

# Impact of Project Amp: Quantitative Findings

## What is Project Amp?

Project Amp is an innovative substance use prevention and early intervention model for youth. The model engages young adult peer mentors with lived experience to deliver 4-6 one-on-one sessions and is designed to prevent and delay substance use among adolescents by mitigating risk factors and strengthening protective factors.

From 2020-2022, the C4 Innovations Project Amp team conducted a pre/post evaluation of Project Amp in three communities: Johns Creek, Georgia, Taos, New Mexico, and Lorain County, Ohio. The team examined outcomes related to youth quality of life, substance use and substance use risk, self-efficacy, coping mechanisms, perception of harm of substances, and resistance to peer influence. The data demonstrate statistically significant improvements in self-efficacy, coping skills, social connectedness, and quality of life for youth who have completed Project Amp.

## Study Population

Across Project Amp’s three sites, thirty-one students completed the intervention (n=31), with ages ranging from 12-19. Of the students who participated, 48% were Hispanic or Latinx, 15% were White, 6% were Black or African American, 3% were Alaskan Native or American Indian, and 29% identified as another race or more than one race.

The distribution of youth substance use risk level in Project Amp was bimodal. The majority of youth fell in the low or high-risk groups during their completion of the pre-survey, with very few falling in the medium risk group. The Project Amp students who completed both pre- and post- questionnaires only included two participants that fell in the medium risk level at the start of the program.

## Findings

### Self-efficacy

Self-efficacy is an individual’s belief in their capacity to exert control over their own motivations, behaviors, and social environments.<sup>1</sup> Research has shown that self-efficacy is a reliable predictor of post-treatment abstinence and is related to the lessened occurrence or frequency of drinking and drug use in general.<sup>2,3,4</sup> Students who completed Project Amp experienced a statistically significant increase in self-efficacy. Using the Schwarzer General Self Efficacy (GSE) Scale, the Project Amp team saw an increase in self-efficacy score from 27.71 at pre- to 30.35 at post (p<.001). In the GSE, the total score ranges between 10 and 40, with a higher score indicating more self-efficacy.

### Coping Skills

Youth who completed Project Amp also had a statistically significant increase in coping skills (p<.05), which can provide an alternative to substance use as a means of dealing with stress. Using the Adolescent Coping Orientation for Problem Experiences (A-COPE), a self-report measure of coping strategies appropriate for use with adolescents, the Project Amp team observed a significant or marginal increase for Project Amp youth on several subscales, including ventilating their feelings, seeking professional support, seeking diversions, developing self-reliance and optimism, engaging in demanding activities, and being humorous.



## Social Connectedness

Social support is a protective factor against developing alcohol and substance use disorders.<sup>5</sup> Project Amp helps youth strengthen positive social relationships with family, friends, and communities. Youth who participated in Project Amp had a statistically significant increase in social connectedness. The team used the Social Connectedness Scale,<sup>6</sup> a 20-item scale in which responses range from 1 (strongly disagree) to 6 (strongly agree), to measure social connectedness. The items in this scale are summed, and a higher score indicates more connectedness to others. For Project Amp youth, there was an increase in mean scores from 75.55 at pre- to 82.45 at post ( $p > .01$ ).

## Quality of Life

Finally, Project Amp youth experienced a statistically significant increase in youth quality of life ( $p < .001$ ). Quality of life is a subjective judgment of one's own life and does not map to functional or health status. However, it is useful in the evaluation of adolescents' engagement in health risk behavior. The Youth Quality of Life Instrument – Research Version (YQOL-R) measures quality of life in youth using a 100-point scale where a higher score represents a higher quality of life. The mean score on the YQOL-R rose for students who completed Project Amp from pre- (64.07) to post (72.05). Notably, gains in quality of life were significantly higher for the subgroup of youth that met in-person for all sessions than the group that met virtually for all sessions [ $t(26) = 1.90$ ,  $p = .034$ ].

## Limitations

Smaller sample sizes of subgroups limited the Project Amp team's ability to do thorough sub-group-by-outcome analyses, though there were some significant findings. Both pre- and post- questionnaires only included two participants that fell in the medium risk level at the start of the program.

## Conclusion

Youth who completed Project Amp with near-age peer mentors developed several protective factors that are related to preventing or delaying initiation to substance use and decreasing substance use risk.



## References

1. Carey, M. P. & Forsyth, A. D. (2009). *Teaching tip sheet: Self efficacy*. American Psychological Association. <https://www.apa.org/pi/aids/resources/education/self-efficacy>
2. Stephens R. S., Wertz J. S., & Roffman R. A. (1995). Self-efficacy and marijuana cessation: A construct validity analysis. *Journal of Consulting and Clinical Psychology*, 63(6):1022–1031.
3. Kadden R. M, Litt M. D, Kabela-Cormier E., & Petry N. M. (2007) Abstinence rates following behavioral treatments for marijuana dependence. *Addictive Behaviors*, 32, 1220–1236.
4. Hayaki J., Herman D. S., Hagerty C. E., de Dios M. A., Anderson B. J., & Stein M.D. (2011). Expectancies and self-efficacy mediate the effects of impulsivity on marijuana use outcomes: An application of the acquired preparedness model. *Addictive Behaviors*, 36, 389–396.
5. Das, J. K., Salam, R. A., Arshad, A., Finkelstein, Y., & Bhutta, Z. A. (2016). Interventions for adolescent substance abuse: An overview of systematic reviews. *Journal of Adolescent Health*, 59(2016), S61-S75.
6. Lee, R. M., & Robbins S. B. (1995). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology*, 42, 232-241.