), or "most" (2) of their friends had engaged in a variety of prosocial behaviors such as being involved in school activities and obeying school rules in the past year. A composite mean score was calculated with these six items to create an *Affiliation with Prosocial Peers* variable.[i]

Substance Use

The ARBS[40] was used to measure lifetime and past year substance use. For each of 12-14 substances (including cigarettes, alcohol, stimulants, sedatives, opioids, marijuana, club drugs, cocaine, heroin, hallucinogens, and inhalants) participants were first asked whether they had ever used the substance. If they indicated they had, they were then asked how many times (at T1, T2, and T3) or days (at T4) in the past month, year, and/or lifetime they had used that substance. The exact substances and the time frames for reported use varied slightly at each time point.

In constructing the Substance Use scales, the frequency of each substance used in a given time period was used as the unit of measurement. The reason for this was that if a participant received a no/yes (0/1) score for each substance used and those scores were then summed, each substance would be equally weighted in the overall score. Theoretically, some substances are more serious than others (e.g., smoking cigarettes vs. using cocaine), and we aimed to capture these differences in severity as well as frequency in creating the Substance Use scales. In order to transform the frequencies so that 1) the outliers did not have excessive weight and 2) the scales would reflect the severity of behaviors, each substance use frequency variable was transformed into percentile scores and then standardized. This two-step transformation process was necessary as the conversion to percentiles served to remediate the undue influence of outliers, while the standardization of these percentiles resulted in scores which reflected the relative infrequency of substances.[41] Consider, for example, a youth who endorsed smoking cigarettes 20 times and using cocaine once in the past year. Simply summing the number of times each substance had been used would result in a higher score for smoking cigarettes than using cocaine, which is problematic, given that cocaine is considered to be a much more severe substance associated with more negative consequences when compared to cigarettes. Utilizing the score transformation described above results in a much higher score for using cocaine once than for smoking cigarettes 20 times in the past year, thereby capturing important information about severity and frequency for each substance used.

Unfortunately, substance use outcomes could not be examined at T2 or T3, as only 3.5% and 8.1% of youth reported substance use during the T2 and T3 follow-up time periods, respectively. Therefore, only young adult (T4) substance use (with 74.5% reporting past-year use) was examined as an outcome.

[i] Please note that although we are using the word "peers" when describing these measures, study participants were prompted with the following before responding to the questions: We're asking about your friends, not just the kids you know, but kids you hang out with.

Analysis

Equivalence between intervention and control groups on baseline characteristics was assessed using chi-square tests for categorical variables and independent samples t-tests for continuous variables. The same analyses were repeated for the retained/analyzed samples at T2 and T3 (i.e., post attrition).

For Research Question 1, a series of linear regression models was used to test whether intervention status was related to T2 and T3 *Positive and Negative Expectancies for Substance Use*, *Affiliation with Prosocial and Deviant Peers*, and *Peer Substance Use*. Then, for Research Question 1a, the same models were tested for females and males separately.

For Research Question 2, a linear regression model was used to test the main effect of intervention status on young adult (T4) *Substance Use*. For Research Question 2a, a multivariable linear regression model that included the interaction term of group status times baseline substance use was used to examine whether intervention status moderated the impact of baseline substance use on young adult substance use. Moderation analyses were conducted and baseline substance use was mean centered prior to analyses. The significant moderation effect was further probed by plotting the interaction and testing the simple slope coefficients (i.e., the conditional effects) at both levels of the moderator, conditioned on below average (-1 *SD*), average, and above average (+1 *SD*) levels of baseline substance use.

All models controlled for the parallel baseline measure and concurrent age at the follow-up time point. All analyses used the intent-to-treat sample, and no missing data were imputed.

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Preliminary Findings

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Preliminary Finding #1

There were no baseline differences between the intervention and control groups.

It is important to establish baseline equivalence between the control and intervention groups to ensure that potential confounding variables are not present or, if present, are appropriately controlled for in statistical models. We examined whether the intervention and control groups differed on any of over 20 indices including age (at all time points), sex, race, ethnicity, baseline placement type (e.g., foster care, kinship care, congregate care), parental characteristics (e.g., maternal substance use), and the parallel baseline measures of the outcomes of interest. There were no statistically significant differences at $p<0.05$ between the intervention and control groups on any of the baseline variables. In addition, given that there is some attrition (i.e., dropouts from the study) at follow-up time points, it is important to examine whether the analysis sample at each time point remains balanced on key characteristics across intervention and control conditions. Retention analyses were conducted at T2 and T3 and no significant differences were detected. These findings establish baseline equivalence on demographic characteristics and other variables of interest and indicate that no baseline covariates were needed in analyses.

Preliminary Finding #2

At T2, six months post participation in the FHF-P program, intervention youth (compared to control youth) reported having more prosocial friends than control youth.

FHF-P had a positive impact on prosocial peer affiliations six months after the program ended (T2). Although there were no statistically significant differences on T2 *Positive and Negative Expectancies for Substance Use*, *Affiliation with Deviant Peers*, and *Peer Substance Use*, the direction of findings was encouraging and is of practical significance to the lives of these youth. For example, the intervention group reported more negative expectancies for substance use ($p=0.10$) and were less likely to report having friends who engaged in substance use (with 21.4% of control youth reporting their friends use substances and only 12.8% of intervention youth reporting this, $p=0.16$).

Preliminary Finding #3

At T3, 1.5 years post intervention, intervention youth (compared to control youth) reported having fewer deviant friends and were less likely to report having friends who used substances.

The effect of the FHF-P program on participants' association with deviant peers, and specifically those who use substances, seems to be a more delayed impact of the program. Nearly the same percentage of intervention youth who reported their friends were using substances at T2 (12.7%) reported this at T3 (13.7%), but nearly a third of control youth (31.2%) reported having friends who used substances at T3. Although the impact of FHF-P on affiliations with prosocial peers was no longer significant at T3, positive expectancies for substance use approached significance ($p=0.11$) and remains of practical value, with intervention youth reporting fewer positive expectancies than control youth.

Preliminary Finding #4

Most of the positive effects of FHF-P on risk and protective factors for substance use were concentrated in females.

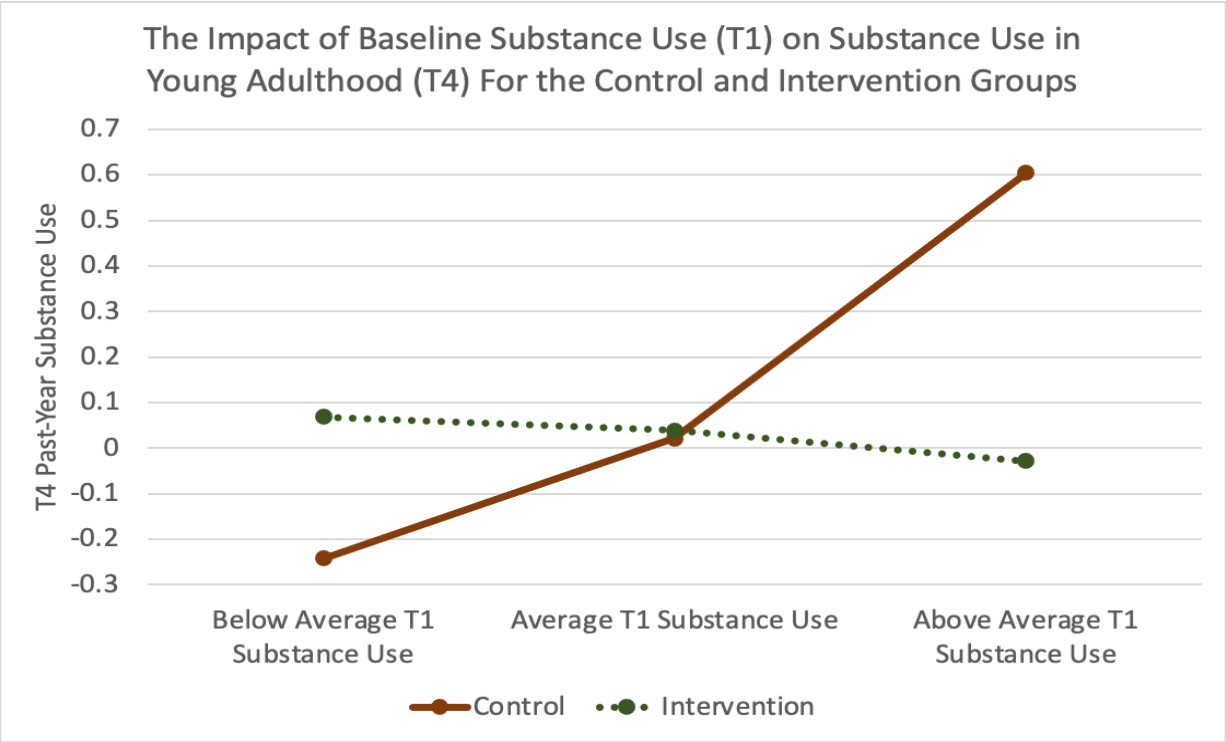
The same outcome analyses at T2 and T3 were conducted separately for females and males. While only one of the 10 analyses approached statistical significance for males, there were several significant positive outcomes for females. For males at T3, there was a statistical trend for more males in the control group to report having friends who were using substances than males in the intervention group (31.2% control vs. 14.1% intervention, p=0.07). This intervention effect on friends using substances was even stronger for females, with a significant effect at both T2 (20.9% of control female youth vs 4.1% of intervention female youth reported having friends who were using substances, p=0.02) and T3 (29.5% vs. 11.9%). Furthermore, for females in the intervention group, there were several statistically significant effects: more prosocial peers at T2 and T3, fewer deviant peers at T3, and higher negative expectancies for substance use at T2 as compared to females in the control group.

Preliminary Finding #5

Although there were no group differences in T4 young adult substance use, early substance use was a strong predictor of later substance use, but only for the control group, suggesting that FHF-P may buffer the effects of early risk on later outcomes.

As demonstrated in Figure 1, there was no association between baseline (T1) substance use and young adult (T4) substance use for the intervention group. Conversely, for the control group, baseline (T1) substance use was a strong predictor of young adult substance use, such that youth reporting above average levels of baseline substance use reported the highest levels of substance use in young adulthood. However, given the small sample size (21 in the control group and 26 in the intervention group), these results should be interpreted with caution and warrant replication with larger samples.

Figure 1. The Impact of Baseline Substance Use (T1) on Substance Use in Young Adulthood (T4) for the Control and Intervention Groups



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Making Data Actionable

Recommendations
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Conclusion

Making Data Actionable

The Family First Evidence Building Hub model advances Colorado's 5-year vision for evidence-based decision making (EBDM). EBDM recognizes that research evidence is not the only contributing factor to policy and budget decisions. It is the intersection of the best available research evidence, community needs and implementation context, and decision-makers' expertise. Recommendations and lessons learned below capture actionable insights primarily based on the best available research evidence. These findings should be paired with community needs and implementation context as well as decision-makers' expertise to make recommendations actionable for Colorado's children, youth, and families.

Recommendations

Preliminary findings from this rigorous evaluation suggest that the FHF-P program demonstrates positive impacts on key risk and protective factors for substance use in early to mid-adolescence. FHF-P also appears to buffer the impact of early substance use on young adult substance use. Results highlight the following:

1. In the current sample, by age 12, less than a quarter of youth reported ever using substances, and under 10% were current/regular users. Given the known risk of problematic substance use among this population, **our findings suggest there is ample opportunity to prevent substance use among child welfare-involved youth and to intervene with those who have begun using**.
2. The field of prevention science has identified several evidence-based programs that prevent substance use through skill-building (i.e., enhancing social, cognitive, personal self-management, and behavioral or drug-resistance skills), though few have been tested in high-risk populations such as with youth involved in the child welfare system. **The results of this study suggest that implementing FHF-P, which employs all the evidence-based practices for the prevention of substance use, will help reduce substance use in this vulnerable population of youth in out-of-home care**.

> *"It is imperative that strategies to bring preventive interventions to scale pursue…health equity for the most vulnerable and underserved populations."*
>
> **- Hawkins et. al (2016)** [42]

3. It is important to identify for whom and in what ways evidence-based programs operate. As the current study demonstrates, FHF-P's positive effects on risk and protective factors for substance use were concentrated among females. **Further research should examine whether there are differences in program effects by race/ethnicity, living situation, and baseline risk factors. In addition, researching the mechanisms by which FHF-P may reduce later substance use among early users is recommended**.

Lessons Learned

There are significant challenges when working with substance use data collected from youth, as there tends to be relatively low endorsement of use in this age group (and particularly so for preteens). Quantifying youth substance use is also challenging as there are important differences between normative experimentation and problematic use, and consideration of frequency, duration, type, and severity of use is important. The data transformations in this report allowed us to address many of these challenges. Additionally, given the low rates of substance use in early adolescence, it is critical to collect data on well-established risk and protective factors for substance use during this developmental stage. A high number of participants with diverse sociodemographic characteristics is also needed to examine subgroup effects and mechanisms of program effects.

Conclusion

Given high rates of substance use among adolescents in out-of-home care and the deleterious outcomes associated with the early onset of substance use, it is imperative that effective preventive interventions are developed for this vulnerable population. Currently, there are very few *early* intervention programs with demonstrated effectiveness targeting substance use for this vulnerable population. A comprehensive review of interventions specific to youth who have been maltreated and exposed to violence[43] suggests that those which reduce trauma symptoms, bolster youth's internal agency, and build positive peer networks can promote youth restraint from substance use. FHF-P targets many of these domains, and the current investigation demonstrated positive intervention effects at two follow-up time points that included: 1) greater affiliation with prosocial peers, 2) less affiliation with deviant peers, and 3) less likely to have friends who used substances. Our preliminary findings also suggest that the FHF-P intervention breaks the link between early adolescent and young adult substance use. Finally, our study replicates earlier findings[44] that suggest that peer factors exert a strong influence on substance use, especially among females.

The preliminary results of this study suggest that implementing FHF-P, which employs an array of evidence-based practices for the prevention of youth substance use, will help reduce substance use among Colorado child welfare-involved youth and advance the prevention focus of Family First.

Endnotes

[1] Taussig, H.N., Fulginiti, A., Racz, S.J., Evans, R., & Cary Katz, C. (2024). Long-term impact of the Fostering Healthy Futures for Preteens program on suicide-related thoughts and behaviors for youth in out-of-home care: A randomized controlled trial. *American Journal of Community Psychology*, 1–12. https://doi.org/10.1002/ajcp.12745

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