Community Engaged Learning and Prevention of Substance Use in Adolescents

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INTRODUCTION

•Community engaged learning (CEL)
- defined as a type of experimental learning in which educational experience involves organized service activity paired with structured reflections to teach students about social issues (Lundy, 2007; Conway et al., 2009; Dunlap, 1998).
- has several outcomes including development of
  - personal efficacy
  - interpersonal skills
  - social responsibility (Lundy, 2007; Campbell & Oswald, 2018; Kalbi et al., 2013).

•Peer leadership
- involves college students educating a same-age or younger audience (middle or high schoolers) and encouraging the audience to educate their own peers and family.
- acts as an efficient method for substance abuse education and prevention among adolescents (Klepp et al., 1986; Popova et al., 2021). Environment, application, and motivation should be considered when using peer education.
- can be more meaningful if substance education
  - comes from youth (Popova et al., 2021, Klepp et al., 1986; Skager, 2009).
  - is formatted in an interactive manner (Guttman et al., 2008; Skager, 2009; Ennett et al., 1994).
  - utilizes educators that are able to make personal connections to the audience (Klepp et al., 1986; Botvin et al., 1984; Skager, 2009).

•One of the most popular and widely implemented drug education programs, DARE (Drug Abuse Resistance Education), has shown little to no long-term positive effects in reducing substance use (Dukes, Ullman, & Stein; 1996; Lynam, 1999; Ennett et al., 1994). Despite a multitude of studies showing the ineffectiveness of DARE, many communities continue to back its use in adolescent drug education, leading the authors to attempt to design a program incorporating CEL that is peer-led and contains an interactive component.

HYPOTHESES

1. Adolescents will learn about the effects of alcohol, cannabis, and vaping on the brain and behavior.
2. Adolescents will be more motivated to abstain from substance use following the intervention.
3. Adolescents will feel more comfortable educating their peers following the intervention.
4. Peer educators (USF college students) will feel more confident in articulating about substances and substance use and will have an increased likelihood of participating in civic engagement in the future.

METHODS

This poster presents a proposal. There has been no data collection or interaction with participants. An IRB protocol is currently being written.

Design:
Nonequivalent control group pretest-posttest design.

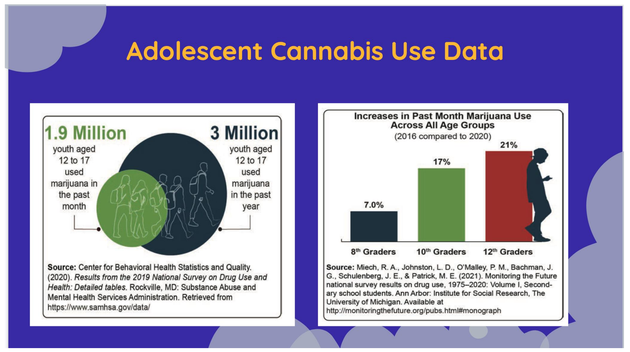
Participants:
Adolescents ages 13-18 will be recruited from area high schools using convenience sampling. Participants identifying as current members of Drug-Free Youth (D-Fy) will be selected to be in one group and the remaining participants will be in the comparison group. Fliers will be used for recruitment purposes. A group of USF students (n = 8) will be recruited to serve as peer educators.

Materials:
Knowledge Survey: A 10-item questionnaire will be administered to all participants to assess each participant's general knowledge of the effects of alcohol, vaping, and cannabis on adolescent brains and behavior. At the end of the survey, additional questions will be added to gather data on demographics including age and gender.

Intervention: A research-based slideshow lasting approximately 30 minutes will present the effects of alcohol, cannabis, and vaping on adolescent health and development. Group participation will be encouraged.

Procedure:
- A consent form will be given to the adolescents prior to participation in order for the adolescents under 18 to receive parental consent.
- Small groups of adolescents (members of Drug Free Youth vs. nonmembers) will complete the Knowledge Survey. Each participant will receive an identification number so their responses will remain confidential.
- Peer educators will administer the intervention. All participants (members of Drug Free Youth vs. nonmembers) will receive the same intervention involving a thirty-minute research-based slideshow presentation on the effects alcohol, cannabis, and vaping have on adolescent health and development. It will also include activities for the youth to get more involved in the presentation.
- The Knowledge Survey will be re-administered following the intervention. The same participant number will be used to compare responses pre vs post-intervention.
- Following the study, participants will be fully debriefed regarding the nature of the study and specific hypotheses.

Analyses:
The proposed study will use a two-way mixed factor ANOVA to analyze data. The between subjects variable will be type of adolescent (members of Drug Free Youth vs. nonmembers) and the repeated measures will be Session (Pretest vs Posttest). The dependent variable will be the score on the Knowledge Survey. All statistical analyses will be considered significant at the 0.05 alpha level.



EXPECTED RESULTS

- Overall, scores on the Knowledge Survey are expected to be significantly higher for the post-test than for the pre-test. This will likely be due to participants having recently studied the subject material in a peer-led environment, which will increase the emotional impact of the intervention and subsequently yield superior results.
- Members of Drug-Free Youth may obtain higher pre-test scores than unaffiliated participants, possibly due to drug prevention efforts in the coalition.
- Nonmembers may undergo a greater change during the intervention and experience a significant increase in knowledge of drug effects at the post-test.
- Improved Knowledge Survey scores on questions that were discussed most prevalently during the research-based slideshow. Assigning more focus to specific subjects by talking about them for an extended period of time will result in participants having a more thorough understanding of the topics rather than just memorizing key facts.
- Utilizing peers to educate participants about alcohol, cannabis, and vaping are expected to result in an increased understanding of these topics after the intervention due to personal connections between the peer educators and participants. This emotional component is hypothesized to lead to increased participant motivation to educate other peers about substance misuse.
- USF students involved in community engaged learning will benefit by enhancing their own
  - knowledge of the harmful effects of substance use
  - personal efficacy
  - interpersonal skills
  - social responsibility

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