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Sports as a Resiliency Factor in Native American Youth

Martin Robison

This research is a product of the Doctor of Psychology (PsyD) program at George Fox University. [Find out more](#) about the program.

Sports as a Resiliency Factor in Native American Youth

by

Martin Robison

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George Fox University

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by

Martin Robison, M.A.

has been approved at the

Graduate School of Clinical Psychology

George Fox University

as a Dissertation for the PsyD degree

Signatures:

Glena L Andrews PhD

Glena Andrews, Ph.D., ABPP – Dissertation Chair

Kristie Knows His Gun, PsyD

Kristie Knows His Gun, Psy.D. – Dissertation Member

Ryan Cox, MA

Ryan Cox, M.A. –Dissertation Member

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Martin Robison

Graduate School of Clinical Psychology at

George Fox University

Newberg, Oregon

Abstract

American Indian/Alaska Native (AI/AN) communities face unique issues due to historical and continued colonization, genocide, and forced assimilation (Stumblingbear-Riddle & Romans, 2012). AI/AN youth must address intergenerational trauma related to high rates of adverse childhood life events (Duran, 2006, Waller et al. 2002). Native American youth have the challenge of balancing their individual traditional culture with mainstream culture (Waller et al., 2002). Sports are one way that AI/AN communities are able to express themselves (Bloom, 2000). Participation in high school sports has been associated with various academic and social benefits (Fredricks & Eccles, 2006). Identifying the coping skills and support systems AI/AN youth use is imperative in order to allow the community to flourish. This study aimed to explore sports as a resilience factor for AI/AN high school students at an American AI/AN boarding school where 185 enrolled students were surveyed. Information was gathered on childhood adversities using the Adverse Childhood Experiences Survey (ACES). The Connor-Davidson Resilience Scale (CD-RISC) was used to measure student's ability to withstand adversity. There

was no correlation between childhood adversities and resilience for this sample which is consistent with previous findings of adversity and resilience in the AI/AN population (Knows His Gun, 2013). There was a small effect for resilience in those who participated in both formal and recreational sports compared to those who did not participate in sports. For students with either a high or low ACES score, there was a large effect size for resilience when they participated in formal and recreational sports compared to non-participating counterparts. It is essential for sports programs in boarding schools and reservations to continue to be accessible to youth as they grow a vital resilience factor.

Keywords: Native American, Indian American, youth, high school students, resilience, ACES, CD-RISC, sports

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Chapter 1

Introduction

American Indians and Alaska Natives (AI/AN) make up approximately 2% of the national population according to the U.S. Census Bureau (2016). This people group faces unique issues compared to other ethnic groups due to historical and continued colonization, genocide, and forced assimilation (Stumblingbear-Riddle & Romans, 2012). It should be noted that with over 550 federally recognized tribes, there is great diversity within the AI/AN people group, and not every person or tribe faces the same difficulties (National Congress of American Indians, 2016; Stumblingbear-Riddle & Romans, 2012). Due to this set of unique issues, AI/AN's continue to suffer from a variety of biological, psychological, and socioeconomic stressors. According to Stumblingbear-Riddle and Romans (2012), American Indians are at risk for alcoholism (579%), accidents (212%), suicide (70%), and homicide (41%) in comparison to the national average. There are also physiological consequences that have been noted through increased risk of obesity, diabetes, renal disease, cardiovascular problems, and poor nutrition (Munch, 2014). Native American populations also show physical activity levels below the national and international recommendations (Foulds, Warburton, & Bredin, 2013).

The AI/AN people have suffered the effects of hundreds of years of abuse and oppression from other people and systems (Knows His Gun, 2013). Trauma and oppression that occurred in the past continues and is not frozen in time. Many agree that generational trauma, when not properly addressed or grieved, is passed down from generation to generation (Duran,

Firehammer, & Gonzalez, 2008). The concept of unprocessed trauma that is passed down to subsequent generations is understood by the AI/AN community as a “soul wound” (Duran, 2006). This is also known as intergenerational trauma in current literature. Projecting pathology onto those who have less power can perpetuate soul wounds. These soul wounds can manifest into cyclical ailments such as domestic violence, institutional violence, mental illness, and substance abuse. In order for healing to occur in the AI/AN community, repair needs to take place on an individual level, which takes commitment and patience (Duran, 2006).

Since the colonization of North America, there has been an effort to control Native American populations in order to control land and natural resources (Child, 2016). One of the ways that majority culture attempted to gain and maintain control was forcing Native Americans to assimilate Christian beliefs, western values, working class occupations, private land ownership, and English education systems (Child, 2016). The government arraigned to have children forcibly removed to attend boarding schools where they could strip AI/AN people of their culture and replace it with a culture where White people were in power (Child, 2016). Although Native American boarding schools are often associated with an abusive and dark history, current boarding schools have recalibrated their goals. The oldest continuously operating Native American boarding school in United States now aims to provide their students with opportunities for success (Chemawa Indian School, 2015). The current ambition is to be cognizant of diversity among AI/AN students while honoring and celebrating unique tribal cultures in an educational setting (Chemawa Indian School, 2015). AI/AN students are no longer required to attend boarding schools away from their homes, but are offered the opportunity to attend if they feel it can benefit their personal aspirations.

Many former AI/AN boarding school students have positive memories of playing sports at school even if they hold negative memories of boarding school in general (Bloom, 2000). Sports were first used at boarding schools to impose western ideals and tradition in an effort to erase AI/AN culture. Ironically, sports ended up being a “source of pride for students and their children, a resource for pleasure, and an instrument through which they creatively constituted and reformulated their identities” (Bloom, 2000, p. 12). Sports can provide an effective symbol for the collective political and cultural struggle that AI/AN people face every day (Bloom, 2000).

Although sports are important to many AI/AN communities, they do not transcend the soul wounds that continue to be perpetuated in our society. Witherspoon (1993) illustrates this in her account of a Mohave girl’s struggles when her father passed away and mother turned to alcohol. The girl also struggled with drinking when she was in her early teens but identified sports as something that provided a positive outlet stating, “[Sports] keep me going. It’s something to do besides just go find trouble” (Witherspoon, 1993, p.1).

Despite being faced with seemingly insurmountable adversity, the AI/AN people are a group that is consistently growing in numbers and proportion of the American population (U.S. Census Bureau, 2016). According to Garrett et al. (2014) in 2011 AI/AN median age was six years younger than the national average. This means that the largest age group within the AI/AN people is youth. “Resilience in the face of adversity is not new to American Indian tribes” (Feinstein, Driving-Hawk, & Baartman, 2009, p. 194). It was shown that Native American employees of the St. Labre Indian School, a historically identified boarding school, displayed a higher level of resilience than expected (Knows His Gun, 2013).

Garrett et al. (2014) indicated there is a great need for research in promoting positive development in AI/AN youth. Most have the individual challenge of navigating two different cultural systems. It is a struggle to find meaning and balance in both traditional and modern culture (Garrett et al., 2014). Waller et al. (2002) stated that Native American youth often want to be able to maintain their unique traditional/tribal identities while at the same time fitting into the dominant world. Focusing on addressing intergenerational trauma and identifying sources of resilience, especially for youth, is vital for the continued restoration of the AI/AN people.

Sports and physical activity can provide a wide range of benefits for youth. Extracurricular physical activity and structure were positively related to verbal, quantitative, and cognitive functioning (Esteban-Cornejo, 2014). According to Pauperio, Corte-Real, Dias, and Fonseca (2012), young people with high levels of sports practice report a higher level of life satisfaction. Neely and Holt (2014) found that parents reported that their children benefited from participation in sports personally, socially, and physically when mastering a new skill. In addition, participation in physical activity is shown to mitigate risky behavior such as cigarette smoking and hazardous drinking (Ali, Amialchuk, & Heller, 2015; Hallinberg, Moore, Morgan, Bowen, & Goozen, 2015). According to Smith, Findlay and Crompton (2010), aboriginal youth's participation in various extracurricular activities provided an array of positive benefits including positive academic achievement, improved psychological functioning, and good peer relationships. Participation in high school clubs and sports is related to increased academic adjustment, educational status, and civic engagement (Fredricks & Eccles, 2006). In addition, involvement in extracurricular activities such as pow wows, music, and sports acted as a protective factor (Feinstein et al., 2009). Native American youth viewed sports as a positive way

to exercise. They identified it as a way to gather in community, socialize, be a team member, and “hang out together” (Perry & Hoffman, 2010, p. 110).

The current study aims to explore if the level of sports involvement has an impact on the level of resilience in AI/AN youth in a boarding school setting. This will benefit the AI/AN community through understanding how sports, adverse childhood experiences, and resilience in their youth are related in order to identify those who will likely benefit from additional supports. It will also support systems in funding programs that foster resilience for AI/AN youth. It is hypothesized that the level of adverse childhood experiences will not negatively impact the level of resilience. Second, it is hypothesized that the level of sports involvement will be positively associated with the level of resiliency. Lastly, it is hypothesized that those who have high involvement in sports, with any level of adverse childhood experiences, will have the highest level of resilience.

Chapter 2

Methods

Participants

Participants were gathered from a boarding school for Native American/Alaska Native high school students located in Northwestern United States. All students who are admitted to the Indian School have shown that they are at least $\frac{1}{4}$ Native American or are enrolled with a recognized tribe. There were 292 students enrolled at the time of the study. This study collected data from 185 students who participated with consent from a parent or guardian. One participant was omitted due to neglecting to complete the materials. The participants represented 68 different tribes or combination of tribes (See Table 1). Participants ranged in age from 13 to 19 years old ($M = 16.4$, $SD = 1.3$). Participants were in 9th grade ($n = 38$, 20.7%), 10th grade ($n = 37$, 20.1%), 11th grade ($n = 47$, 25.5%), 12th grade ($n = 49$, 26.6%), and 7.1% did not disclose their grade ($n = 13$). Participants identified as female ($n = 94$, 51.1%), male ($n = 78$, 42.4%), and 6.5% of participants did not disclose their gender ($n = 12$). The majority of participants lived on a reservation at some point in their lives ($n = 155$, 84.2%; M years = 12.39, $SD = 6.15$) but a few have not ($n = 8$, 4.3%) and 11.4% did not disclose whether or not they have ever lived on a reservation ($n = 21$).

Materials

The first measure (DV1) was the Adverse Childhood Experience Rating Scale (ACES, See Appendix A) developed by Felitti and colleagues (1998). This measure was originally

Table 1

Frequency of Participating Tribes

Tribe	Frequency	Percent
A'eot	1	0.5
Acoma	5	2.7
Akimel O'odham/Eskimo	1	0.5
Apache	1	0.5
Apache Pima	1	0.5
Assiniboine	1	0.5
Assiniboine/Gros Ventre	1	0.5
Athabasca	1	0.5
Blackfeet	5	2.7
Burns Paiute	1	0.5
Cherokee	1	0.5
Cheyenne River Sioux	1	0.5
Chippewa Cree	1	0.5
Coeur D'Alene	3	1.6
Colorado River	1	0.5
Concow	1	0.5
Crow	2	1.1
Dakota Sioux	1	0.5
Eskimo	1	0.5
Fort Peck Assiniboine	2	1.1
Gila River	3	1.6
Gila River/Akimel O'odham	1	0.5
Gros Ventre	1	0.5
Hopi	6	3.3
Hualapai	3	1.6
Inuit Yupik Eskimo	1	0.5
Laguna Pueblo	1	0.5
Lakota	1	0.5
Lac Du Flambeau	1	0.5
Menominee	4	2.2
Mescalero Apache	2	1.1
Navajo	18	9.8
Northern Arapaho	7	3.8
Northern Cheyenne	1	0.5
Oglala Sioux	1	0.5
Oglala Sioux/Seneca	1	0.5
Oglala Sioux/Rosebud Sioux	1	0.5

Table 1 (continued from previous page)

Tribe	Frequency	Percent
Omaha	2	1.1
Oneida	1	0.5
Piipaash	1	0.5
Pima	5	2.7
Pima/Tohono O'odham	1	0.5
Pomo	2	1.1
Pyramid Lake	1	0.5
Rosebud Sioux	1	0.5
Salish Kootenai	1	0.5
San Carlos Apache	10	5.4
Shoshone	1	0.5
Shoshone/White Mountain Apache	1	0.5
Shoshone Paiute	1	0.5
Siletz	1	0.5
Sioux	1	0.5
Spirit Lake Sioux	1	0.5
Standing Rock Sioux	3	1.6
Stantee Sioux	1	0.5
Tohono O'odham	19	10.3
Tohono O'odham/Navajo	1	0.5
Tsimshian	1	0.5
Umatilla/Totowa	1	0.5
Wailaki	1	0.5
Wailaki/Pomo	2	1.1
Wailaki/Nomlaki	1	0.5
Wanapum	1	0.5
Warm Springs	4	2.2
White Mountain Apache	11	6
Yakama	4	2.2
Yupik Eskimo	1	0.5
Yurok	4	2.2
Tribe Not Disclosed	13	7.1
Total	184	98.1

designed as a checklist; however, the present study adapted the format as a 10-question self-report measure of perceived childhood maltreatment and family dysfunction. Family dysfunction and maltreatment could be behaviors stemming from generational trauma (Stumblingbear-Riddle & Romans, 2012). Participants were asked to indicate if they were or were not exposed to each event during their childhood by marking either yes or no. The ACES showed satisfactory internal consistency ($\alpha = .77$) and has been shown to have a significant correlation to comorbid medical conditions (Anda et al., 2006).

Although there is extremely limited information about the prevalence of adverse childhood life events in AI/AN youth, it is shown that AI/AN youth have higher scores on the Adverse Childhood Experiences Survey (ACES) in comparison to their non-Hispanic White (NHW) counterparts. Kenney and Singh (2016) found that, “AI/AN children were more likely to have experienced 2+ ACEs (40.3% versus 21%), 3+ ACEs (26.8% versus 11.5%), 4+ ACEs (16.8% versus 6.2%), and 5+ ACEs (9.9% versus 3.3%) compared to NHW children” (p.1). Parents reported that their AI/AN youth had higher rates of depression, anxiety, and ADHD. In youth with three or more childhood adversities, AI/AN youth had school problems, grade failure, and needed medication and counseling 2-3 times more often than NHW youth (Kenney & Singh, 2016). Felitti et al. (1998) found that an increased number of adverse childhood life events in the general population increased the chances of several negative health and well-being outcomes later in life. These outcomes include, but are not limited to, an increased risk of: alcohol abuse, chronic obstructive pulmonary disease, depression, illicit drug use, liver disease, heart disease, poor work performance, sexually transmitted diseases, smoking, suicide attempts, intimate

partner violence, unintended pregnancies, adolescent pregnancies, and poor academic achievement.

The second measure (DV2) used was the Connor-Davidson Resiliency Scale (CD-RISC; Connor & Davidson, 2003; see Appendix B). Permission was obtained from Dr. Jonathan Davidson to use the scale. The CD-RISC is a 25-item scale that measures the ability to cope with stress and adversity. Respondents rate items on a scale from 0 (*not true at all*) to 4 (*true nearly all the time*). Total scores range from 0-100 with higher scores reflecting higher resilience. The CD-RISC has a reported internal consistency reliability coefficient of .89. Additionally, a test-retest reliability coefficient of .87 was obtained after two consecutive clinical visits. Evidence for convergent validity was demonstrated by the positive relationship between the CD-RISC and the Kobasa (1982) hardiness measure. There is no available accurate comparison group for AI/AN high school students for the CD-RISC, however Clauss-Ehlers and Wilbrowski (2007) found high school graduates had a mean CD-RISC score of 73.1 ($SD = 14.1$). Gucciardi, Jackson, Coulter, and Mallet (2011) reported a mean CD-RISC score of 73 ($SD = 10.9$) in teenage Australian cricketers. While the US general population achieves a total mean CD-RISC score of 80.4 ($SD = 12.8$; Connor & Davidson, 2003).

The final measure used was a questionnaire gathering demographic information including which sports the students have been involved in (see Figure 1) and for how long (see Appendix C). It also included information on which recreational activities they engaged in as a hobby. Other possible sources of resilience, such as connectedness to various support systems, were also measured. Demographic information gathered included age, grade in school, gender, tribal enrollment, and whether they ever lived on a reservation, and if so, for how long.

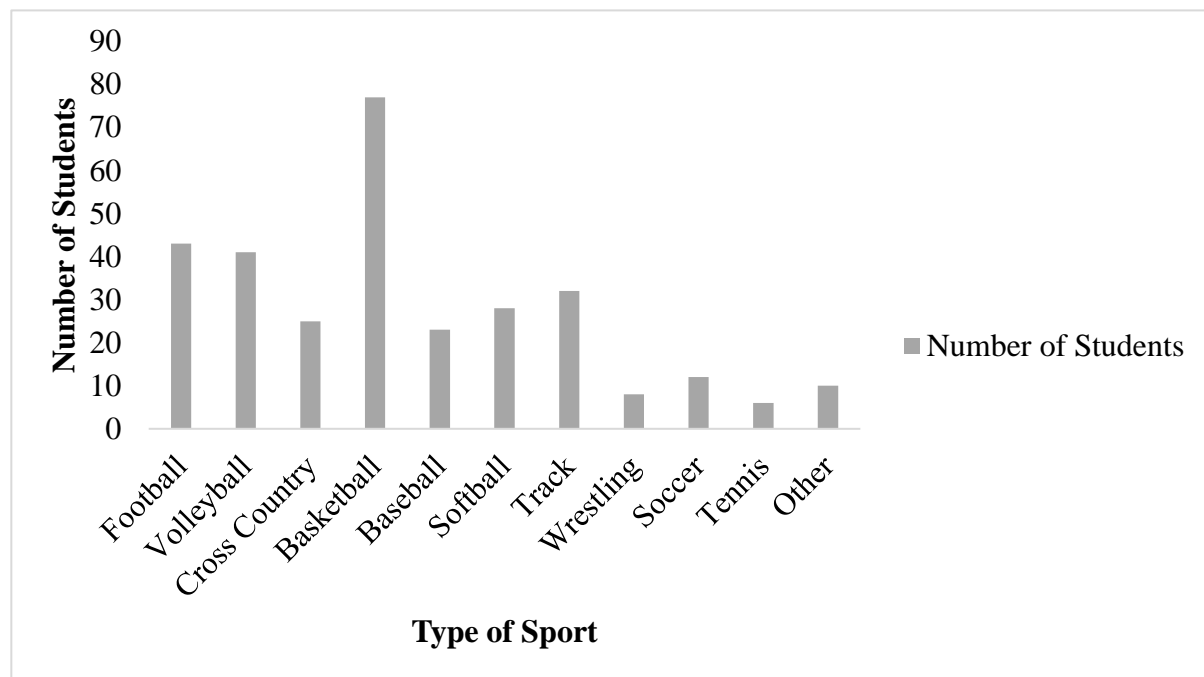


Figure 1. Frequency of sports participation among students.

Procedure

Permission was granted from the George Fox University Institutional Review Board and from the Indian Boarding School to conduct the study. All students were given a parent/guardian consent form before winter break so they could hand deliver it to their parent/guardian to read and sign for permission to participate in the study (see Appendix D). All students who were enrolled at the school at the time of the study were invited to participate. Students who did not obtain parental consent over winter break had a parental/guardian consent mailed to their home address provided by the school. The parental/guardian consent contained information about the study, instructions, and a prepaid/pre-addressed envelope. Remaining students who did not have parental/guardian consent obtained in the first two methods were given the opportunity to participate by having the researcher call parents/guardians and offer to answer questions and

document verbal consent, until written consent could be mailed. After parental/guardian consent was obtained the students also had a choice to provide written assent to participate in the study (see Appendix E).

After receiving the signed form, participants were invited to participate in the study taking 10-20 minutes to complete. The students provided assent to participate at their own discretion. The study was described as “A study measuring different ways we bounce back from hard times.” A packet containing study materials was administered by the researcher to gather data during their homeroom class period. Participants filled out the self-report questionnaire packet during their home room class and then the researcher collected questionnaires from the students. Students were allowed to discontinue at any time without penalty. Students were offered an incentive to participate in the study by being entered into a drawing for 1 of 10 \$10 gift cards. Participants had access to follow up counseling services through Indian Health Services and the Indian School if needed. An email address was given to the students who wanted to be informed on results of the study.

Chapter 3

Results

Data were analyzed by using IBM/SPSS Version 22.0.0.0 (IBM, Armonk, New York, USA). Participants were divided into four groups based on their level of sports involvement as self-reported on the sports survey. The first was *formal sports only* which was defined as a student who participated in formal sports but not recreational sports ($n = 8$). The second *both formal and recreational sports* group was defined as students who have or plan to continue to participate in a Freshman, Junior Varsity II, Junior Varsity, or Varsity sports team and also participate in at least one sports related activity through the recreational department at least once a week ($n = 113$). The third *recreation* group was defined as students who participate in sports or recreational activities at least once a week through the recreation department ($n = 40$). The fourth and final group, *no sports* was defined as students who do not engage in sports or do so less than once weekly ($n = 23$). Due to a low number of students who played *formal sports only*, this group was omitted from statistical analysis when comparing groups resulting in three different levels of sports involvement.

In addition, participants were divided based on the self-reported ACES score. Three groups were formed based on quartile cutoffs. The *low ACES* group responded positively to 0-1 of the 10 questions ($n = 63$). The *moderate ACES* group responded positively to 2-3 of the questions ($n = 49$). The third group *high ACES* responded positively to 3 or more of the items on

the ACES measure ($n = 67$). Five participants were omitted due to an incomplete ACES measure.

Trauma Results

Of the valid scores ($n = 179$) the total number of adverse childhood life events ranged from 0-8 ($M = 2.86$, $SD = 2.21$). Student positively endorsed each of the 10 items ranging from 11.4%-69.6% (see Table 2). Figure 2 shows the distribution of ACES scores.

Table 2

Percentage and Number of Endorsement for Each ACES Item

Item no.	Abbreviated item	% Positively endorsed	<i>n</i>
1	Emotionally humiliated	24.5%	45
2	Physically abused	14.7%	27
3	Sexually abused	11.4%	21
4	Emotionally neglected	27.7%	51
5	Physically neglected	12.5%	23
6	Parents Divorced	69.6%	128
7	Mother treated violently	21.2%	39
8	Household member abused drugs/alcohol	43.5%	80
9	Household member mentally ill	21.7%	40
10	Household member incarcerated	37.0%	68

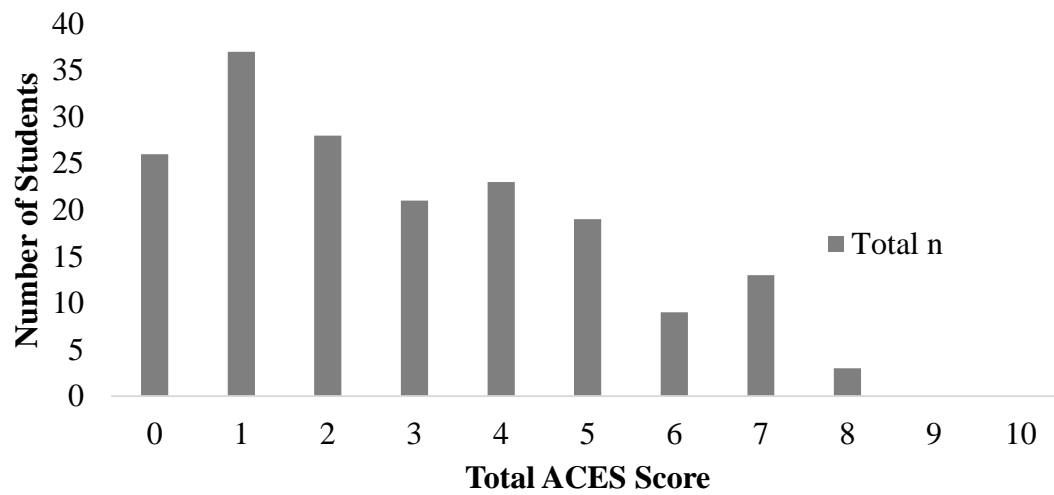


Figure 2. Student's total number of ACES items endorsed.

Resiliency Statistics

Scores on the CD-RISC ranged from 29-100 ($M = 63.49$, $SD = 15.35$) among all students.

Table 3 shows the mean response for each CD-RISC on a 0-4 rating scale.

Sports Involvement

Among the 184 valid self-reports, 113 students identified as playing both formal and recreational sports (61.4%), 40 identified as playing recreational sports only (21.7%), 23 did not participate in any sports on a weekly basis (12.5%), and 8 declined to report (4.3%).

Hypothesis 1

A Pearson Correlation was computed to investigate any relationship between the number of adverse childhood events and the self-reported level of resilience on the CD-RISC. This revealed that there was no significant correlation between the level of resilience and reported ACES score, $r(166) = .18$, $p = .41$. The hypothesis was supported.

Table 3

Percentage and Number of Endorsement for Each CD-RISC Item

Item no.	Abbreviated item	<i>M</i>	<i>SD</i>
1	I am able to adapt	2.64	0.89
2	I have one secure relationship	2.88	1.10
3	When unclear, God can help	1.83	1.30
4	I can deal with whatever	2.58	0.94
5	Past success gives me confidence	2.62	0.98
6	I use humor to help	2.65	1.02
7	Coping makes me stronger	2.38	1.01
8	I bounce back after illness/injury	2.51	1.09
9	Most things happen for a reason	2.79	1.12
10	I give my best effort	2.59	1.00
11	I can achieve my goals	2.84	1.03
12	I don't give up	2.66	0.96
13	I know where to turn for help	2.38	1.12
14	I stay focused	2.26	1.03
15	I prefer to take the lead	2.46	0.99
16	I am not easily discouraged	2.42	0.93
17	I think of myself as strong	2.52	1.03
18	I can make difficult decisions	2.40	1.02
19	I can handle unpleasant feelings	2.47	1.09
20	Sometimes I act on a hunch	2.36	0.94
21	I have a sense of purpose	2.46	1.03
22	I feel in control	2.52	1.05
23	I like challenges	2.42	1.09
24	I work to attain my goals	2.64	0.89
25	I take pride in achievements	3.00	0.94

Hypothesis 2

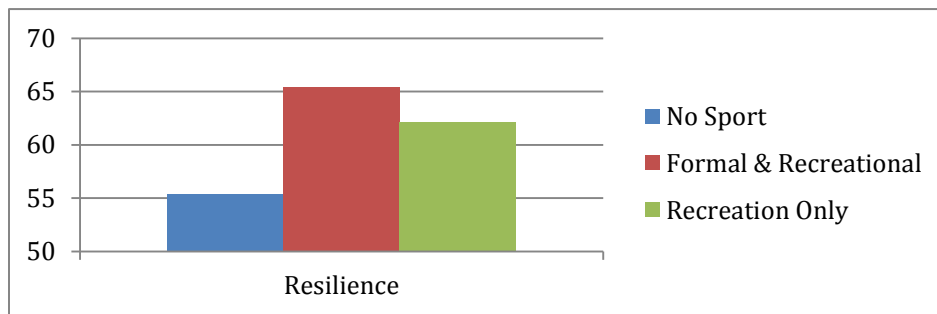
The ACES scores have skewness at .507 which is not unusual for this inventory. If the calculated skewness is divided by standard error of skewness the value is less than four.

Therefore, a One Way ANOVA is appropriate for statistical analysis. The CD-RISC is nearly NID. A One Way ANOVA was used to see if there was a relationship between the level of resilience (CD-RISC) and sports involvement. There is a significant difference in resilience scores between the sports groups, $F(2, 163) = 4.33, p = .015, \eta^2 = .05$ (Small effect). Post hoc analyses using LSD post hoc criterion for significance indicated that resilience is significantly higher ($p = .005$) in those who participate in both Formal and Recreational sports ($M = 65.75, SD = 15.76$) in comparison to those who have no sports involvement ($M = 55.38, SD = 15.22$). The hypothesis was supported.

Hypothesis 3

In order to evaluate Hypothesis 3 the data were entered using a 3(sports groups) x 3 (ACES levels) ANOVA. A main effect was found for resilience with sport groups, $F(2,150) = 4.60, p = .012, \eta^2 = .06$ (small effect). A Gabriel post hoc analysis was employed to evaluate which sport groups differed. The resilience scores for those students who did not participate in sports ($M = 55.38$) and those who participate in both formal and recreational sports ($M = 65.42$) were significantly different $p = .01$ (See Figure 3). There is no main effect for level of ACES, $F(2,150) = .26, p > .05$. There is no significant interaction between sports groups and level of ACES, $F(4,150) = 1.56, p > .05$.

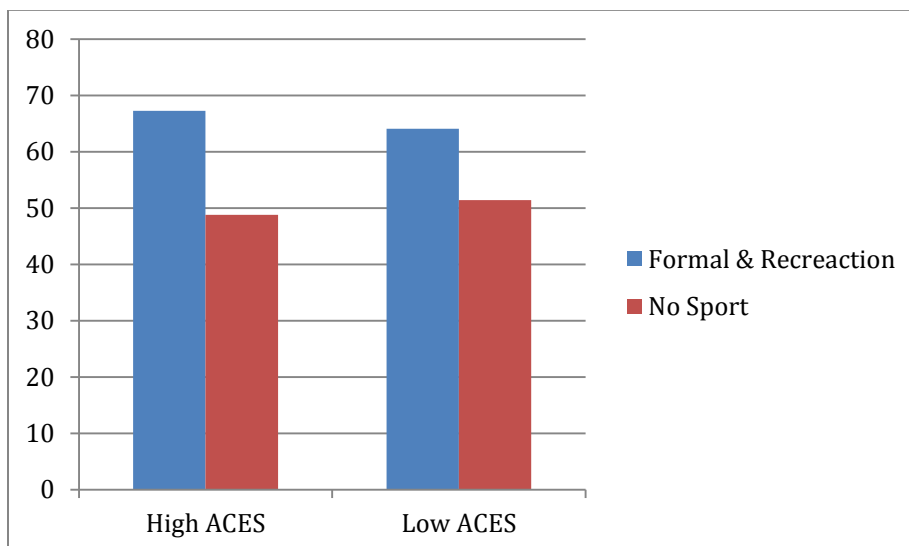
To further investigate the impact of high levels of adverse childhood events, resilience levers were evaluated for only those who fell into the top quartile of ACES alone. An



Note. $p = .01$

Figure 3. Mean Resilience Scores by Sport Groups.

independent t -test was used to look at resilience scores for those who participate in both formal and recreational sports ($M = 67.28$) and those who do not participate in sports ($M = 48.8$), $t(42) = 2.50$, $p = .017$. Cohen's $d = 1.26$ (large effect). A significant differences was found (see Figure 4).



Note. High ACES $p = .017$, Low ACES $p = .001$.

Figure 4. Resilience Means between Sports Involvement Based on Extreme ACES.

While evaluating resilience in those with low levels of adverse childhood events (bottom quartile), a significant difference was found between those who participated in both formal and recreational sports ($M = 64.08$) and those who did not participate in sports ($M = 51.43$). Due to unequal variance in the groups, an adjusted t-test was used, $t(27.74) = 3.55$, $p = .001$, Cohen's $d = 1.0$ (large effect). A significant difference was found (See Figure 4).

In order to better understand the effect of participation in sports on resilience, two additional analyses were run. The first evaluated if the number of sports in which the student participated impacted resilience. The second compared the effect of involvement in team or individual sports on resilience. The categories of number of sports in which a student was involved ranged from 0 to 6 or more. A one way ANOVA indicated no significant difference in resilience based on number of sports in which the student is involved, $F(6, 163) = 1.72$, $p > .05$. The second analysis was a two way ANOVA and indicated no main effect for individual sports ($F(4, 147) = 1.03$, $p > .05$), no main effect for team sports ($F(5, 147) = .49$, $p > .05$), and no interaction between the two ($F(13, 147) = 1.58$, $p > .05$).

Additional Information

Data were collected on self-reported sense of connectedness to others on a 5-point rating scale. Pearson correlations were computed to find relationship between variables (see Table 4).

Table 4

Correlations of Connectedness Factors

Connectedness Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Total ACES	1											
2. Total Conner Davidson	.02	1										
3. Connected to Family	-.40**	.18*	1									
4. Connected to Friends	-.18*	.18*	.35**	1								
5. Connected to Elders	-.24**	.19*	.35**	.33**	1							
6. Connected to Community	-.20**	.28**	.36**	.42**	.55**	1						
7. Connected to School	-.16*	.29**	.36**	.45**	.24**	.52**	1					
8. Connected to Teachers	-.15*	.27**	.29**	.36**	.18*	.35**	.55**	1				
9. Connected to Dorm Staff	-.20**	.15*	.32**	.30**	.15*	.31**	.48**	.47**	1			
10. Connected to Counselor	.00	.16*	.15*	.22**	.27**	.34**	.36**	.30**	.18*	1		
11. Connected to Mentor	-.07	.29**	.27**	.30**	.30**	.38**	.37**	.48**	.25**	.46**	1	
12. Connected to Coach	-.14	.39**	.24**	.23**	.33**	.45**	.37**	.34**	.29*	.33**	.43**	1

Note. ** Correlation is significant at the 0.01 Level (2-tailed).

*Correlation is significant at the 0.05 Level (2-tailed).

Chapter 4

Discussion

The subject matter and participants make this study unique. It is a rare opportunity to survey 185 students who represent 68 different tribes, or combination of AI/AN tribes, across the United States. Of the 292 students enrolled in the school at the time of the study, over 63% of the target population was reached creating a representative sample of the boarding school. Results can also be cautiously generalized to the AI/AN youth population because of the significant diversity represented. It is interesting and somewhat counterintuitive that no correlation between resilience and amount of adverse childhood experiences was found. Logic would suggest that as adverse childhood experiences increase for a person, resilience would be affected either in a negative (lack of resilience due to level of adversity) or positive (increased resilience seen in the midst of adversity) manner. Yet it is important to consider the unique nature, background, and current setting of the population of the study. When the lack of a relationship between resilience and adversity is evaluated with a similar sample, the findings of the current study are better understood. Knows His Gun (2013) found similar results using the same measures in a Native American population living and working on a reservation. I propose a cultural hardiness within the Native American population that enables them to remain resilient in the face of adversity. As previously noted, this population faces ongoing stressors related to forced assimilation from the American government and larger society, in addition to historical trauma. It is likely that coping skills and community support have developed to address these stressors.

This study also revealed a relationship between resilience and sports involvement. AI/AN youth who participate in recreational and formal sports have higher resilience compared to those who do not participate in sports. This confirms that extracurricular activities provide positive benefits (Smith et al., 2010). Participation in high school sports is related to increased academic adjustment, educational status, and civic engagement, which may be due to higher resilience (Fredricks & Eccles, 2006). This may be one clue to how AI/AN youth populations overcome the many obstacles they face as they work toward completing their high school education and preparing for adulthood.

In a more specific investigation, it was found that students who have a high number of adverse childhood experiences (in the top quartile of the sample) and participated in sports, were shown to be significantly more resilient than those who did not participate in sports. Individuals with high ACES scores are at the highest risk for negative health outcomes later in life but also seem to benefit the most from participation in sports (Felitti et al., 1998). It would be beneficial to investigate whether AI/AN youth experience increased health issues, which may result from adverse childhood experiences. However, engaging in a physical activity would also likely increase physical health in general. Being involved in sporting activities with others with whom you live and encounter in school would increase social support and a sense of belonging and community, which are known to be beneficial to overall physical and mental health.

When evaluating students who have a low number of adverse childhood experiences, those who participated in sports were shown to be more resilient than those who did not participate in sports. This indicates that even students who do not endorse high levels of adversities in childhood can still procure the benefits that sport participation has to offer. The

impact of sports raising the level of resilience is not reserved only for high-risk students, but low-risk students alike. Sports, therefore, has a role both as an intervention for students and as a preventative activity that can bolster supports already in place. The number of sports, or the kind of sports, in which the students participated did not influence their level of resilience. It is paramount that AI/AN high school students explore a formal sport that may be a good fit for them, while also engaging regularly in recreational activity, but the type of sport (individual or team) does not matter. Thus, organizing recreational and formal sporting opportunities will have the potential to benefit all students.

Although this study has several strengths, it is important to acknowledge the limitations. This study is a cross sectional design that surveyed students at one point in time. It is possible that sports attract more resilient students. To further explore the effect of sports on resilience over time, a longitudinal study would be necessary. The effect of sports beyond high school cannot be determined from these results, which is another reason a longitudinal study would be beneficial. Understanding the duration of positive effects of engagement in sports would be valuable for the AI/AN youth as they move into adulthood and begin to engage in the events of this stage of life.

It is also important to note that the measures used were self-report and social desirability factors may have influenced students' answers. Finally, there were a large number of students who participate in formal and recreational sports, leaving a small amount of students who did not participate in any form of sports. A larger sample size would allow for increased statistical power. Although the number of tribes represented in this sample was encouraging, there are

many tribes not represented in the study which decreases the generalizability of these results to a degree.

Moving from the boarding school to understand AI/AN in urban schools, reservation schools, and rural schools across the U.S. would be beneficial. Are AI/AN youth more resilient overall or does the cultural focus of the boarding school provide an environment that fosters resilience in addition to the involvement in sports? This is an additional question that is worth exploring in order to better understand the challenges facing AI/AN youth today.

Bloom (2000) explains that stories of sports at Native American boarding schools evoke complex history and understanding of both the past and present. Listening and learning about the past experiences of athletes at AI/AN boarding schools is progress towards understanding soul wounds such as poverty, substance use, and unemployment that grow out of historical circumstances, meant to benefit a majority culture at the expense of Native Americans. The AI/AN community continues to face significant adversity and available research on the population is limited. For this reason, it is imperative to act on factors that contribute to the resilience of AI/AN youth as they continue to flourish in our society. Focusing on keeping sports programs funded and healthy is one such factor. This study shows us the importance of sports because of its many benefits, and the role it plays for youth in AI/AN cultures, specifically in terms of resilience.

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Appendix A**Adverse Childhood Experiences Survey**

Before you were 18 years old...

1. Did a parent or other adult in the household often or very often...Swear at you, insult you, put you down, or humiliate you? or act in a way that made you afraid that you might be physically hurt?

- ☐ Yes
- ☐ No

2. Did a parent or other adult in the household often or very often...Push, grab, slap, or throw something at you? or ever hit you so you were injured?

- ☐ Yes
- ☐ No

3. Did an adult person at least 5 years older than you ever...Touch or fondle you or have you touch their body in a sexual way? or Attempt or actually had any kind of sex with you?

- ☐ Yes
- ☐ No

4. Did you often or very often feel that ...No one in your family loved you or thought you were important or special? or Your family didn't look out for each other, feel close to each other, or support each other?

- ☐ Yes
- ☐ No

5. Did you often or very often feel that ... You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? or Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

- ☐ Yes
- ☐ No

6. Were your parents ever separated or divorced?

- ☐ Yes
- ☐ No

7. Was your mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? or Sometimes, often, or very often hit by someone or something? or Ever repeatedly hit at least a few minutes or threatened with a gun or knife?

☐ Yes

☐ No

8. Did you live with anyone who had problems drinking used street drugs?

☐ Yes

☐ No

9. Was a household member depressed or mentally ill, or did a household member attempt suicide?

☐ Yes

☐ No

10. Did a household member go to prison?

☐ Yes

☐ No

Developed by Felitti and Anda. Open source. Adapted from <http://acestudy.org/the-ace-score.html>

Appendix B

Connor-Davidson Resilience Scale 25 (CD-RISC-25) ©

initials ID# date visit age

For each item, please mark an "x" in the box below that best indicates how much you agree with the following statements as they apply to you over the last month. If a particular situation has not occurred recently, answer according to how you think you would have felt.

	not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
1. I am able to adapt when changes occur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I have at least one close and secure relationship that helps me when I am stressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When there are no clear solutions to my problems, sometimes fate or God can help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I can deal with whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Past successes give me confidence in dealing with new challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I try to see the humorous side of things when I am faced with problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Having to cope with stress can make me stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I tend to bounce back after illness, injury, or other hardships.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Good or bad, I believe that most things happen for a reason.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I give my best effort no matter what the outcome may be.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I believe I can achieve my goals, even if there are obstacles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Even when things look hopeless, I don't give up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. During times of stress/crisis, I know where to turn for help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Under pressure, I stay focused and think clearly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I prefer to take the lead in solving problems rather than letting others make all the decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I am not easily discouraged by failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I think of myself as a strong person when dealing with life's challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I can make unpopular or difficult decisions that affect other people, if it is necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. In dealing with life's problems, sometimes you have to act on a hunch without knowing why.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I have a strong sense of purpose in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I feel in control of my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I like challenges.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I work to attain my goals no matter what roadblocks I encounter along the way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I take pride in my achievements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Appendix C**Sports Survey**

Age:

Grade:

Tribe:

Gender:

Have you ever lived on a reservation? Yes/No:

If yes how many years?

Have you or do you plan to continue to participate in a Freshman, Junior Varsity II, Junior Varsity, or Varsity sport?

☐ Yes

☐ No

If yes which sport(s)?

☐ Football

☐ Volleyball

☐ Cross Country

☐ Basketball

☐ Baseball

☐ Softball

☐ Track

☐ Wrestling

☐ Soccer

☐ Tennis

☐ Other:_____

Do you participate **at least once a week** in one of the following activities through the recreation department?

- Volleyball
- Basketball
- Dodge ball
- Weight Room
- Open Swim
- Paintball
- Basketball in the pits

- Skateboarding
- Walking/Running the track
- Other:_____

- ☐ Yes
☐ No

If yes, please mark below which activities you have participated in.

- ☐ Volleyball
☐ Basketball
☐ Dodge ball
☐ Weight Room
☐ Open Swim
☐ Paintball
☐ Basketball in the pits
☐ Skateboarding
☐ Walking/Running the track
☐ Other:_____

On a scale from 1(Not at all true) to 5(Very true) please circle how true each statement is for you:

I feel connected to my family.

Not at all true 1 2 3 4 5 6 Very true

I feel connected to my friends/peers.

Not at all true 1 2 3 4 5 6 Very true

I feel connected to my elders.

Not at all true 1 2 3 4 5 6 Very true

I feel connected to my community.

Not at all true 1 2 3 4 5 6 Very true

I feel connected to my school.

Not at all true 1 2 3 4 5 6 Very true

I feel connected to my teachers.

Not at all true 1 2 3 4 5 6 Very true

I feel connected to my dorm staff.

Not at all true 1 2 3 4 5 6 Very true

I feel connected to my counselor/therapist.

Not at all true 1 2 3 4 5 6 Very true

I feel connected to my mentors.

Not at all true 1 2 3 4 5 6 Very true

I feel connected to my coach(es).

Not at all true 1 2 3 4 5 6 Very true

School is important to me.

Not at all true 1 2 3 4 5 6 Very true

On average which letter grade do you achieve in school the most?

- ☐ A
- ☐ B
- ☐ C
- ☐ D
- ☐ F

Appendix D**Parental Consent Form****Resiliency Factors in Native American Youth**

Your student has been selected to participate in the following research study. This study is to better understand how individuals persevere through hard times. The general purpose of the research is to identify what factors contribute to a sense of resilience. Students will have the opportunity to fill out a self-report survey, taking 10-20 minutes during the school day. The survey will gather information on the student's ability to bounce back from hard times, demographic information, childhood experiences, and their level of physical activity. If you choose to provide your permission or consent, your students will be also be asked to give informed assent before starting the survey. If funds are made available, the students who participate will be given a small incentive in the form of a gift card.

The demographic information requested does not include a name or date of birth in order to protect the student's confidentiality. Once surveys have been completed the data will remain confidential and protected according to guidelines of the American Psychological Association. All surveys will only be used for the purposes of research and benefiting your student's school community.

Your student is not required to participate in this study. You or the student has the right to decline participation without penalty at any point during the study.

The potential benefit of this study is the general increase in understanding of sources of resilience in Native American and Alaska Native youth in order to better serve your student. Potential risk of this study is a student feeling uncomfortable with some of the questions. Your students can skip any questions that cause uncomfortable feelings.

Any inquiries concerning the procedures or outcomes of this experiment can be discussed with the experimenter, Martin Robison (mrobison10@georgefox.edu) or Dr. Glena Andrews, Director of Clinical Training, George Fox University, Newberg, OR (gandrews@georgefox.edu). The guidelines for protecting the rights of human participants that are in operation in this study may be found in the APA Code of Ethics at www.apa.org/ethics.

Martin Robison, M.A.
Graduate Department of Clinical Psychology
George Fox University
Newberg, OR 97132
mrobison10@georgefox.edu

I have read and understand the above statement and give my voluntary consent for my students to participate in the research entitled "Resiliency Factors in Native American Youth".

Parent's Signature

Date

Name of Chemawa Student

Appendix E**Student Assent Form****Resiliency Factors in Native American Youth**

You have been selected to participate in a research study to better understand how students bounce back from hard times. The purpose of the research study is to learn what increases a sense of resilience. You will have the opportunity to fill out a self-report survey, taking 10-20 minutes. The survey will gather information on your ability to bounce back from hard times, demographic information, childhood experiences, and level of physical activity. If funds are made available, those who participate will be given a small incentive in the form of a gift card.

The information requested does not include a name or date of birth in order to protect your confidentiality. Once surveys have been completed the data will remain confidential. All surveys will only be used for the purposes of research and benefiting the school community.

You are not required to participate in this study. You have the right to decline participation without penalty at any point during the study.

The potential benefit of this study is the general increase in understanding of sources of resilience in Native American and Alaska Native youth in order to better serve students. Potential risk of this study is feeling uncomfortable by some of the survey questions.

Any questions concerning the procedures or outcomes of this research can be discussed with the experimenter, Martin Robison (mrobison10@georgefox.edu) or Dr. Glenna Andrews, Director of Clinical Training, George Fox University, Newberg, OR (gandrews@georgefox.edu). The guidelines for protecting the rights of human participants that are in operation in this study may be found in the APA Code of Ethics at www.apa.org/ethics.

Martin Robison, M.A.
Graduate Department of Clinical Psychology
George Fox University
Newberg, OR
Mrobison10@georgefox.edu

I have read and understand the above statement and give my voluntary consent for participation in the experiment entitled "Sports as a Resiliency Factor in Native American Youth".

Name of Student (Print)

Date

Student Signature

Appendix F**Curriculum Vitae****Martin Robison**

George Fox University
414 N. Meridian St. #RC 261
Newberg, OR 97132
503-798-3583
mrobison10@georgefox.edu

Education

Psy.D. (Doctorate of Clinical Psychology)	George Fox University (APA Accredited) (Expected 2019)
M.A. Clinical Psychology	George Fox University (APA Accredited) (Received 2016)
B.S. Psychology	George Fox University (Received 2014)

Clinical Hours

- Intervention – 1248 Total hrs.
- Assessment – 208 Total hrs.
- Supervision – 373 Total hrs.
- Support – 745 Total hrs.

Clinical Experience

Internship | George Fox Integrated Care – Providence Medical Group-Bethany (August 2018-August 2019)

- This APA accredited internship focused on refining the skill set of a behavioral health provider working on integrated primary care in a family and internal medicine clinic. The demographics served are those from birth to geriatrics presenting a wide range of both physical and mental health diagnosis.
- Brief 30-minute individual sessions account for a vast majority of interventions. However, screening assessments, and group visits are also offered to patients.
- Involvement on interdisciplinary teams which include: clinic managers, patient relations representatives, nursing quality supervisors, primary care physicians, medical assistants, physical therapists, and other specialty providers.
- In addition to weekly didactics, supervision of practicum students delivering community-based mental health is also a valuable part of intern training. In addition, this internship requires a program evaluation project as well as a comprehensive assessment.

Pre-Internship | Physicians Medical Center (Summer 2017-Summer 2018)

- This practicum was in an integrated primary care clinic consisting of three departments: Pediatrics, Family Medicine, and Internal Medicine. The demographic served are those from birth to geriatrics and present with diagnosis covering the spectrum. This practicum had an emphasis on promoting health related behaviors through CBT and mindfulness techniques.
- I worked consistently on an interdisciplinary team including nurses, diabetic educators, medical assistants, and providers of various specialties. As a behavioral health consultant, I provided 30-minute individual sessions to patients addressing mental health concerns and health related behaviors.
- In addition, I consulted with providers and patients in real time by providing “warm handoff” interventions. I also offered group and individual pain school education classes to build coping skills and promote opiate safety for those suffering from chronic pain.
- Supervisor – Kristie Schmidlkofer, Psy.D.

Practicum II | Chemawa Indian School/Indian Health Services (Fall 2016-Spring 2017)

- This two year practicum site was located on a federal property-hosted boarding school for Native American/Alaska Native high school students as well as a community health center open to all members of a recognized tribe. The demographic served were all Native American/Native Alaskan and primarily high school aged students; although community members of various ages were also served. Diagnosis varied widely from substance abuse to mood disorders. All clients were engaged from a culturally sensitive and trauma informed framework.
- This practicum had an emphasis on assisting the Chemawa Indian School Special Education Department by completing assessments to determine service eligibility.

- Throughout the school year I carried a caseload of students to whom I provided 50-minute individual therapy sessions at the Indian Health Services Behavioral Health Clinic.
- I also facilitated group therapy sessions focusing on minimizing violence within adolescent romantic relationships by adapting a domestic violence protocol to be relevant to a young and ethnically diverse population.
- The two-year practicum format was advised by experts in the field to promote continuity of care, training opportunities, and establish relationships. It was also necessary to spend additional time serving the site due to the extensive clearance process.
- Supervisor – Kristie Knows His Gun, Psy.D.

Practicum I | Chemawa Indian School/Indian Health Services (Fall 2015-Spring 2016)

- This two year practicum site was located on a federal property-hosted boarding school for Native American/Alaska Native high school students as well as a community health center open to all members of a recognized tribe. The demographic served were all Native American/Native Alaskan and primarily high school aged students although community members of various ages were also served. Diagnosis varied widely from substance abuse to mood disorders. All clients were engaged from a culturally sensitive and trauma informed framework.
- I developed a relationship with this training site because I recognized the rich clinical opportunities that it offers.
- As the first practicum student at this site, I gained experience in program development and established procedures for future students. This included navigating separate clearance processes through the Bureau of Indian Education and the Bureau of Indian Affairs. Other vital program development included, establishing relationships and trust with key stake holders, utilizing a referral process, and understanding how to effectively document/provide treatment in both locations.
- This practicum placement involved facilitating individual therapy, group therapy, and administering assessments for Special Education eligibility at Chemawa Indian School. I utilized both behavioral and crisis intervention to students needing support. I also facilitated group therapy focusing on minimizing violence within adolescent romantic relationships.
- The two-year practicum format was advised by experts in the field to promote continuity of care, training opportunities, and establish relationships. It was also necessary to spend additional time serving the site due to the extensive clearance process.
- Supervisor – Glena Andrews, Ph.D.

Supplemental Clinical Experience

Psychometrician | Dr. Mark Dillon – Forensic Psychologist (Winter 2016-Present)

- This supplemental practicum is located at the office of a private practice forensic psychologist in an urban environment. Evaluations were also regularly conducted in correctional facilities. Clients served were adults involved in primarily parenting competency evaluations, and social security disability evaluations. Clients presenting diagnosis varied widely from traumatic brain injuries to personality disorders.
- I am responsible for administering and scoring various psychodiagnostic tests for a forensic psychologist. Tests measuring personality, cognitive, physical, and memory functioning, are administered and scored according to the clients' referral and presenting concerns.
- Supervisor – Mark Dillon, Ph.D.

Intake Assessment Counselor | Cedar Hills Hospital (Spring 2016-Fall 2017)

- This supplemental practicum and employment opportunity was located in an urban city and served patients across the country. The hospital specializes in psychiatric stabilization, medically necessary detox, and military rehabilitation. Patients were adults who were both voluntary and involuntary suffering from severe substance use disorders, trauma, mood disorders, and psychosis.
- As an assessment counselor, I oversaw referral and admission activities for patients.
- I provided telephonic and in-person risk assessments to inquiring patients.
- During initial contact with potential patients, I conducted a structured interview to understand patients from a biopsychosocial perspective as well as identify specific areas of strength and potential risk. In addition, I provided care coordination, scheduling and crisis intervention as needed. After the appropriate level of care was determined, I completed admission pre-certifications to insurance agencies.
- Supervisor – Alisha Kauffman, M.A.

Depression Management | Providence Newberg Medical Group (Fall 2014)

- This supplemental practicum experience was set at a church in a rural community. Groups were open to anyone in the community and were attended by adults.
- This program was designed to assist individuals suffering from depressive disorders, by aiding them in making both cognitive and behavioral changes. I provided psychoeducation to clients regarding depression, its known causes, and strategies to provide symptom relief. I co-facilitated weekly therapeutic support groups to members referred by their primary care providers.
- Supervisor – Tammi Rodgers, M.D.

Other Relevant Experience

- Guest Lecturer – Professional Issues (10/19/2018)
 - Preparing for Internship Interviews
- Panel Expert (10/13/17)
 - Angst: Raising Awareness Around Anxiety – First United Methodist Church
- Advanced Counseling Teachers Assistant (Fall 2017)
 - George Fox University – Undergraduate Psychology
- Serve Day Volunteer (2014, 2016, 2017)
 - George Fox University
- Student Editor (2014-2015)
 - George Fox University Graduate Department of Clinical Psychology
- Guest Lecturer- General Psychology (1/20/2015)
 - Pseudoscience vs. Scientific Thinking-George Fox University
- School Counseling Volunteer (Spring 2014)
 - Chemawa Indian School – George Fox University Senior Field Experience
- Transitions Class Aid Volunteer (Spring 2013-Fall 2014)
 - Newberg School District Special Education Department – George Fox University Senior Field Experience

Research Experience

- **Robison, M.** (2017) *Sports as a resiliency factor in Native American youth.*
 - Dissertation defended November, 2018
 - Original data dissertation
- Spromberg, C., **Robison, M.**, Andrews, G., & Shumway, K. (October, 2017) *Developmental markers of agenesis of the corpus callosum and partial genesis of the corpus callosum.* Poster session presented at the National Association of Neuroscience, Boston, MA.

- Andrews, G., Spromberg, C., Shumway, K., & **Robison M.** (August, 2017) *ADHD and controls: Adolescents and executive functioning performance tasks*. Poster session presented at the American Psychological Association Convention, Washington, DC.
- Shumway, K., **Robison, M.**, & Wendler, D. (February, 2017) *Stress, social connectedness, and satisfaction in graduate school: An intervention study*. Presented at George Fox University Graduate Department of Clinical Psychology Faculty Meeting, Newberg, OR.
- Stroop Testing Research Assistant for Dr. Chris Koch – George Fox University (2014) Newberg, OR.

Relevant Graduate Coursework

Theory and Practice

Cognitive Behavioral Psychotherapy
 Clinical Foundations I & II
 Psychopathology
 Human Development
 Family Therapy in a Diverse Culture
 Learning, Cognition, and Emotion
 Social Psychology
 History and Systems of Psychology
 Psychodynamic Psychotherapy
 Consultation and Program Evaluation I & II
 Biological Basis of Behavior
 Group Psychotherapy
 Attachment in Psychotherapy
 Professional Issues
 Supervision and Management in Psychology

Assessment

Personality Assessment
 Child and Adolescent Therapy and Assessment
 Cognitive Assessment
 Neuropsychological Assessment Fundamentals
 Neuropsychological Assessment Interpretation

Research

Research Team I, II, III
 Research Design
 Statistics
 Psychometrics

Diversity

Theories of Personality/Psychotherapy
 Multicultural Therapy

Ethics	Ethics for Psychologists
Integration	Spiritual Formation I, II, III, IV, V Bible Survey for Psychologists Integrative approaches to Psychology Spiritual and Religious Diversity in Psychology Theological Survey for Psychologists

Academic Societies

- Society of Clinical and Child and Adolescent Psychology 2017-Present
 - APA Division 53-Student Affiliate
- Experimental Psychology 2017-Present
 - APA Division 3-Student Affiliate
- Developmental Psychology 2017-Present
 - APA Division 7-Student Affiliate
- Society for Family Psychology 2017-Present
 - APA Division 43-Student Affiliate
- Association for Psychological Science 2016-Present
 - Student Affiliate
- American Psychological Association 2014-Present
 - Student Affiliate
- Neuropsychology Student Interest Group 2014-Present
 - George Fox University – Student Member
- Health Psychology Student Interest Group 2014-Present
 - George Fox University – Student Member
- Community Gathering 2014-Present
 - George Fox University – Student Participant
- Psi Chi (International Honor Society for Psychology) 2011-Present

- National Register of Health Service Psychologist
Credential Banking Scholarship Award Winner Fall 2018
- Graduated Cum Laude
2014 B.S. in Psychology George Fox University
- Deans List Fall 2013
Spring 2012
Fall 2012
Spring 2011
Fall 2011
Fall 2010

- Old Pain in New Brains – Scott Pengelly, PhD
2018
George Fox University
Newberg, OR
- Spiritual Formation and the Life of a Psychologist: Looking Closer at Soul-Care – Lisa
Grahm McMinn, PhD and Mark McMinn, PhD
2018
George Fox University
Newberg, OR
- Becoming a Behavioral Health Clinician to Advance Primary Care – Julie Oyemaja, PsyD,
Mary Peterson, PhD, ABPP, Kristie Knows His Gun, PsyD
2018
George Fox University
- Using Community Based Participatory Research to Promote Mental Health in American
Indian/Alaska Native Children, Youth and Families - Eleanor Gil-Kashiwabara, Psy.D.
2017
George Fox University, Newberg, OR

- Difficult Dialogue-Winston Seegobin, PsyD, Mary Peterson, PhD, ABPP, Mark McMinn, PhD, ABPP and Glenna Andrews, PhD
2017
George Fox University, Newberg, OR
- Domestic Violence: A Coordinated Community Response: Patricia Warford, PsyD and Sgt. Todd Baltzell
2017
George Fox University, Newberg, OR
- Native Self Actualization: It's assessment and application in therapy: Sydney Brown, PsyD
2017
George Fox University, Newberg, OR
- Divorce and Children: Wendy Bourg, PhD
2016
George Fox University, Newberg, OR
- Multicultural Integration: Brooke Kuhnhausen, PhD
2016
George Fox University, Newberg, OR
- Integrated Care Boot Camp- Behavioral Health Consultant Training
2015
George Fox University, Newberg, OR
- Relational Psychoanalysis and The Christian Narrative: Marie Hoffman, PhD
2015
George Fox University, Newberg, OR
- Managing Emerging Sexuality in Therapy: Joy Mauldin, PsyD
2015
George Fox University, Newberg, OR
- Spiritual Formation and Psychotherapy: Dr. Barrett McRay, PsyD
2015
George Fox University, Newberg, OR

- Banking Credentials: Dr. Morgan Sammons PhD
2015
George Fox University, Newberg, OR
- Plugged In: How Technology is Shaping Neurological, Relational, and Interpersonal Functions: Dr. Doreen Dodgen-McGee, PsyD
2014
George Fox University, Newberg, OR
- Understanding and Treating ADHD in Children: Ericka Doty, PsyD, Tabitha Becker, PsyD
2014
George Fox University, Newberg, OR

References

Kristie Knows His Gun, Psy.D.	Internship Director Assistant Director of Clinical Training George Fox University Email: kknowshisgun@georgefox.edu Phone: 503-554-2385
Glena Andrews, Ph.D., MSCP, ABPP	Clinical Supervisor Director of Clinical Training George Fox University Email: gandrews@georgefox.edu Phone: 503-554-2386
Elisa Rudd, Psy.D.	Internship Supervisor Behavioral Health Provider Providence Medical Group-Bethany Portland, OR Email: elisa.rudd@providence.org Phone: 503-764-0100