Intervention IP-096: Bridges: A Family-Based, Multi-Component Preventative Intervention for Adolescent Mental Health and Behavioral Problems

Summary

This family-focused intervention, designed for Mexican-American (MA) youth, consists of components designed to strengthen home-school connections and develop ways to address emotional, behavioral, and academic issues. This intervention is designed for youth at risk for substance use, deviant behavior, depression, and school problems. The interventions include learning sessions on parenting, adolescent coping, and family strengthening. Reported health improvements include GPA, internalizing, and substance use, particularly for MAs with lower acculturation.

Overview

Purpose of Intervention:

To prevent or mitigate adolescent substance use, mental health problems, and behavioral health problems

Intervention Type:

Research-Tested — *Interventions with strong methodological rigor that have demonstrated short-term or long-term positive effects on one or more targeted health outcomes to improve minority health and/or health disparities through quantitative measures; Studies have a control or comparison group and are published in a peer-review journal; No pilot, demonstration or feasibility studies.*

Intervention Details

Intervention was Primarily Driven, Led, or Managed by:

Both Community and Academic/Clinical Researchers

Citations:

- Gonzales NA, Dumka LE, Millsap RE, Gottschall A, McClain DB, Wong JJ, Germán M, Mauricio AM, Wheeler L, Carpentier FD, Kim SY. Randomized trial of a broad preventive intervention for Mexican American adolescents. Journal of consulting and clinical psychology. 2012 Feb;80(1):1-16. Epub 2011 Nov 21.
  Relevance: Main Intervention

- Gonzales NA, Jensen M, Tein JY, Wong JJ, Dumka LE, Mauricio AM. Effect of Middle School Interventions on Alcohol Misuse and Abuse in Mexican American High School Adolescents: Five-Year Follow-up of a Randomized Clinical Trial. JAMA psychiatry. 2018 May 1;75(5):429-437.
  Relevance: Post-Intervention Outcomes
- Gonzales NA, Wong JJ, Toomey RB, Millsap R, Dumka LE, Mauricio AM. School engagement mediates long-term prevention effects for Mexican American adolescents. Prevention science : the official journal of the Society for Prevention Research. 2014 Dec;15(6):929-39.
  Relevance: Post-Intervention Outcomes

Adaptation of Another Research-based Intervention:

No

Contact Information

Primary Contact Name:

Ryan Stoll

Primary Contact Affiliation:

Arizona State University

Intervention URL:

https://reachinstitute.asu.edu/programs/bridges-to-high-school

Primary Contact Email:

rdstoll@asu.edu

Primary Contact Phone Number:

480-965-7420

Results

Intention

Improve minority health or the health of other populations with health disparities (e.g. rural populations, populations with low SES)

Intervention Primary Outcome:

Adolescent substance use risk, adolescent internalizing and externalizing symptoms, adolescent grades in school, and school disciplinary actions

Intervention Secondary Outcome:

Putative mediators such as parental monitoring, parent-adolescent communication, parent-adolescent conflict, consistent discipline, and adolescent self-regulation

Key Findings:

At 12-month follow-up, there was a significant main effect of the Bridges intervention on substance use in the last year. In general, adolescents in the Bridges condition were less likely to use substances than the control group. Positive program effects were also found on all other outcomes at the 12-month follow-up, including reductions in internalizing and externalizing symptoms, improvements in grade point average, and fewer school disciplinary actions. Posttest changes were effective parenting, adolescent coping efficacy, adolescent school engagement, and family cohesion mediated intervention effects. The majority of intervention effects were moderated by language, with a larger number of significant effects for families who participated in Spanish. Intervention effects were also moderated by baseline levels of mediators and outcomes, with the majority showing stronger effects for families with poorer functioning at baseline.

Statistical Method Used:

We used an intention-to-treat approach using ANCOVA (Mplus 5 with full information maximum likelihood). We examined average intervention effects (i.e., main effects) and moderation effects by program language, adolescent sex, and baseline measure.

Evaluations and Assessments

Were Any of the Following Assessments Conducted (Economic Evaluation, Needs Assessment, Process Evaluation)?:

No

Demographic and Implementation Description

Diseases, Disorders, or Conditions:

Mental and Behavioral Disorders and Conditions

Race/Ethnicity:

Hispanic or Latino

Populations with Health Disparities:

People with Lower Socioeconomic Status (SES), Racial and Ethnic Minority Populations

Age:

Adolescents (10 - 17 years), Adults

Socio-demographics / Population Characteristics

Community Type:

Urban / Inner City

Other Populations with Health Disparities:

Unspecified

Geographic Location:

Unspecified

Socio-Economic Status:

Low SES, Middle SES

Minority Health and Health Disparities Research Framework

		Levels of Influence			
		Individual	**Interpersonal**	**Community**	**Societal**
Determinant Types	**Biological**	✔	✔		
	Behavioral	✔	✔	✔	
	Physical / Built Environment	✔	✔		
	Sociocultural Environment	✔	✔	✔	
	Health Care System	✔	✔	✔	

Community Involvement

The community's role in different areas of the Intervention (Choices are "No Role", "Participation", and "Leadership"):

Design:

Participation

Dissemination:

Participation

Evaluation:

Participation

Implementation:

Leadership

Outreach:

Leadership

Planning :

Leadership

Recruitment:

Leadership
Sustainability:

Leadership

Characteristics and Implementation

Intervention Focus Area:

Behavior Change

Disease Continuum:

Primary Prevention, Secondary Prevention

Delivery Setting:

Schools / Colleges

Mode of Delivery:

In-person

Who delivered the Intervention?:

Varied professionals with prior experience working with adolescents and families in school settings (e.g., social service providers, teachers)

Conceptual Framework

Intervention Theory:

Ecological Systems Theory; Developmental Cascade Models

Intervention Framework:

None

Implementation

Intervention Study Design:

Individual Randomized Controlled Trial/Comparative (requires random assignment, a control/comparison group, and pre and post intervention outcome assessments), We had 516 families enrolled and randomized; 338 were randomized to Bridges. In the most recent NIDA-funded trial (R01 DA045855), a short version of Bridges, 663 families were enrolled; 414 were randomized to the intervention.

Targeted Intervention Sample Size:

516

Actual Intervention Sample Size:

338

Start Year:

2008

End Year:

2014

Intervention Exposures

Duration of Intervention/How Long it Lasted:

1-3 months

Frequency of Intervention Delivery:

Weekly

Number of Sessions/Meetings/Visits/Interactions:

7-8 Sessions

Average Length of Each Session/Meeting/Visit/Interaction:

1-2 Hours

Format of Delivery:

Dyad/Group of two (e.g. participant & partner; mother & child), Separate programs for parents and adolescents

Highest Reading Level of Intervention Materials Provided to Participants:

Grade 8-9

Impact, Lessons, Components

Produced an impact or change beyond the primary or secondary outcome:

No

Essential Aspects for Success:

• Comprehensive understanding and application by group leaders via 'Learn, Do, Teach', ensuring skills are solidified
• Participant responsiveness and out-of-session practice are crucial
• Consistent home practice activates and reinforces skills, enabling real-world application and lasting change

Intervention Impact:

Not available

Lessons Learned

Key Lessons Learned and/or Things That Could be Changed or Done Differently:

• Teen program is best implemented by well-trained professionals (master's level training is ideal)
• Para-professionals can deliver the parent program if given ample training and support
• While the Bridges parent and teen programs function well independently, combined use enhances outcomes

Insights Gained During Implementation

Insight Category	Insight Description
Cost of Implementing or Sustaining	The program benefits from pre-emptive solutions like transport aid, childcare, and meals to counter common barriers to attendance. Also, Bridges can prevent or mitigate behavioral problems, thereby contributing to families' reduced need of more expensive youth mental healthcare services.
Administrative Resources	Sustainment of the program benefits from administrative buy-in and dedicated resources. This includes paid time for group leaders to participate in training and supervision, materials to recruit families, parents, or adolescents, and time allocated to regular program delivery.
Equipment / Technologies	The delivery of Bridges requires a projector, television, and computer to show the slides and the multimedia videos developed for the program. Technology can make it easier for Bridges group leaders to deliver the program, but in-person elements are critical to connecting with program participants.
Training / Technical Assistance	For effective implementation, the skills taught in Bridges must be understood by the group leaders for them to teach and coach effectively. This requires group leaders to be trained in the program and practice using the skills themselves before implementing them with families.
Transportation	Pre-emptive solutions to common barriers to program attendance, including transport aid, can benefit implementation success.
Staffing	The program and participants will benefit from having a group leader who is the primary facilitator of the session and then a support person who helps individuals within the group who need additional support (e.g., participants who forgot a guidebook, who need additional time or explanation).

Intervention Components

Intervention Has Multiple Components:

No

Assessed Each Unique Contribution:

N/A

Products, Materials, and Funding

Training is associated with implementing this intervention. Therefore, please contact researcher for guidance and additional materials.

Expertise, Partnerships, and Funding Sources

	Used for Implementation	Needed for Sustainability
Expertise		
Key informants, Tribal leaders, Community gatekeepers	Yes	Yes
Partnerships		
School system (e.g. school administrators, health educators, daycares, preschools, private & public schools)	Yes	Yes
Funding Sources		
Public funding (e.g., federal, state or local government)	Yes	Yes
Private funding (e.g., foundations, corporations, institutions, facilities)	Yes	Yes

Product/Material/Tools

	Tailored For Language	Language(s) if other than English	Material
Outreach/Recruitment Tools			
Publicity Materials (e.g. Posters, Flyers, Press Releases)	Yes	Spanish	https://reachinstitute.asu.edu/programs/bridges-to-high-school
Participant Educational Tools			
Brochures/Factsheets/Pamphlets	Yes	Spanish	https://reachinstitute.asu.edu/programs/bridges-to-high-school
Measurement Tools			
Standardized Instrument/Measures	Yes	Spanish	https://reachinstitute.asu.edu/programs/bridges-to-high-school

Implementation Materials and Products

	Material
Implementation/Delivery Materials	
No Implementation/Delivery Materials provided.	
Implementation/Output Materials	
No Implementation/Output Materials provided.	

Articles Related to Submitted Intervention

	Article
Reports/Monographs	
No Reports/Monographs provided.	
Additional Articles	
What got in the way? Caregiver-reported challenges to home practice of assigned intervention skills	https://pubmed.ncbi.nlm.nih.gov/37090005/