CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

Mental Toughness Program Evaluation

A graduate project submitted in partial fulfillment of requirements

For the degree of Master of Social Work

By

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Abstract

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Purpose: School is challenging for many youth – even more so for those exposed to violence, trauma, and gang-related activities on a daily basis. An estimated half million youth drop out of school each year in the United States (Alosie-Young & Chavez, 2002). Alternative schools address the problem of drop-out for youth challenged in the traditional classroom setting. One such alternative school, Alliance for Community Empowerment, Inc. (ACE), provides a one-week course designed to help at-risk youth age 16-24 to orient the students to the "YouthBuild experience", develop community, influence positive behaviors and attitudes towards school. Hypothesis: Explore the programs offered within alternative schools for students either returning to school after being away for a long period of time or for those transitioning directly from a traditional school. Methods: Participants (N=31) completed paper surveys before and after the Mental Toughness program measuring their resilience, grit, academic confidence, sense of community, and trauma, using standardized measures and open-ended questions. Results: Quantitative results revealed no statistically significant difference between pretest and posttest outcomes in psychosocial factors such as resilience, grit, academic confidence or sense of community, although mean scores improved between pretest and posttest. Students did express gaining skills such as leadership and teamwork. Students

also reported feeling a closer sense of community and as well as an increase in "sense of hope" and being overall satisfied with the program. Discussion: Future research is suggested to further explore the influence of the MT program on student's resilience, academic confidence, grit, and sense of community. Researchers suggest utilizing a comparison group or control group, whichever is most feasible. Longitudinal data can also be another option to gather information on the influence of the MT program over time by following one group of students.

Introduction

As a response to a community need for additional alternative education, Alliance for Community Empowerment, Inc. (ACE), previously known as Ruth Youth Build (RYB) was established in 2013. ACE has addressed community issues such as gang activity, violence, and at-risk factors preventing higher education, brought by adverse conditions. ACE meets their mission to help and empower disenfranchised youth by providing education, job readiness training, leadership/social development, counseling and supporting services while utilizing an engaging and holistic approach for a better future. The services offered by ACE school are "grounded in the fundamental belief that young people, when given the right assistance, tools, and role models, can transform their lives and their community," as stated in their mission statement: "ACE's mission is to strengthen underserved communities by assisting youth in education, vocational training, leadership development, counseling and community engagement. Through knowledge and self-discovery, the individual becomes stronger and a community becomes empowered." ("About ACE," 2015). One of the tools provided to students in the ACE program is the Mental Toughness (MT) program, which is designed to help at-risk youth age 16 – 24 to orient the students to the "YouthBuild experience", develop community, influence positive behaviors and attitudes towards school.

The Mental Toughness (MT) program is held during the first month of school and is designed as a "mental boot camp" where students are oriented to the ACE experience while developing a connecting sense of community. The MT program is made up of team-building activities, workshops and courses. Students are evaluated during MT in areas such as positive attitude and behavior, attendance, and participation. The purpose of

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the current study is to go beyond demographics for individual students and explore the outcomes of the MT program's one-week training course in terms of resilience, academic achievement, and grit.

Alternative Schools

An estimated half million youth drop out of school each year in the United States (Alosie-Young & Chavez, 2002) and research indicates that youth discontinuing their academic studies may experience several unintended consequences. According to Lagana-Riordan (2011), "school dropouts are more likely to be depressed, feel isolated, and use drugs and alcohol. They are more likely to join gangs, commit acts of violence, and become incarcerated" (p. 105). A response to high dropout rates and at-risk youth is an increase in alternative schools. The number of alternative schools has risen over the past 15 years in an attempt to meet the needs of many at-risk students (Foley 2006; Lagana-Riordan, 2011). Alternative schools offer youth identified as at-risk of school failure individualized educational programs that are enhanced and flexible (Foley, 2006; Lagana-Riordan, 2011), which may address some of the risk and protective factors associated with poor academic outcomes in at-risk youth such as trauma, resilience, grit, and academic confidence.

Youth and Trauma

According to the American Psychological Association (2008), trauma is a prevalent issue among adults; yet, youth are often an overlooked population in studies of trauma. In fact, up to one third of youth have experienced traumatic events by age 16 ("Children and Trauma," 2008). Hidden effects from trauma could negatively affect student learning (Sitler, 2009). Educators are often unaware of trauma within their

students and how it impacts learning and their academic performance (Sitler, 2009). By addressing trauma within students, misinterpretation of student learning and academic performance can be avoided so that other student considerations can be met to help aid learning and academic performance (Sitler, 2009). A randomized controlled trial by Kataoka et al. (2011) compared early versus later trauma interventions within two different middle schools, revealing that the middle school student group receiving early trauma intervention obtained higher grades than their middle school student peers who received delayed trauma intervention. Equally important is for students to process current and past trauma, which will then lead to an increase in academic self-confidence and resiliency (Kataoka et al., 2011).

Youth and Resilience

A review of the literature reveals risk factors such as low social economic status, minority identity, English as a second language, and having experienced trauma are related to risk-taking behaviors (Aronowitz, 2005; Finn & Rock, 1997; Kitano & Lewis 2015). According to Finn and Rock (1997), youth demonstrating risk behaviors produce impediments to learning. Such risk behaviors are described as tardiness, not attending school, not completing school or homework, and not attending to the teacher (Finn & Rock, 1997; Kitano & Lewis 2015). Meanwhile, students who do not exhibit risk behaviors, despite multiple chronic stressors and/or risk factors, are identified as resilient (Finn & Rock, 1997). Usually, resilient students attend school regularly, participate in extracurricular activities, and complete school and homework assignments, which serve as protective factors against multiple chronic stressors (Finn and Rock, 1997).

According to McKay (2011), resilience among youth can be promoted by strengthening the following protective factors: bonded relationships, supportive schools, ties to community organizations, and relationships with positive adult role models. Aronowitz, Finn and Rock (2005) identified having a positive adult role model providing the youth with encouragement as strong protective factor against negative life outcomes. Aronowitz et al.'s (2005) qualitative study focused on gaining an understanding of the process that helped at-risk youth develop resilience and stop participating in risk behaviors. In the study, at-risk youth identified having one positive role model that provided modeling, monitoring, and coaching, resulted in the youth feeling competent and having higher expectations of themselves. Similarly, Finn and Rock's (1997) quantitative study found that "student engagement is an important component of academic resilience" (p.231). The authors recommend promoting and reinforcing positive behaviors by teachers and caregivers as an intervention for at-risk youth (Finn & Rock, 1997). With adult support, youth may reach academic resilience despite chronic stressors, and the ACE Mental Toughness program is designed to offer students the opportunity to increase self-awareness, resiliency, and support providing a unique opportunity in the current study to test the effects of additional support in a community-based setting.

Youth and Grit

The psychosocial factor 'grit' is increasingly studied and may affect academic performance. Laursen (2015) found that grit is a valid predictor of success by running six different studies to measure individual differences in grit compared to IQ. Laursen (2015) suggested that grit is a more valid predictor of success than IQ, and revealed that individuals with higher education were higher in grit than those with less education when

age was held constant, suggesting grit as a factor in academic achievement (Duckworth, Peterson, Matthews, & Kelly, 2007).

Other influential developmental factors from existing bodies of literature such as fixed and growth mindsets, perseverance, tenacity, and grit, also provide further evidence that grit is indeed a better predictor of high school graduation and grade point average than IQ (Laursen, 2015). Just as educators are often unaware of the hidden and negative effects from trauma and its impact on learning and academic performance (Sitler, 2009), it may be equally important for educators to target psychosocial factors such as, grit, in engaging low-performing students to increase academic performance, achievement, and success of students (Laursen, 2015). Adopting new approaches to develop inner strengths that foster success in school and life is also in direct alignment with the student activities involved within the Mental Toughness program at ACE.

Youth and Academic Confidence

A review of the literature reveals a positive relationship between academic confidence and high grades. In a study conducted by Nicholson, Putwain, Connors, and Hornby-Atkinson (2013), results suggested that the students' realistic expectations of their coursework and their sense of responsibility were correlated with higher grades. In addition, student confidence in their own academic capabilities also yielded higher grades in contrast to students with less academic confidence (Nicholson et al., 2013). In a different study, controlling for race, immigrant status, and social economic status, Rahmani (2011) found a positive relationship between school performance, measured as grade point average, and self-esteem, with higher student self-esteem related to higher

grade point average. In other words, students with a higher grade point average also measured high on the self-esteem scale.

Sense of Community and Satisfaction

Youth spend a majority of their time at school and a review of the literature reveals a relationship between students having a sense of community at school and positive outcomes. **"**Feeling connected to school involves positive and prosocial connections to peers, teachers, and staff at school; a sense of enjoyment and liking school; a belief that school is important; active engagement in school activities; and a perceived sense of belonging, closeness, and commitment to school" (Daly, Buchanan, Dasch, Elichen, & Lenhart, 2010, p. 18). Positive relationships with adults and peers, investment in school, and higher engagement in school activities were found to be positively related to higher educational achievement (Monahan, Oesterle & Hawkins, 2010).

Previous studies have identified risk factors and negative outcomes that result from students not experiencing a sense of community at school. Implementation of the Zero-Tolerance School Discipline Policy, classroom management (large classrooms, frequent disruptions and lack of complex instruction), and individual risky behaviors are factors preventing a sense of community within schools (Daly et. al, 2010). Schools lacking a sense of community for students result in negative outcomes such as "higher levels of violence, cigarette smoking, alcohol and marijuana use, and earlier onset of sexual activity" (Daly et. al, 2010, p. 19). In addition, previous studies identified protective factors and positive outcomes that result from students experiencing a sense of community. Factors that are associated with creating a sense of community at school

include providing youth with adult support, youth belonging to a positive peer group, and youth committing to education (Monahan et al., 2010; "School Connectedness," 2010).

The ACE program aims to improve resilience, grit, and the sense of community in at-risk youth. The Mental Toughness (MT) program at ACE is designed to assist at-risk youth and their sense of community to increase self-awareness, resiliency and support that can translate to the working world and academia. The current study evaluates the MT program at ACE in an effort to provide outcomes for the program that has not been previously explored for effectiveness.

Hypotheses & Research Questions

This program evaluation explores the outcomes of a one-week training course for students in the ACE program. The researchers specifically seek to explore known factors that can influence academic performance and achievement, such as grit, resilience, and academic achievement within the program and if participation in the Mental Toughness program have an impact on said factors. The one-week course is designed to help at-risk youth age 16-24 develop community, influence positive behaviors and attitudes towards school. The pretest/posttest evaluation is designed to capture four domains stemming from participants' exposure to the Mental Toughness program. The researchers hypothesize that participation in the Mental Toughness program:

1. Increases the participants' sense of community

2. Increases the participants' resilience

3. Increases the participants' grit

4. Increases the participants' academic confidence

While also exploring participant feedback with two research questions:

1. Trauma in the participants will be evident

2. Participants in the Mental Toughness program will report high satisfaction with the program.

Site of Study

Alternative schools such as ACE address at-risk youth struggling academically in public school settings by incorporating teaching curriculums and programs designed to address the needs of struggling students. ACE's mission is to strengthen underserved communities that consist mostly of ethnic minority students from a lower socioeconomic status. Prior to participating in ACE, many students struggled academically with a history of truancy in traditional public school settings. Therefore, providing an adequate environment is important for ACE students to learn and thrive. Another objective of the ACE program is to develop resiliency in their enrolled students. In addition, ACE strives to provide these protective factors to low-income minority youth.

Method

Sample

The study population includes youth currently enrolled at ACE. The sample was recruited from the Mental Toughness program. All students (N=31) over the age of 18 and participating in the Mental Toughness program for the first or second time were asked to participate in the study.

Design

This study applied a pre-experimental one-group pretest-posttest design. Students at the ACE charter school who are participating in the Mental Toughness program were asked to participate in the evaluation by filling out a questionnaire before and after the Mental Toughness program. This design "assesses the dependent variable before and after the stimulus or intervention is introduced" (Rubin & Babbie, 2011, pg. 251). As a result of the study design other factors besides the independent variable are not taken into consideration (Rubin & Babbie, 2011). However, the one group pretest-posttest design has value as a pilot study.

Measurements

Five standardized scales were used to obtain data for the program evaluation. Participants completed a paper and pencil survey on January 11, 2016 before initiating the Mental Toughness program and again on January 15, 2016 upon completion of the program.

Brief Resilience Scale (BRS). The BRS (Smith et al., 2008) consists of six items measuring resiliency on a five point Likert scale where 1 = not at all and 5 = extremely. Sample items include "I can bounce back quickly" and "I usually come through with little

trouble" The BRS has been widely used with demonstrated reliability in the current study (α = .66) and validity. The current study uses the BRS scale to explore the subjects' ability to bounce back.

The Classroom and School Community Inventory (CSCI) "is an existing self-report questionnaire consisting of 20 self-report items that examine community within the classroom and school setting" (Rovai, Wighting, and Lucking, 2004, p. 269). For the purpose of the current study, only the 9 items examining the school setting will be adapted. Items include "I have friends at this school to whom I can tell anything" and "I feel that this school gives me ample opportunities to learn." Each item is measured on a five-point Likert scale, ranging from 5 = strongly agree to 1 = strongly disagree, with higher scores reflecting a stronger sense of school community (Rovai et. al, 2004, p. 269). The CSCI has been widely used with demonstrated reliability in the current study (α = .90) and validity.

Abbreviated Posttraumatic Stress Disorder Checklist Civilian (PCL-C). The PCL-C is a shortened version of the PTSD Checklist – Civilian version (PCL-C). This self-administered questionnaire consists of 6 self-report items that measures posttraumatic stress disorder (PTSD) symptoms (Forbes, Creamer, and Biddle, 2001). Items are measured on a Likert-type scale where 1 = Not at all and 5=Extremely. The Abbreviated PCL-C will only be administered within pre-test surveys, because a significant change in trauma results is not expected in one week. The PCL-C has been widely used with demonstrated reliability in the current study (α = .93) and validity.

Short Grit Scale (SGS). The SGS is an 8-item self-report instrument designed to determine the subject's trait level perseverance and passion for long-term goals

(Duckworth & Quinn, 2009). Items include "when completing projects at school, I feel setbacks don't discourage me, and I finish whatever I begin." Each item is rated on a 5-point Likert-type scale where 1=very much like me, and 5=not like me at all. The SGS appears to have face validity although reliability appears to be questionable in the current study ($\alpha = .40$).

Academic Self-Perception (ASP). The ASP instrument has a total of five items with responses on a 7-point Likert scale ranging from 1=Strongly Disagree to 7=Strongly Agree. The Academic Self-Perception scale was designed to measure the extent to which children have a positive self-perception about their academic abilities (McCoach, 2002). Items include "I am confident in my scholastic abilities and I am confident in my ability to succeed in school." High scores indicate a more positive academic self-perception. The ASP has demonstrated reliability in the current study ($\alpha = .93$) and appears to have face validity.

The final section of the questionnaire only appears on the posttest survey because overall satisfaction after completing the program will be measured. The final questions are open ended. Items are "Overall how would you describe what you have learned or gained from the Mental Toughness program?" and "what recommendations do you have for improving the Mental Toughness program?" In this section, participants are encouraged to share any additional comments regarding the program.

Data Analysis

Frequencies and descriptives were performed for all univariate variables. Paired sample t-tests were used to explore differences between pre and posttest surveys. This statistical procedure was utilized because "paired sample t-test (also called repeated

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measures) are used to analyze changes in scores for participants tested at Time 1, and then again at Time 2 (often after some intervention or event)" (Pallant, 2010). A total of 52 participants completed either a pre, post, or both surveys. The researchers only analyzed data in which both pre-and post-surveys were answered, in order to create a comparable data set. A total of 31 participants completed both pre and post surveys. Of the 31 participants, three participants had one missing value each. As a result of the three nonresponses, the process of mean imputation was applied allowing for complete data to be analyzed. Missing data were imputed by "replacing each missing value with the mean of the observed values for that variable" (Missing Data Imputation). Overall the data set analyzed included 31 students who attended the MT program and completed both the pre and post questionnaire.

Results

The researchers evaluated and analyzed the collected data using paired-sample T-Tests in SPSS. As listed in the table below, sense of community (scores range 9-45), resilience (scores range 6-30), grit (scores range 8-40), and academic confidence (scores range 5-25) are relatively high (see Table 1).

Table 1

T-test Results for Sense of Community, Resilience, Grit, and Academic Confidence

| | Pretest | | Posttest | | | 95% CI for Mean | | |
Outcome	M	SD	M	SD	n	Difference	t	p
Sense of Community	34.5	6.70	33.9	6.06	31	-.765, 1.93	.881	.385
Resilience	20.3	3.67	21.0	3.69	31	-1.55, .328	-1.330	.193
Grit	26.0	3.10	25.8	3.28	31	-1.34, 1.79	.293	.771
Academic Confidence	29. 3	6.04	30.2	3.97	31	-2.45, .568	-1.273	.213

Sense of Community

A paired-samples t-test was conducted to evaluate the impact of the Mental Toughness Program on students' scores on the Classroom and School Community Inventory (CSCI). There was no statistically significant difference in CSCI scores from Time 1 ($M = 34.52$, $SD = 6.7$) to Time 2 ($M = 33.94$, $SD = 6.07$), $t(30) = .881$, $p > .385$ (two-tailed), suggesting that the intervention did not have an influence on sense of community. The mean decrease in CSCI scores was .058 with a 95% confidence interval ranging from -.765 to 1.927.

Resiliency

A paired-samples t-test was conducted to evaluate the impact of the Mental Toughness program on students' scores on the Brief Resilience Scale (BRS). There was no statistically significant difference in BRS scores from Time 1 ($M = 20.3871$, $SD = 3.67$) to Time 2 ($M = 21.0$, $SD = 3.688$), $t(30) = -1.330$, $p > 1.93$ (two-tailed). However,

the mean scores increased between time 1 and time 2 (the mean increase in BRS scores was 0.613 with a 95% confidence interval ranging from -1.55 to .328) albeit not statistically significantly.

Grit

A paired-samples t-test was conducted to evaluate the impact of the Mental Toughness program on students' scores on the Short Grit Scale (SGS). There was no statistically significant difference in SGS scores from Time 1 ($M = 26.0$, $SD = 3.97$) to Time 2 ($M = 25.77$, $SD = 3.28$), $t (30) = .293$, $p >.771$ (two-tailed), suggesting that the intervention did not have an influence on grit. The mean decrease in SGS scores was 0.23 with a 95% confidence interval ranging from -1.35 to 1.710.

Academic Confidence

A paired-samples t-test was conducted to evaluate the impact of the Mental Toughness program on students' scores on the Academic Self-Perception Scale (ASP). There was no statistically significant difference in ASP scores from Time 1 ($M = 29.26$, $SD = 6.05$) to Time 2 ($M = 30.2$, $SD = 3.97$), $t (30) = -1.273$, $p >. 213$ (two-tailed), suggesting that the intervention did not have an influence on academic confidence, although scores increased between Time 1 and Time 2. The mean increase in APS scores was 0.94 with a 95% confidence interval ranging from -2.45 to 0.568.

Overall Trauma

In exploring the research question pertaining to trauma, a frequency analysis revealed that 61.3% of participants in this sample met the threshold for trauma, as evidenced by the scoring 14, which is the cut off criteria for trauma on the PCL

instrument that considers an individual as positively screened for trauma if sums of items are at 14 or higher.

Overall Mental Toughness Program Satisfaction

Concluding the qualitative segment of the study overall, students were given the opportunity to share what they learned or gained from the MT program. Table 2 demonstrates student responses in categories and in percentages. Most students reported gaining self-efficacy at the conclusion of the MT program (63.41%). In addition, students reported gaining a sense of community (58.54%), teamwork and respect for others (53.66%) from the MT program.

Table 2

Describe what you learned or gained from the Mental Toughness Program	n	% of students
Sense of community	25	58.54%
Leadership skills	12	26.83%
Teamwork and Respect for others	23	53.66%
Self-efficacy	22	63.41%
Preparation	10	24.39%
Responsibility	6	12.19%

Percentages total more than 100 as participants made more than one comment

Furthermore, many student participants noted the positive impact the program had on them, stating "it's the best program I been in" and "I've grown so much as a person with this program" and reflected the importance of having a sense of community within the school. For example, one student stated:

I have learned that we need work together in order to have a good community at school.

Others communicated self-efficacy, through their hopes for the future and themselves, something that may have been suppressed in the past, by stating:

I have learned to never give up, that its never to late to reach your goals and

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set a correct for yourself. Also I gained confidence from my staff and peers [SIC]

I have gained experience of the core values of the program because through the issues in life you lose sight of who you are and what is important. In the past few months I've lost sight of who you are and what is important. In the past few months ive lost sight of being resilient to be united with others to transform my depression to strength and to have hope in my self and future goals [SIC].

Table 3

Recommendations for Improvement of the Mental Toughness Program	n	% of Students
No Recommendations	21	65.85%
Suggestions provided	18	41.46%
Expressed Satisfaction	13	31.70%
Expressed Dissatisfaction	2	4.8%

Percentages total more than 100 as participants made more than one comment

The final question asked student participants to make recommendations for improving the Mental Toughness program. Most students (65.85%) did not have any recommendations to make and 31.70% shared feeling satisfied with the program as it is. Some student participants stated, "I think it's great just the way it is," "none! You guys are doing a solid job," "nothing, really its good how it is," and "nothing everything is great." However, there were 4.8% (n=2) of student participants who expressed being dissatisfied with the MT program and would recommend eliminating it completely. Of the 41.46% of students who did make suggestions for the program, the majority focused on being together or doing additional activities as a group.

I feel that mental toughness can be better if we did more stuff together as a school. more activities [SIC].

Some recommendations I have is more activities that are new and gets everyone together [SIC].

Overall, students express feeling satisfied with the program and desire more connecting activities to build a sense of community within the school. Student recommendations and suggestions should be considered in on going MT programs.

Discussion

The purpose of this study was to evaluate the MT program, specifically to explore if grit, resilience, sense of community, and academic confidence increase after participating. In addition, trauma was explored as a factor that may be present in the participants and the overall satisfaction the participants have of the program. The findings suggest that participation in the MT program may not directly affect factors such as resilience, grit, sense of community, and academic confidence. However, the findings suggest that the MT program is targeting the intended group of individuals as more than 60% of participants meet the threshold for trauma.

Most importantly, overall satisfaction of the MT program was reported by participants. Previous literature suggests that alternative schools positively affect academic outcomes in at-risk youth specifically in trauma, resilience, grit, and academic confidence. Despite the current results not indicating a statistically significant improvement in outcomes, both resilience and academic confidence did increase. In addition, positive results were indicated by the qualitative comments students expressed such as gaining skills in leadership, teamwork, and feeling connected to the community. A general consensus among the qualitative reports from the students included "feeling a closer sense of community" as well as an increase in "sense of hope" and being satisfied overall with the Mental Toughness program after participation completion.

The quantitative results differed from the results in the qualitative section and that may have several explanations. Perhaps one week of MT program was not enough time to allow for students to fully grasp the interventions learned throughout the program. It should also be noted that though the program is intended to increase student attendance,

researchers did not take this factor into account which may help explain the sample of students that were not able to complete both the pre and post-test questionnaires. However, despite not showing statistically significant results, the results are still promising as they provide a baseline and framework to build upon as a starting point for any future studies conducted at ACE.

In addition to ACE providing interventions and support that otherwise would be nonexistent for these students, it should be emphasized and highlighted how ACE is spot-on and directly on target with their mission statement. As the trauma results have shown, an overwhelming majority of the students that participated in this study met the threshold for trauma, while the students that did not meet threshold scores for trauma trailed very closely behind. In alignment with the current existing body of work regarding trauma and learning, trauma can profoundly impact cognitive development and learning outcomes, especially if left unaddressed. Therein, the student qualitative feedback of increased sense of community, self-efficacy, leadership and teambuilding should be emphasized and highlighted as they demonstrate how ACE educators are providing vital and necessary resources for the exact intended target demographic of underserved communities, which is in direct alignment with their mission statement.

The use of self-report surveys could also be considered a limitation as the participants may have given socially desired responses or completed the surveys in haste. However, giving these traditionally marginalized students and opportunity to express themselves in their own words mirrored the mission of ACE and modeled the behavior. Despite the few limitations self-report surveys convey, it's important to note, students at ACE were given a voice through the unitization of the surveys. It should be noted that

students may have struggled interpreting the standardized questionnaires as a result of their low reading level. To negate any potential struggle with comprehension, students' reading levels were taken into consideration and some of the vocabulary in the instruments was modified to allow for easier interpretation.

Recommendations

As demonstrated in this study, future studies can utilize the findings from this study and ACE as a model for future teacher trainings in public schools with similar demographics for education reform, strengthen existing models that support student academic achievements, and early intervention.

Additionally, as shown in the results section, the grit scale proved to have low reliability in this study. Therefore, future studies could utilize a different instrument or further modify the scale to include statements and questions directly relevant to the students' demographic and population that would replace the somewhat vague and general statements that may not have been as applicable to the target population of students at ACE.

As, in hindsight, there is a possibility that quantitative data may have been some compromised that could help explain the disparities in quantitative and qualitative results. Despite researcher efforts to thoroughly modify vocabulary and eliminate any overly complex terminology or excessive verbiage that had the potential of impairing reading comprehension or ease of understanding, researchers could modify instruments to incorporate statements and questions of relevant barriers specific to student socioeconomic demographics. For example, limited access to transportation, stable living

conditions, safety, sufficient food availability, access to medical necessary medical care, and so forth that may impact student learning and achievement.

Longitudinal data can also be another option to gather information on the influence of the MT program over time by following one group of students. Also important to consider is a review of the MT program curriculum as it may not be designed to influence higher levels of grit, academic confidence, and resilience. Further research is necessary to conclude the long term effects of the MT program on a larger number of students before generalizing conclusions.

An exploration of trauma revealed high scores at onset of the program. These results can help educators in public schools and other charter schools' become better aware of learning and academic deficiencies at school as a result of trauma exposure in student's personal lives outside of school. The trauma results can also help educators at ACE strengthen existing interventions or implement additional interventions to address trauma that may act as hidden barriers towards student learning and achievement. With the existing body of literature in support of how trauma exposure can have far reaching influences when it comes to learning and academic achievement, educators in public schools and other charter schools' can use this awareness to be readily prepared in providing proper interventions, even allowing the space for dialogue to discuss the extent to which trauma exposure impacts student learning experience and how they can cope.

Ideally, public schools should consider adopting a similar model to that of ACE and train teachers in working with similar target demographics for education reform that addresses developmental and environmental factors that have proven to act as barriers towards student performance and achievement. Unfortunately, as reported by Alosie-

Young & Chavez (2000) an estimated half million youth drop out of school each year in the united states, a high number of students may be leaving an educational system that are not meeting their needs. If students were indeed able to receive the appropriate and proper support needed within their learning environments at school, they could be better equipped towards reaching academic success. Further research should be conducted on programs offered at alternative schools like ACE, so that further exploration and seeking of beneficial implications from their programs and curriculums can be adopted and incorporated in the main educational or public school systems.

Given the fact that social, cultural, institutional, and historical forces indeed have an effect on individuals, such as, socioeconomic status, immigration status, language barriers, and adverse environmental upbringings and so forth, addressing these issues only seems not only appropriate, but necessary in fostering success in not only schools but life as well.

References

About ACE. (n.d.). Retrieved December 1, 2015, from

      http://www.allianceforcommunityempowerment.com/about-ace.html

Aloise-Young, P. , & Chavez, E. (2002). Not all school dropouts are the same: Ethnic

      differences in the relation between reason for leaving school and adolescent

      substance use. *Psychology in the Schools*, *39*(5), 539-547.

Anonymous, . (2010). School connectedness: Strategies for increasing protective factors

      among youth. *Reclaiming Children and Youth*, *19*(3), 20-24.

Aronowitz, T. (2005). The role of "envisioning the future" in the development of

      resilience among at-risk youth. *Public Health Nursing*, *22*(3), 200-208.

Brooks, R., & Goldstein, S. (2003). The power of resilience: Achieving balance,

      confidence, and personal strengths in your life. <u>New York, NY</u>: *McGraw-Hill.*

Cassady, J. (2004). The influence of cognitive test anxiety across the learning–testing

      cycle. *Learning and Instruction*, *14*(6), 569-592.

Children and Trauma. (2008). Retrieved from

      http://www.apa.org/pi/families/resources/children-trauma-update.aspx

Daly, B. , Buchanan, C. , Dasch, K. , Eichen, D. , & Lenhart, C. (2010). Promoting

      school connectedness among urban youth of color: Reducing risk factors while

      promoting protective factors. *Prevention Researcher*, *17*(3), 18-20.

Duckworth, A. , Peterson, C. , Matthews, M. , & Kelly, D. (2007). Grit: Perseverance and

      passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6),

      1087-1101.

Duckworth, A. , & Quinn, P. (2009). Development and validation of the short grit scale

      (grit-s). *Journal of Personality Assessment*, *91*(2), 166-174.

Finn, J. , & Rock, D. (1997). Academic success among students at risk for school failure.

      Journal of Applied Psychology, *82*(2), 221-234.

Foley, R. , & Pang, L. (2006). Alternative education programs: Program and student

      characteristics. *The High School Journal*, *89*(3), 10-21.

Forbes, D., Creamer, M., & Biddle, D. (2001). The validity of the ptsd checklist as a

      measure of symptomatic change in combat-related ptsd. *Behavior Research and*

      Therapy, 39(8), 977-986.

Harville, E. , Jacobs, M. , & Boynton-Jarrett, R. (2015). When is exposure to a natural disaster traumatic? comparison of a trauma questionnaire and disaster exposure inventory. *PloS One*, *10*(4), e0123632-e0123610.

Kataoka, S., Jaycox, L. H., Wong, M., Nadeem, E., Langley, A., Tang, L., & Stein, B. D. (2011). Effects on School Outcomes in Low-Income Minority Youth: *Preliminary Findings from* S1–71–7.

Kitano, M. , & Lewis, R. (2005). Resilience and coping: Implications for gifted children and youth at risk. *Roeper Review*, *27*(4), 200-205.

Lagana-Riordan, C. , Kim, J. , Streeter, C. , Aguilar, J. , Franklin, C. , et al. (2011). At-Risk students' perceptions of traditional schools and a solution-focused public alternative school. *Preventing School Failure: Alternative Education for Children and Youth*, *55*(3), 105-114.

Laursen, E. (2015). The power of grit, perseverance, and tenacity. Reclaiming Children and Youth, 23(4), 19

Missing Data Imputation. (n.d.). Retrieved May 07, 2016, from http://stat.columbia.edu/

McCoach, D. (2002). A validation study of the school attitude assessment survey. *Measurement and Evaluation in Counseling and Development [H.W. Wilson – EDUC*], 35(2), 66.

McKay, C. (2011). The resilient community: Implications for out of school programming. *Child And Adolescent Social Work Journal*, 28(5), 357-373.

Monahan, K. , Oesterle, S. , & Hawkins, J. (2010). Predictors and consequences of school connectedness: The case for prevention. *Prevention Researcher*, *17*(3), 3-6.

Nicholson, L. , Putwain, D. , Connors, L. , & Hornby-Atkinson, P. (2013). The key to successful achievement as an undergraduate student: Confidence and realistic expectations? *Studies in Higher Education*, *38*(2), 285-298.

Pallant, Julie. (2010). *SPSS Survival Manuel: A Step by Step Guide to Data Analysis Using SPSS*. Open International Publishing.

Rahmani, P. (2011). The relationship between self-esteem, achievement goals and academic achievement among the primary school students. *Procedia - Social and Behavioral Sciences*, *29*, 803-808.

Rovai, A., Wighting, M., & Lucking, R. (2004). The classroom and school community

inventory: Development, refinement, and validation of a self-report measure for educational research. *The Internet and Higher Education*, 7(4), 263-280.

Rubin A. & Babbie, E. R. (2011). *Research methods of social work.* Belmont, CA: Wadsworth Pub. Co.

Sitler, H. (2009). Teaching with Awareness: The Hidden Effects of Trauma on Learning. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 82(3), 119-123. Retrieved October 1, 2015, from http://search.proquest.com.libproxy.csun.edu/docview/196883837/fulltext?accoun tid=7285

Smith, B. , Dalen, J. , Wiggins, K. , Tooley, E. , Christopher, P. , et al. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*(3), 194-200.

Solar, E. (2011). Prove Them Wrong. *Teaching Exceptional Children*, 44(1), 40-45. (Solar, 2011).

Name_____

Date_____

__Mental Toughness Project__

Thank you for taking part in this survey. ACE/RYB wants you to receive the best possible experience from the Mental Toughness program. The purpose of this research study is to evaluate the Mental Toughness program at ACE/RYB. Participation in this study is completely voluntary.

Instructions: Please respond to each question by marking one box per row. There are no right or wrong answers, so just answer honestly!

When I experience hard times, I feel…	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I can bounce back quickly					
its hard to make it through					
like it does not take me long to recover					
it is hard for me to snap back					
I usually come through with little trouble					
like it takes a long time to get over it					

When thinking about my school, I feel…	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I have friends who I can tell anything					
it satisfies my educational goals					
that I matter to other students at this school					
it gives me a lot of opportunities to learn					
close to others					
I can talk to staff about personal matters					
I share the educational values of others					
that I can rely on others at this school					
satisfied with my learning					

In the past month…	Extremely	Quite a bit	Moderately	A little bit	Not at all
I had repeated, disturbing memories, thoughts, or images of a stressful experience from the past.					
I felt very upset when something reminded me of a stressful					

experience from the past.					
I avoided activities or situations because they reminded me of a stressful experience from the past.					
I felt distant or cut off from other people.					
I felt irritable or having angry outbursts.					
I had trouble concentrating.					

When completing projects at school, I feel…	Very much like me	Mostly like me	Somewhat like me	Not like much like me	Not like me at all
new ideas and projects sometimes distract me from previous ones.					
setbacks don't discourage me.					
I become obsessed with a certain idea or project for a short time but later lose interest.					
I am a hard worker.					
I often set a goal but later choose to pursue a different one.					
I have difficulty maintaining my focus on projects that take more than a few months to complete.					
I finish whatever I begin.					
I am persistent (I keep at it).					

When thinking about my role as a student, I feel confident…	Strongly Agree	Agree	Slightly Agree	Neither Agree nor disagree	Slightly Disagree	Disagree	Strongly Disagree
in my academic abilities.							
I can do well in school.							
I can learn new material quickly.							
that I can be successful.							
In my ability to succeed in school.							

THANK YOU FOR YOUR PARTICIPATION! WE REALLY APPRECIATE IT!

Name_____

Date_____

Mental Toughness Project

Thank you for taking part in this survey. ACE/RYB wants you to receive the best possible experience from the Mental Toughness program. The purpose of this research study is to evaluate the Mental Toughness program at ACE/RYB. Participation in this study is completely voluntary.

Instructions: Please respond to each question by marking one box per row. There are no right or wrong answers, so just answer honestly!

When I experience hard times, I feel…	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I can bounce back quickly					
its hard to make it through					
like it does not take me long to recover					
it is hard for me to snap back					
I usually come through with little trouble					
like it takes a long time to get over it					

When thinking about my school, I feel…	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I have friends who I can tell anything					
it satisfies my educational goals					
that I matter to other students at this school					
it gives me a lot of opportunities to learn					
close to others					
I can talk to staff about personal matters					
I share the educational values of others					
that I can rely on others at this school					

satisfied with my learning					

When completing projects at school, I feel…	Very much like me	Mostly like me	Somewhat like me	Not like much like me	Not like me at all
new ideas and projects sometimes distract me from previous ones.					
setbacks don't discourage me.					
I become obsessed with a certain idea or project for a short time but later lose interest.					
I am a hard worker.					
I often set a goal but later choose to pursue a different one.					
I have difficulty maintaining my focus on projects that take more than a few months to complete.					
I finish whatever I begin.					
I am persistent (I keep at it).					

When thinking about my role as a student, I feel confident …	Strongly Agree	Agree	Slightly Agree	Neither Agree nor disagree	Slightly Disagree	Disagree	Strongly Disagree
in my academic abilities							
I can do well in school							
I can learn new material quickly							
that I can be successful							
In my							

ability to succeed in school						

Overall how would you describe what you have learned or gained from the Mental Toughness Program?

What recommendations do you have for improving the Mental Toughness Program?

THANK YOU FOR YOUR PARTICIPATION! WE REALLY APPRECIATE IT!

Appendix B: Addendum

ADDENDUM – **Mental Toughness Program Evaluation**

Mental Toughness Program Evaluation is a joint graduate project between **Savonn Tep** and **Belia Velez**. This document will explain the division of responsibilities between the two parties. Any additional information can be included in a separate document attached to this Addendum page.

Savonn Tep is responsible for all the following tasks/document sections:

- Administer Pre-test at Alliance Community Empowerment, create codebook, and enter final scores into SPSS for evaluation.
- Write and edit introduction section including conducting research.
- Write, edit, and gather supporting research articles for literature review sections on trauma and girt.

Belia Velez is responsible for all the following tasks/document sections:

- Administer Post-test at Alliance Community Empowerment and enter final scores into SPSS for evaluation.
- Write, edit and gather supporting research articles for literature review section on alternative schools, resilience, and sense of community.

Both parties shared responsibilities for the following tasks/document sections:

- Compute outcomes using SPSS
- Proof read all sections and provide feedback
- Write and edit Methodology section, results, and discussion.
- Create and edit pre and post survey

_____	_____	_____	_____
Savonn Tep	Date	**Belia Velez**	Date
_____		_____	
104486562		**102176982**	

_____	_____	_____	_____
Dr. Jodi Brown, Chair	Date	**Dr. Amy Levin**	Date

_____	_____	_____	_____
Dr. Amy Levin	Date	**Dr. Amy Levin**	Date

_____	_____
Hyun, Park	Date