



RezRIDERS: A Tribally-Driven, Extreme Sport Intervention & Outcomes

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Abstract

Reducing Risk through Interpersonal Development, Empowerment, Resiliency, and Self-Determination (RezRIDERS) is a tribally-driven youth empowerment program designed to deter substance abuse and depression symptomology among high-risk American Indian youth while increasing hope/optimism, self-efficacy, and pro-social bonding. The quasi-experimental intervention took place between 2012-2015 in the Pueblo of Jemez (New Mexico, USA). The community-based program served fifty-five total youth. RezRIDERS has four major curricular components: 1) Extreme Sport activity clusters paired with; 2) Indigenized behavioral-cognitive lessons; 3) Tribal Research Team providing program oversight and cultural mentoring; and 4) Community action projects addressing youth-identified community issues. This unique program is a modern version of challenge and journeying that Indigenous people historically experienced as norms. Using qualitative and quantitative data, intervention pilot-testing assessed feasibility and efficacy of the program.

INTRODUCTION

American Indian and Alaska Native (AI/AN) youth are strong and resilient descendants from diverse tribal histories (Belcourt-Dittloff, 2007). Resiliency within this diverse population is evidenced by the ability to persist in the face of historic adversity. In fact, to underscore the ability to overcome extraordinary insults, Belcourt-Dittloff (2007) proposed the term *reziliency* to capture the unique development of resiliency in AI/AN such as a cultural identity and community belonging, among others. In present-day society, AI/AN youth continue to encounter cultural contradictions that challenge resiliency and task them to negotiate at least two worlds, traditional and contemporary (Nieto, 1992). The difficulty in negotiation contributes to disparities in education, employment and health. For example, in one study prevalence rates for AI students compared to national rates were significantly higher for nearly all substances (Stanley, Harness, Swaim & Beauvais, 2014). Data from the 2015 Youth Risk Behavior Surveillance System (YRBSS; CDC, 2015) estimate 34.9% of AI youth reported depression symptomology, feeling sad or hopeless, almost every day for two or more consecutive weeks during the past 12 months. Several leading causes of morbidity and mortality in AI/AN adults can be traced back to adolescent behaviors (Kann et al., 2016), indicating that adolescent behaviors should be a focus for improved AI/AN community health and continued development of *reziliency*.

Youth empowerment programs can reinforce protective factors like self-regulation, negotiation, and social networks at multiple levels of the social-ecology necessary to control risky behaviors (Henson, Sabo, Trujillo & Teufel-Shone, 2017; Wiers et al., 2007). However, it is all too common that communities are required to adapt health programs that do not fit the needs, life stage, values, or culture of Indigenous communities. Adolescent focused programs need to provide challenge and engagement to develop assets successfully. For example, sport for development and peace (SDP) harnesses sport as challenge while programs provide opportunity to deconstruct power relations (Darnell, 2012). Further Hayhurst, Gills, and Wright (2016) found SDP girl-focused Indigenous programs strengthened social ties, fostered confidence, and developed Indigenous role models. Along those lines, the RezRIDERS curriculum was designed to invoke challenge while strengthening cultural values and social ties.

In this paper, the authors present the RezRIDERS program, a youth empowerment program born from lived experience, theoretically-grounded and guided by the principles of Tribally-driven CBPR (Belone, et al. 2016; Mariella, Brown, Carter & Verri, 2009). Principles include recognizing community governance, building on community strengths and resources, and complying with community values and traditions (Israel, Schulz, Parker, & Becker, 1998; Mariella, Brown, Carter & Verri, 2009). RezRIDERS, a three-year feasibility study funded by the National Institute on Drug Abuse, aimed to deter substance (ab)use and depression symptomology while increasing optimism/hope for the future among high-risk AI youth. This article reports on the 1) role of a Tribal Research Team (TRT); 2) the results from RezRIDERS pilot-test for feasibility and efficacy with high-risk youth in grades 8-11, and; 3) assessment of additional program effects at the individual and community level. This program was made possible by shared planning, mutual vision, goals and research alignments (Tafoya, Tosa & Lucero, 2012).

Reducing Risk through Interpersonal Development, Empowerment, Resiliency & Self-Determination (RezRIDERS) is an AI-authored curriculum and product of the second author's¹ experience as a high-risk youth. RezRIDERS embraces adversity by tapping into the appeal of Extreme Sport (ES; Tomlinson, 2004) while Tribal Research Team (TRT) members who serve as culturally-grounded mentors, guide the journey. The name 'RezRIDERS' itself is meant to invoke discourse stemming from life experience, historical legacies and unique AI/AN contexts. The use of ES may appear novel in a contemporary context, but it is an indigenous traditional concept; a modern version of challenge and journey that indigenous people historically experienced as norms (Cajete, 1995), where the natural environment plays a critical role in positive development. The program contains four major curricular components: a) ES activity clusters paired with; b) Indigenized behavioral-cognitive lessons; c) TRT as cultural mentors; and d) Youth-driven Community

¹ Gregory B. Tafoya, (Santa Clara Pueblo and Sac and Fox) facilitated AI youth groups, grades 8–12 for eight years with the Snowboard Outreach Society (SOS) at Ski Santa Fe. A professionally certified Level I instructor with the American Association of Snowboard Instructors, Mr. Tafoya has experience with high-risk youth, including middle school, paroled AI youth & young adults, and the Jemez-UNM Family Circle Program. An enrolled tribal member of Santa Clara Pueblo which is adjacent to the city of Espanola (NM) a city known nationally for heroin epidemics. His interests in high-risk AI youth & young adults stem from personal childhood experience, background in scientific research, and career as a snowboard instructor. Greg developed RezRIDERS for his MPH thesis. Mr. Tafoya was an academic research partner with the Pueblo of Jemez for over 10 years.

Action Projects (CAPs). CAPs are intended to provide immediate, action-based community level benefit. Tribal youth engage in three ES multi-day activity clusters that follow the sacred water cycle: winter snowboarding; spring white-water rafting; summer high-ropes and rock climbing. Place-based teaching is imperative because the specific mountains and rivers where activities occur have cultural significance to indigenous people (Walters, Beltran, Huh & Evans-Campbell, 2011). The experience culminates during the harvest season with CAPs. The activity clusters provide the context for the Indigenized behavioral-cognitive lessons that emphasize individual and collective core values, optimism/hope, self-determination and empowerment. Indigenized behavioral-cognitive lessons are determined based on cultural knowledge of behavior and how decisions are made as it relates to health. RezRIDERS blends indigenous knowledge with decolonizing research methodology to create a robust youth empowerment program.

THEORETICAL FRAMEWORK

This curriculum was developed at the nexus of Indigenous, social learning, and empowerment theories guided by tribally driven CBPR. Indigenous knowledge theory applies cultural mentorship to center beliefs and practices by explaining problems and offering solutions within the program (Cajete, 1999; King et al., 2009; Tuhiwai Smith, 2012; Wilson, 2008). It includes empirical and normative learning (Battiste, 2002); methodologies of observation, experiential learning in the physical world, and apprenticeship (Cajete, 1999; 2000). Indigenous theory suggests that specific behavioral sanctions against deviant drug/alcohol behaviors have been weakened through mainstream drug prevention emphasizing individual skills that may conflict with tribal culture, with cultural mentorship especially important to negotiate contradictions between Western and Indigenous worlds (Tuhiwai Smith, 2012; Whitbeck, Sittner-Hartshorn & Walls, 2014). Various literatures find cultural connectedness and identity positively associated with health (Beals et al., 2005; Gone, Hartmann & Sprague, 2017; Ringwalt & Bliss, 2006; Whitbeck, Sittner-Hartshorn & Walls, 2014). The indigenized cognitive-behavioral curriculum paired with ES adapts evidence-based social learning theory (Bandura, 1977), with the interaction between person, psycho-social belief/behaviors and the natural environment also central to Indigenous theory. CAPs build on youth empowerment theory

by recognizing youth as decision-makers and participants for increased self- and collective efficacy, group bonding, participation in social action, and improved mental health and educational outcomes (Berg et al, 2009; Wallerstein, 2006). Extreme sport, which AI/ANs rarely access, was used to expose participants to stimulating, risky sport activities in natural conditions.

RESEARCH LOCATION AND PROJECT DEVELOPMENT

Our tribally-driven CBPR project between the Pueblo of Jemez and University of New Mexico embraced RezRIDERS to meet community needs, values and fit within tribal culture. The Pueblo of Jemez is one of 19 federally-recognized New Mexico (NM) pueblos that consists of 3,400 people and proudly retains 87% fluency in speaking their Towa language. This community is located at the base of the Jemez Mountains, one-hour northwest of Albuquerque. The way of life of the Jemez people (Hemish), revolves around the cultivation of crops that have been passed down throughout the ages. Like many Native American tribes, the Hemish are proud of their resiliency against colonial domination. Presently, however, pressing issues of substance and alcohol abuse threaten the fabric of the Hemish way of life. RezRIDERS was created to address these concerns for present and future generations.

To ensure that Jemez ways and culture informed the research design, the program was directed by the Tribal Research Team (TRT), also article co-authors. The tribal PI and TRT leader, Janice Tosa ² purposefully selected tribal members who would be responsive to the program challenge and provide program consistency through commitment. The TRT was comprised of 6-8 adult tribal member volunteers who maintained strong cultural ties and lived in the community. Members were and continue to be role models in the Jemez community. The team consisted of teachers, tribal program managers and college students. They served as examples to Jemez youth; TRT members live positive lives and maintain a

² Janice Tosa is a member of the Pueblo of Jemez. Locally, Janice is known for her running prowess that earned her a full cross-country scholarship to the University of New Mexico. After her cross-country career, Ms. Tosa continued her education earning her master's degree in 2010. Janice was raised and continues to reside in her community. For the last 10 years, she has worked in the Jemez Department of Education, Education Services Center, where she continues to work with students on various program like Pecos Pathways (tanginstitute.andover.edu/learning-in-the-world/litw-programs/pecos-pathways) and the Family Circle Project (cpr.unm.edu/research-projects/flcp).

high level of respect in the community. Mentors must live the life they preach, one that is rooted in language and the culture of the Jemez people.

The TRT advanced the role of traditional Community Advisory Boards common to CBPR practice to promote direct participation. Expectations of all TRT members included review and revision of data collection instruments, attend activity clusters, assist with CAPs, co-interpret aggregate data and participate in dissemination activities. Those TRT who opted to complete Human Subjects Research training were also responsible to assist with data collection and analysis. Prior to this feasibility study, the TRT piloted an abbreviated RezRIDERS program and adapted curricular activities based on program experience. From the pilot experience, the TRT developed a dialogue-to-action model (figure 1) meant to benefit the Pueblo of Jemez, Indigenous and other communities facing inequity. The model highlights listening and dialogue as a means to action. The model was embedded into the curriculum to represent how discussions with Jemez youth would result with beneficial action. While the group was initially formed for the RezRIDERS feasibility study, the purpose and structure have continued in other prevention programs serving the Hemish community.

Figure 1. Dialogue-To-Action Model



Fig. 1: Dialogue-To-Action Model

METHODS

RezRIDERS utilized a quasi-experimental design with intervention and non-participant groups. Inclusion was limited to AI youth in 8-11 grades, who lived within community borders. Recruitment occurred through two mechanisms. First, at two local high schools the tribal PI presented an overview of RezRIDERS during class sessions. Interested youth were invited to bring parents to a local information session. Second, as some youth attended schools outside of the community, a recruitment announcement was published in the local newsletter. The announcement provided an overview of the program and details of upcoming information sessions with contact details. Information sessions were led by the TRT who detailed program components and expectations of participants. Parents of youth who provided consent to youth assent were asked to participate in an individual interview at the end of the year-long program. Written consent was obtained from parents willing to be interviewed. Three separate cohorts were recruited using these methods. Youth who chose not to participate were asked to become a non-participant control group member. Research was approved by the UNM Human Research Protections Office (#11-055).

SAMPLE AND PARTICIPANT SELECTION

Intervention Group. At the start of each cohort, the TRT convened meetings with youth participants. The purpose of the first meeting was two-fold. Youth were introduced to each other, TRT members and research members. Participants were also asked to complete a pre-intervention survey instrument. The immediate post intervention measurement was completed within one month of the last activity day (long-term follow up is not addressed in this article). Participants were given the post-measure to complete prior to a graduation celebration. Meetings were held before and after each activity cluster for briefing and preparation, and debriefing discussion held after activities. All activity days were held outside of school on weekends or during school breaks. Participants on average experienced at least two activity clusters with 80% rate of attendance. The mean age for the participant group youth was 16 years. Three participant cohorts completed a one-year-long program, with a mean of 10 participant youth per cohort (N=30, 40% female and 60% male).

Non-Participant Group. Non-participant youth met intervention inclusion criteria but chose not to participate. Non-participating youth were asked to complete the survey instrument to serve as a control group for comparative analysis. Two consented samples of non-participating youth completed the intervention post-measure instrument. Control data collection was conducted at the same time as the intervention group. The mean age for the control group youth was 16.5 years (N=25, 48% female and 52% male).

Parents of Participants. To look beyond the quantitative pre/post measures, parents of intervention youth were enrolled to get perspectives of program impacts on their teenager. Individual semi-structured interviews were conducted with a parent at a convenient location within two months of program graduation. A member of the TRT, who had been trained in qualitative research methods and motivational interviewing, conducted the interviews. In total five parents of both male and female participants were interviewed (100% female). Female adult participation is consistent with other health promotion programs within this community (Shendo et al, 2012). With only five participants, we are unable to make claims relative to transferable program effects. However, the trajectories of comments are positive, worth mentioning, and will require further attention in a larger study.

MEASURES AND ANALYSIS

Quantitative. Quantitative measures were purposefully selected from previously-tested and reliable measurement protocols from the field of positive psychology. From experience as AI researchers and having been survey respondents, the tribal-academic team decided that the questionnaire would focus on “*what is right in our lives, instead of what is wrong,*” recognizing strengths rather than deficits. While the ultimate proposed outcomes of this study were reduced alcohol use and depression symptomology, the research team also wanted to assess and enhance resiliency factors of optimism/hope, empowerment, gratitude, and sense of community. For example, statements related to gratitude include: “I have so much in life to be thankful for” and “If I had to list everything that I felt grateful for, it would be a very long list.” Statements like these are intended to provide a positive experience for respondents and result with better response quality addressing known challenges with youth research (Brener, Billy & Grady, 2003). Questions on sensitive

topics are thought to result in reduced validity due to survey respondent discomfort. Intervention participants completed a 68-item pre/post-test consisting of the Brief Cope Scale, a 28-item measure of stress and coping (Carver, 1997); Life Orientation Test-Revised [LOT-R] Scale, a 10-item measure of dispositional optimism (Scheier, Carver & Bridges, 1994); Hope Scale, a 12-item measure of positive motivational states (Snyder et al, 1991); Gratitude Questionnaire, a 6-item measure of affective state & grateful disposition (McCullough, Emmons & Tsang, 2002); and, Wiggins Empowerment, a 7-item measure of sense of community, collective efficacy, self-efficacy, and reflection/action for change (Romero, et al, 2006). Depression/sadness, alcohol use/abuse and threat perception questions came from the NM Youth Risk and Resiliency Surveillance Survey (NM-YRRS; NM Dept. of Health, 2011), a part of the CDC YRBSS. This allowed the program to link program outcome measures with NM youth rates.

The main quantitative outcome variables were coping, gratitude, optimism, empowerment, self and collective efficacy, as well as depression symptomology and alcohol use. A matched paired t-test was conducted using SPSS (Version 22.0.0.0, IBM Corp.) for pre/post intervention group comparisons and one-way analysis of variance (ANOVA). Given the differing level of participation in intervention activity clusters, the dataset was stratified based on program exposure and participation. Intervention participants were divided into minimum and maximum exposure groups, with TRT members creating an ES composite variable that ranked exposure to program clusters combined with attendance records (see Table-1). A 1-ranking was assigned to youth who only attended meetings or participated in CAPs but did not participate in ES clusters. A 2-ranking was assigned to youth who had minimal ES activity cluster exposure of one-day with satisfactory attendance. A 3-ranking was assigned to those who participated in at least two ES clusters, with good attendance overall. The minimum exposure group therefore included participants ranked 1-3. A 4-ranking was assigned to those who were exposed to all three ES sports and held an 85% attendance rating. A 5-ranking was assigned to youth who attended all ES clusters and had a 100% attendance rating. The maximum exposure group combined participants ranked 4 and 5. Non-participant comparison group was given a 0-rank, for no-exposure nor participation denoting usual care.

Table 1. Intervention Conditions

Intervention Conditions: Program Exposure/Rank, Frequency, Gender.			
Intervention Condition	Ranking	N	Gender (%)
No Exposure/Usual Care	0	25	12 female (48.0) 13 male (52.0)
Minimum Exposure	1, 2, 3	17	7 female (41.2) 10 male (58.8)
Maximum Exposure	4, 5	13	5 female (38.5) 8 male (61.5)
<i>Total Study Participants</i>		55	24 female (43.6) 31 male (56.4)

Qualitative. For qualitative data, a semi-structured interview guide was developed for parent interviews. The guide consisted of ten questions; sample interview questions included: What expectations did you have with your child participating in RezRIDERS? Have you seen any changes in your child since they started participating in RezRIDERS? How has RezRIDERS affected your child and how they make decisions? Has RezRIDERS affected your relationship with your child? If so, how? On average, interviews lasted 40 minutes, were audio recorded and transcribed verbatim. Thematic analysis procedures were used (Creswell, 2007; 2014; Nowell, Norris, White & Moules 2018). To begin, two research team members listened to audiotapes and read through all interviews. Each member reviewed independently one-selected transcript looking for commonalities in the data and used those commonalities to categorize responses. These categorizations were inductively coded. The two individual team members then came together to discuss the coded transcript and decided on a coding framework. Transcripts were entered and coded in Atlas.ti (version 8, a Scientific Software Development GmbH), a qualitative software package. After which the team decided on themes that were seen across all interviews. With five participants, the research team decided on two cross-sectional themes “decision-making” inclusive of self-imposed changes to improve environment, plans, and self-efficacy codes. The second theme was named “self-expression” inclusive of improved communication and attention to relationships codes. Results are provided in the next section.

RESULTS

QUANTITATIVE

A paired-samples t-test was conducted for the maximum exposure group pre/post intervention program exposure. There was a significant difference in the scores for the Hope Scale pre-program ($M=44.69$, $SD=6.28$, Cronbach's $\alpha=.31$) and post-program ($M=49.23$, $SD=7.18$, Cronbach's $\alpha=.65$) exposure conditions $t(12)= 3.650$, $p= .003$. The same paired-sample t-test on the minimum exposure group was conducted and results were promising but not statistically significant. These results suggest that maximum exposure to the intervention had a positive effect on hope or positive motivational states and increased hope for the future.

Next, a one-way between groups ANOVA was conducted to compare the effects of the program exposure for exposure scores for the three conditions: maximum, minimum exposures and a no-exposure control group. For the item measuring depression, there was a significant effect for program exposure on depression at the $p<.05$ level for the three group conditions [$F(2, 52)=5.44$, $p=.007$]. A post hoc comparison using the Tukey HSD test indicated that the mean score for the maximum exposure group ($M=.00$, $SD=.00$) was significantly different from the control group ($M=.44$, $SD=.51$), and not significantly different from the minimum exposure group ($M=.18$, $SD=.39$). For the Brief Coping scale measuring behavioral disengagement there was a significant effect for program exposure on coping at the $p<.05$ level for the three group conditions [$F(2, 40)=3.71$, $p=.033$]. A post hoc comparison using the Tukey HSD test indicated that the mean score for the maximum exposure group ($M=2.54$, $SD=.89$) was also significantly different from the control group ($M=3.5$, $SD=1.2$) and not significantly different from the minimum exposure group ($M=2.69$, $SD=.95$). In sum, these results suggest that maximum program exposure influenced reported depression and behavioral disengagement. The results offer that maximum exposure results with less depression and improved behavioral disengagement compared with controls.

QUALITATIVE

Parents. Across all interviews two themes emerged “decision-making” and “self-expression.” Decision-making was seen at the personal level, including plans such as

college and/or career paths, and peer network level. One parent shared that her daughter showed change in how she cares for herself “she looks at her problems first, like her home life, she’s always by herself so she has made herself secure in the house, she is looking out more for herself instead of having someone look after her.” This indicates improved self-efficacy of the participant to control her own safety. Another parent indicated a participant made peer network changes “I think she is making better decisions as far as who she is hanging out with” improving her influence environment. Implying the deliberate change in choice and social networks. More research is needed to understand the full value of these changes. Regarding career and college paths a parent disclosed,

[H]e came home after one of the rafting trips. We were home and he said ‘[I] decided what I want to do or go for’ ‘What?’ I said, ‘what college?’ ‘[I] don’t think I am going to go to college yet Mom I think because I don’t know what I want to be, and I don’t know what to study and I just don’t want to go to school just to go to school.’ And he said ‘I think I am just going to go into the marines.’

While the parent preferred the participant immediately go to college, she was pleased that he made this important decision for himself, on his terms.

Self-expression, the second theme, connects improved communication and strengthened relationships. A parent indicated a participant was more empathetic and thoughtful, saying “the different trips, it has opened his eyes to different things and he’s always coming home ‘mom gah that was scary mom.’ I guess it got us closer than we were because we can share and he can tell me things.” Improved communication, as an outcome, was seemingly more prevalent among male youth, per parent accounts, and viewed by the TRT as a very important outcome. Communication is a key factor in relationships, learning how to express emotion in a healthy way is important to resiliency and emotional growth critical to AI/AN men and boy’s health (Braveheart et al, 2012; Sarche et al, 2017). RezRIDERS was effective in this regard as one parent stated,

What I have noticed is that he’s more outspoken with his feelings, and like stuff he is going through versus before he was more reserved and kept those to himself. And being outspoken about his feelings he knows how to express his feelings when he’s upset or angry, but he’ll do it in a calm way instead of lashing out.

And another parent shared, “He’s become more open and he’s more, like, he is not as afraid and he speaks out now” further supporting potential for AI/AN men and boy’s specific interventions. However, this program recognizes all youth need support and future research will work to identify intermediate outcomes that benefit overall health and wellness. Taken together, these qualitative outcomes are promising as participants made decisions to improve their individual situations, thought about the future, expressed feelings, improved communication and relationships. Coupled with the significant quantitative results showing improved hope and coping measures as well as reduced depression symptomology work toward strengthening resilience in AI/AN youth.

Community Action Projects (CAPs). Each year, the TRT asked Jemez youth to identify community issues that could be addressed through the planning and implementation of a youth-driven CAP to generate immediate community benefit. The first youth cohort set a very high bar by deciding to make traditional head dresses, worn by female dancers during the tribal feast day ceremony, an annual community event held in November. For this project, traditional leadership approval was required. Approval was initiated by adult TRT members who guided youth engagement with leaders. Traditional leadership then provided required direction from start to finish including distribution of headdresses to dancers. Through this youth-driven CAP, access to headdresses led to more ceremonial participation, and directly addressed community concerns about loss of cultural and traditional knowledge from decreased youth-traditional leadership interaction. In a 2003 Jemez tribal government-community assessment, loss of traditional knowledge and decreased ceremonial participation were documented and deemed primary risk factors for community health and education disparities. The construction and use of 78 finely detailed, hand-crafted headdresses resulted with increased tribal member participation in cultural activities. The second cohort decided to address a different issue by implementing a community-wide run/walk toy-drive. Youth identified that the tribal social services program was lacking toy donations for Jemez families in need during the Holidays; RezRIDERS youth were determined to help. Through much planning, preparation, commitment and tribal leadership support, this action project addressed several issues by tapping into known community strengths such as giving and running traditions. The event drew over 130 runners/walkers who, on average, donated 2-3 toys each. The event was an

incredible success, and community members publicly acknowledged the impact of RezRIDERS youth. Similarly, the third youth cohort planned a run/walk event with a different issue and similar benefit in mind. The youth identified a community faith-based organization that annually provided food to Jemez families in need. This community-wide event attracted 150 runners/walkers who, on average, donated 3-4 non-perishable food items. At both run/walk events, event participants received t-shirts with RezRIDERS imagery and logos that also helped the program name diffuse within the community. At all CAPs events, community acknowledgement and pride toward youth were clearly expressed. As a community outcome, annual toy drives continue under the direction of tribal social services, the event grows attendance each year. Since completion of action projects, Jemez leadership approached the TRT to assist with other community service efforts involving RezRIDERS youth which supports important youth-leadership interaction providing direct community benefit. These are examples of promising leadership and policy development, describing RezRIDERS tribal system effects far beyond quantitative measures of intervention impact.

DISCUSSION

The results of RezRIDERS proposes a promising and feasible intervention for positive youth development. In this challenge-based program fears were dealt with head on. Youth and mentors were challenged mentally and physically. Facing fears through ES resulted in behavior change that affected participants, parents and community. Individuals learned to overcome ES challenges and rewards for perseverance were witnessed by group members. Pro-social bonding occurred through the demonstration of social support, or encouragement of the group to prevail. At the end of each activity, TRT and research team observed youth walking taller and interpreted this as them feeling more optimistic about life.

The diffusion of RezRIDERS, a project aim, spread quickly over three years. Based on TRT and youth discussions, community members were familiar with RezRIDERS because of program participants and CAPs. For example, during a non-RezRIDERS program meeting, a facilitator approached the second author and said, “yeah, RezRIDERS, RezRIDERS, RezRIDERS, it’s all about RezRIDERS.” The intent of diffusion was to

provide benefit to non-participating youth through peer and community social networks via awareness. However, diffusion to non-participants was not systematically captured. It was hypothesized that program diffusion, or controlled contamination, would work to generate interest to participate and provide proxy benefit for those choosing not to participate. Since the Pueblo of Jemez is tightly connected, contamination cannot be controlled, and diffusion therefore was viewed as beneficial. The indigenous view embraced contamination as a research reality (Cochran et al, 2008). Despite diffusion, analysis of program efficacy still showed impact, this could be a lesson or practice for other communities with small populations. While program results are promising, challenges and limitations of the program exist.

CHALLENGES AND LIMITATIONS

There were three distinct challenges to this program including (a) transportation, (b) developing partnerships with ES industry, (c) challenges related to research. At the beginning of year one, transportation issues surfaced. The program did not have a vehicle and, therefore, inter-tribal program collaboration was necessary. The TRT secured vans from the Jemez Health & Human Services that were used for rock climbing and white-water rafting activity clusters. However, the vans were not meant for snow. Therefore, a shuttle company was contracted which travelled 160 miles round trip, to Jemez to pick up participants, deliver them to the resort, and back to Jemez at the end of the day. Encountering these issues early in year one allowed the TRT to set up plans for future programming. Similarly, the TRT had to identify companies that would partner with the tribe. Finding a natural fit to help the program meet its goals and objectives was necessary but not immediate. For example, one company asked if they could survey youth participants and use the data for their purposes which was not allowable. Eventually established relationships with partnering companies allowed the team to focus on providing comprehensive programming.

Issues related to research included sample size and data collection. While the sample size of the intervention was small, this also led to more effective program experiences. Small sizes are simply the reality of tribal community settings and the push by UNM to enroll more participants created partnership tension. It turned out that cohort

sizes of 15 or less strengthened the program in several ways. First, to be more effective in changing the lives of youth, TRT mentors needed one-on-one time for meaningful interaction. Second, the program could only accommodate small numbers for a few reasons: (a) the closest activity location was 1.5 hours from the community and the furthest was 2.5 hours driving; (b) space in the transportation vehicle was needed for safety and sport gear; and (c) food for youth was not grant supported. Food costs were feasible for small group sizes, with funders needing to recognize that growing youth have large appetites especially after they have been active. Third, the safety of the participants was top priority, small group sizes were helpful for TRT oversight. Non-participant data collection was challenging but resolved by eliminating code numbers for longitudinal data linkage and eliminating parental consent for control group members which was approved by the Institutional Review Board and funder as a surveillance activity. This change encouraged youth to respond without concern about parents asking to see responses and improved the research design and instrument precision.

CONCLUSION

RezRIDERS was intended to be an intervention that would recognize and honor the strength of culturally-connected mentors and youth. In this case, authors out to address substance abuse, depression symptomology, and promote health for the Pueblo of Jemez. The intervention was successful with respect to depression symptomology, hope/optimism, decision-making and self-expression. Although long-term follow-up would determine sustained outcomes. The RezRIDERS curriculum purposefully does not offer nor direct how specific prevention messages should play out. Neither does the curriculum instruct mentors about how dialogic techniques should develop with tribal youth. This is done on purpose, because it must be defined by TRT mentors to meet local context, language, culture and setting as observed in Fig-1. Interaction with tribal youth must develop and flow naturally so that mentors can be themselves, which tribal youth prefer and trust. RezRIDERS has demonstrated the importance of community direction and cultural grounding for program efficacy and ownership, as shown in the lives of the youth themselves. A parent stated it best, “she is staying out of trouble and it is because of RezRIDERS. The program works!”

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