

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Name of Program/Strategy: Storytelling for Empowerment

Report Contents

1. Overview and description
2. Implementation considerations (if available)
3. Descriptive information
4. Outcomes
5. Cost effectiveness report (Washington State Institute of Public Policy – if available)
6. Washington State results (from Performance Based Prevention System (PBPS) – if available)
7. Who is using this program/strategy
8. Study populations
9. Quality of studies
10. Readiness for Dissemination
11. Costs (if available)
12. Contacts for more information

1. Overview and description

Storytelling for Empowerment is a school-based, bilingual (English and Spanish) intervention for teenagers at risk for substance abuse, HIV, and other problem behaviors due to living in impoverished communities with high availability of drugs and limited health care services. The program primarily targets Latino/Latina youth and uses cognitive decision-making, positive cultural identity (cultural empowerment), and resiliency models of prevention as its conceptual underpinnings. Storytelling for Empowerment aims to decrease alcohol, tobacco, and other drug (ATOD) use by identifying and reducing factors in the individual, family, school, peer group, neighborhood/community, and society/media that place youth at high risk for ATOD use, while enhancing factors that may strengthen youth resiliency and protect against ATOD use. The core components of the intervention include the Storytelling PowerBook and the Facilitator's Guide. The PowerBook is a series of activity workbooks that include the following sections:

- Knowledge Power: brain physiology, physical effects of drugs
- Skill Power: decision-making strategies, role-playing

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

- Personal Power: multicultural stories, symbol making
- Character Power: multicultural historical figures, character traits
- Culture Power: defining culture, bi-culture, subculture; cultural symbols
- Future Power: multicultural role models, choosing a role model, goal setting

Other available adaptations of the PowerBook include the (1) StoryBook for HIV, with sections on science, risk factors, relationships, and self-efficacy, and (2) Stories To Live or Die By: Inhalants, Meth, Ecstasy, which teaches facts and myths about methamphetamine, ecstasy, and club drugs.

2. Implementation considerations (if available)

Storytelling for Empowerment also uses fotonovelas--a comic book-like print medium popular in Mexico and Latin America - to facilitate discussion between parents and their children on specific behaviors. Lesson plans are self-explanatory and can be implemented by teachers, program staff, or youth facilitators. Options for the number and timing of sessions are available.

3. Descriptive information

Areas of Interest	Substance abuse prevention
Outcomes	1: Alcohol and marijuana use 2: Anticipated ability to resist ATOD use 3: Knowledge about ATOD use 4: Perceived risk from ATOD use 5: Perception of peer disapproval of ATOD use
Outcome Categories	Alcohol Drugs Tobacco
Ages	6-12 (Childhood) 13-17 (Adolescent)
Gender	Male Female
Races/Ethnicities	Hispanic or Latino Race/ethnicity unspecified
Settings	School
Geographic Locations	Urban

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Implementation History	Storytelling for Empowerment was first implemented in 1995-1996 in a middle school on a rural reservation in Sells, Arizona, with 203 American Indian students participating. In 1997-1999, it was implemented in the Murphy School District in Phoenix, Arizona, with 292 students (primarily Mexican Americans). In 2001-2004, abuse and HIV prevention program based on Storytelling for Empowerment. In 2004-2007, 240 youth participated in an implementation of the program that included the methamphetamine, inhalant, and club drugs curriculum Stories To Live or Die By. During the same period, a site at Royal Palm Middle School in Phoenix, Arizona, used an adaptation of the Storytelling PowerBook with 15 teens (primarily African Americans).
NIH Funding/CER Studies	Partially/fully funded by National Institutes of Health: Yes Evaluated in comparative effectiveness research studies: No
Adaptations	The program has been implemented with American Indians, Latinos/Latinas, and African Americans.
Adverse Effects	No adverse effects, concerns, or unintended consequences were identified by the applicant.
IOM Prevention Categories	Selective

4. Outcomes

Outcome 1: Alcohol and marijuana use

Description of Measures	The personal commitment variable consisted of 12 survey items assessing private and public manifestations of commitments regarding substance use and other problem behaviors. Responses were on a 4-point Likert scale ranging from "strongly agree" to "strongly disagree." Items included, "I have made a decision to not get high by sniffing fumes."
Key Findings	In a study that compared the intervention group with an assessment-only control group, program participants had a statistically significant decrease in alcohol use from pretest to posttest and 1-year follow-up relative to the control group ($p < .05$). A significant interaction was found between program dosage (program contact hours) and alcohol use during the past 30 days in a subsample of program participants. Participants with more than 28

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

	<p>program contact hours significantly decreased their use of alcohol compared with participants with less than 28 program contact hours (all p values < .05).</p> <p>No statistically significant differences were found between the intervention and control groups on marijuana use. However, there was a significant interaction between program dosage and marijuana use during the past 30 days in a subsample of program participants.</p> <p>Participants with more than 28 program contact hours significantly decreased their use of marijuana compared to participants with less than 28 contact hours (p < .05).</p>
Studies Measuring Outcome	Study 1
Study Designs	Experimental, Quasi-experimental
Quality of Research Rating	3.3 (0.0-4.0 scale)

Outcome 2: Anticipated ability to resist ATOD use

Description of Measures	Anticipated ability to resist ATOD use was assessed using self-report items from CSAP's National Youth Survey in the following format: "Your best friend offered you a [drink, cigarette, marijuana, or other drugs] and you did not want it."
Key Findings	In a study that compared the intervention group with an assessment-only control group, the anticipated ability to resist ATOD use increased among program participants from pretest to posttest and 1-year follow-up and decreased among the control group during the same period (p < .01).
Studies Measuring Outcome	Study 1
Study Designs	Experimental, Quasi-experimental
Quality of Research Rating	3.2 (0.0-4.0 scale)

Outcome 3: Knowledge about ATOD use

Description of Measures	Substance Abuse Prevention Curriculum Knowledge test, a self-report instrument that measures knowledge, intention to use or not to use, and self-efficacy (intention to refuse substances if a friend
--------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

	offers them). The assessment includes sections on substance abuse prevention and methamphetamine inhalant prevention.
Key Findings	<p>In one study, program participants demonstrated a statistically significant increase in their knowledge about ATOD use from pretest to posttest (all p values < .05). No control group was used for this study.</p> <p>In another study, participants randomly assigned to receive the program showed a statistically significant increase in knowledge about ATOD use from pretest to posttest relative to a comparison group of youth who did not receive the program (p < .001).</p>
Studies Measuring Outcome	Study 2, Study 3
Study Designs	Experimental, Pre-experimental
Quality of Research Rating	3.1 (0.0-4.0 scale)

Outcome 4: Perceived risk from ATOD use

Description of Measures	<p>Perceived risk from ATOD use was assessed using self-report items from CSAP's Government Performance and Results Act (GPRA) Client Outcome instrument in the following format: "How much do you think people risk harming themselves physically or in other ways if they ..." [smoke one or more packs of cigarettes per day, try marijuana once or twice, use methamphetamine regularly, etc.]. Responses were on a Likert-type scale ranging from "no risk" (1) to "great risk" (4) with an additional option for "can't say/drug unfamiliar." Higher scores indicated higher perceived risk of ATOD use.</p>
Key Findings	<p>In one study, program participants increased their perception of risk from ATOD use from pretest to posttest (p < .001). No control group was used for this study.</p> <p>In another study, participants randomly assigned to receive the program showed a statistically significant increase in their perception of risk from ATOD use from pretest to posttest relative to a comparison group of youth who did not receive the program (p < .001).</p>
Studies Measuring Outcome	Study 2, Study 3

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Study Designs	Experimental, Pre-experimental
Quality of Research Rating	3.4 (0.0-4.0 scale)

Outcome 5: Perception of peer disapproval of ATOD use

Description of Measures	Perception of peer disapproval of ATOD use was measured using a self-report item from CSAP's GPRA Client Outcomes instrument: "How much would your friends disapprove of your using ..." followed by a list of 12 categories of drugs (e.g., alcohol, cigarettes, marijuana, heroin or other opiates, ecstasy, prescription drugs that are not prescribed for you). Responses were on a scale ranging from 1 ("a lot") to 4 ("not at all"). Lower scores indicated higher levels of peer disapproval.
Key Findings	In one study, program participants showed an increased perception of peer disapproval of ATOD use from pretest to posttest ($p < .001$). No control group was used for this study.
Studies Measuring Outcome	Study 2
Study Designs	Pre-experimental
Quality of Research Rating	3.3 (0.0-4.0 scale)

5. **Cost effectiveness report (Washington State Institute of Public Policy – if available)**
6. **Washington State results (from Performance Based Prevention System (PBPS) – if available)**
7. **Who is using this program/strategy**

Washington Counties	Oregon Counties
Ferry/Stevens, King	

8. Study populations

The studies reviewed for this intervention included the following populations, as reported by the study authors.

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Study	Age	Gender	Race/Ethnicity
Study 1	6-12 (Childhood) 13-17 (Adolescent)	53.5% Female 46.5% Male	85% Hispanic or Latino 15% Race/ethnicity unspecified
Study 2	6-12 (Childhood) 13-17 (Adolescent)	55% Male 45% Female	93% Hispanic or Latino 7% Race/ethnicity unspecified
Study 3	6-12 (Childhood) 13-17 (Adolescent)	58% Female 42% Male	85% Hispanic or Latino 15% Race/ethnicity unspecified

9. Quality of studies

The documents below were reviewed for Quality of Research. Other materials may be available. For more information, contact the developer(s).

Study 1

Nelson, A., & Arthur, B. (2003). Storytelling for Empowerment: Decreasing at-risk youth's alcohol and marijuana use. *Journal of Primary Prevention*, 24(2), 169-180.

The WHEEL Council. (n.d.). Storytelling for Empowerment: Decreasing at risk youth's alcohol and marijuana use. Final report 1994-1999 for Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention Grant No. 7821.

Study 2

Nelson, A., Walters, A., & Szecsy, E. (n.d.). Storytelling for Empowerment: Increasing health risk knowledge and unfavorable attitudes for meth, inhalant, ecstasy and club drug use. Final report 2004-2007 for the Wheel Club, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention Grant No. SP10780.

Study 3

The WHEEL Council. (n.d.). The Wheel Club: HIV minority initiatives. Final report 2001-2005 for Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention Grant No. 9865.

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Supplementary Materials

Arizona Prevention Resource Center, Arizona State University. (1995). Storytelling for Empowerment Project: Evaluation report. Submitted to the Storytelling for Empowerment Project, Arizona Affiliated Tribes, Inc.

Nelson, A., Siquieros, R., Arthur, B., & Mahrt, J. (1996). Storytelling for Empowerment: Prevention for middle school youth. Manuscript submitted for publication.

Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see Quality of Research.

Outcome	Reliability of Measures	Validity of Measures	Fidelity	Missing Data/Attrition	Confounding Variables	Data Analysis	Overall Rating
1: Alcohol and marijuana use	3.5	4.0	3.3	2.8	2.8	3.8	3.3
2: Anticipated ability to resist ATOD use	3.3	3.5	3.3	2.8	2.8	3.8	3.2
3: Knowledge about ATOD use	3.3	3.0	3.3	2.5	2.5	4.0	3.1
4: Perceived risk from ATOD use	4.0	3.5	3.1	2.8	2.8	4.0	3.4
5: Perception of peer disapproval of ATOD use	4.0	3.5	3.0	2.8	2.8	4.0	3.3

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Study Strengths

The measures used in the studies have good psychometric properties and have a long history of use by other independent researchers. Most of the assessments have been validated for use with the population receiving the intervention. The studies used exemplary methods to address missing data (e.g., data imputation, listwise deletion) and used statistical analyses that were appropriate for their respective designs and data.

Study Weaknesses

Attrition was high, and the attrition analyses used were basic (simple analyses of demographic characteristics of attritors versus non-attritors). No information was presented about the effects of attrition and differential attrition by groups on key outcome variables.

10. Readiness for Dissemination

The documents below were reviewed for Readiness for Dissemination. Other materials may be available. For more information, contact the developer(s).

Dissemination Materials

Nelson, A. (1998). *Storytelling for prevention*. Phoenix, AZ: The WHEEL Council.

Nelson, A. (1999). *Storytelling PowerBook*. Phoenix, AZ: The WHEEL Council.

Program Web site, <http://www.wheelcouncil.org>

The WHEEL Council. (1999). *Storytelling PowerBook: Facilitator's guide*. Phoenix, AZ.

The WHEEL Council. (2002). *Ricardo's pain*. Phoenix, AZ.

The WHEEL Council. (2006). *Prevention skills series book 1: Knowledge power and skill power*. Phoenix, AZ.

The WHEEL Council. (2006). *Prevention skills series book 2: Personal power and character power*. Phoenix, AZ.

The WHEEL Council. (2006). *Prevention skills series book 3: Culture power and future power*. Phoenix, AZ.

The WHEEL Council. (n.d.). *Quality assurance materials: Storytelling for Empowerment NREPP review*. Phoenix, AZ.

The WHEEL Council. (n.d.). *Stories teach, stories heal [DVD]*. Phoenix, AZ.

The WHEEL Council. (n.d.). *Storytelling PowerBook: Workshop training manual*. Phoenix, AZ.

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see Readiness for Dissemination.

Implementation Materials	Training and Support Resources	Quality Assurance Procedures	Overall Rating
3.0	2.3	2.8	2.7

Dissemination Strengths

The Facilitator's Guide provides good background information and easy-to-use lesson plans that maximize the use of the Storytelling PowerBook. The developer can provide customized training and technical assistance on request. Helpful resources and implementation tips are provided on the program Web site. Multiple tools are available to support quality assurance.

Dissemination Weaknesses

Little guidance is provided for planning and preparing for implementation. It is unclear how some individual materials fit into the overall implementation process. Trainings have occurred infrequently over the past 10 years. Little guidance is provided on administering quality assurance measures and using the resulting data to improve program delivery.

11. Costs (if available)

The information below was provided by the developer and may have changed since the time of review. For detailed information on implementation costs (e.g., staffing, space, equipment, materials shipping and handling), contact the developer.

Item Description	Cost	Required by Program Developer
Storytelling PowerBook	\$15.95 each	Yes
Facilitator's Guide	\$65.95 each	Yes
Storytelling for Prevention	\$3.50 each	Yes

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

HIV StoryBook	\$13.95 each	Yes
Stories To Live or Die by: Inhalants, Meth, Ecstasy	\$9.95 each	Yes
Angela's Hope fotonovela	\$5.95 each	Yes
Ricardo's Pain fotonovela	\$5.95 each	Yes
Huffing Marion & Walt Gonzo's Out fotonovela	\$5.95 each	Yes
Student activity books, activity guides, family discussion guides, and brochures	\$1.50-\$50.95 each	
1- or 2-day, on-site training	\$375 per day per trainer plus travel expenses	Yes
Training materials	\$25 per person	Yes
Implementation consultation	\$375 per day per trainer plus travel expenses	No
Fidelity checklist	Free	Yes

Additional Information

A 20% volume discount applies to orders of 10 or more of any 1 item.

12. Contacts for more information

For information on implementation:

Dora R. Sanchez
dora@wheelcouncil.org

For information on research:

Annabelle Nelson, Ph.D.
(928) 214-0120
annabelle@wheelcouncil.org

Learn More by Visiting: <http://www.wheelcouncil.org>