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## A Study of the Effectiveness of a Youth Peace Education Program

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#### **Abstract**

Based on the premise that students can be active learners and change makers, rather than passive recipients of knowledge, this study evaluated the effectiveness of the peace education program, READING PEACE PALS, delivered to six-to-nine-year-olds at a Boys and Girls Club. This program infused art, literacy, and community mentorship to teach conflict resolution skills. This study assessed the program's effectiveness by utilizing Kirkpatrick's (2016) model for evaluating training effectiveness and statistically assessed affective, cognitive, and behavioral learning, and the results/impact of peace education to examine perceptions of impacts of youth learning on the community and society. Youth and mentors responded positively to all forms of learning, and the impact of youth learning indicated overall effectiveness. The findings have profound implication for research, training, and practice in peace education as this model program provides evidence that participants perceived that this program has positive impacts on youths' lives, communities, and society.

#### A STUDY OF THE EFFECTIVENESS OF A YOUTH PEACE EDUCATION PROGRAM

#### Introduction

Peace education seeks to engage students in becoming active, critically thinking, and contributing members of their local community and the larger global society. From the onset of this article, the authors argue that peace education is best accomplished by giving students the tools, skills, and knowledge to affect positive changes that impact them the most. In a world were media,

technology, and peer groups often address conflict with violence, it is imperative that youth are given alternatives. Therefore, the READING PEACE PALS program incorporated responsible community mentors to assist youth in reading peace-themed books and discussing alternatives to violence and bullying. Because marginalized youth often operate in communities and schools wrought with violence and may feel discomfort when talking openly about their experiences, this program infused creative art in the form of drawings and meaningful song lyrics or poems to engage youth with the topic of peace education and literacy. As Freire (2000) argued, "As they attain this knowledge of reality through common reflection and action, they discover themselves as permanent re-creators" (p. 69), and the hope is that youth will perceive that they can impact society based on their new learning.

This program infused peace education with art, literacy, and conflict resolution and sought to test the effectiveness of the program in relation to Kirkpatrick and Kirkpatrick's (2016) conceptualization of effectiveness of a training that includes the following four main components: 1) the reaction toward learning, 2) the acquired knowledge, 3) the new skills that result, and 4) the impact of the learning. These components follow the three domains of learning detailed in Bloom's (1956) taxonomy of learning. The first component corresponds to affective learning and is popularly linked to Bloom's notion of learning known as the positive emotions that emerge as learning takes place. The second component aligns with cognitive learning, which Bloom (1956) defined as the process and quantity of knowledge gained, and the third component parallels behavioral or skill learning, which Skinner (1953) defined as the influence learning can have on forming skill and behavior. The fourth and final component refers to impact/results, which Kirkpatrick and Kirkpatrick (2016) defined as "the degree to which targeted outcomes occur as a result of the training" (p. 12).

This paper will proceed with a survey of research in peace education and evaluation processes that have been referenced in past research. Next, the quantitative methodological design will be detailed with an overview of the Likert survey that was constructed for this study. The final section will be devoted to reviewing the results of the statistical data analyses that utilized Structural Equation Modeling (SEM) to assess learning types and impacts to determine the effectiveness of READING PEACE PALS program detailed in this study.

## **Literature Review**

## Peace Education and a Reduction in Violence and Bullying

The definition of peace education depends on the setting, context, and scope of the conflict and the problem that the program seeks to address (Salomon & Nevo, 2002). For the purposes of the READING PEACE PALS program, the working definition of peace education is "the process of teaching people about the threats of violence and strategies for peace" (Harris, 2008, p. 15), which includes teaching "listening, reflection, problem-solving, cooperation and conflict resolution . . . nonviolence, love, compassion and reverence for all life . . . Peace education confronts directly the forms of violence that dominate society by teaching about its causes and providing knowledge of alternatives" (Harris & Morrison, 2003, p. 9). While traditional education has focused on teaching the basic disciplines of reading, writing, arithmetic, and memorizing information, peace education

seeks to change behavior and prevent violence through the acquisition of knowledge and skills.

Harris (1988) argues that "societies are economically, socially, and politically stratified, and that schools reproduce that stratification; so that schools, rather than ameliorating the class divisions which cause structural violence, replicate and reinforce those divisions" (p. 27). In addition, traditional education tends to create peer competition rather than cooperation and collaboration. However, others argue that "[t]he goal of education is to provide individuals with tools that lead to coexistence and the creation of positive interpersonal relationships and solidarity in society" (Majcherova, Hadjuova, & Andrejkovic, 2014, p. 463). In addition, "Schools should be a place where children feel safe and comfortable" (Majcherova, Hadjuova, & Andrejkovic, 2014, p. 463).

According to the National Center for Education Statistics (2016), "In 2015, about 21 percent of students ages 12–18 reported being bullied at school during the school year," which is down from almost 32% in 2007. However, research also shows that youth often do not report bullying that they experience or are witnesses to (Delara, 2012). This is problematic for those who perpetrate or are victimized by bullying because research demonstrates that both victim and perpetrator have a greater chance of involvement in future violence (Ttofi, Farrington, & Loeber, 2012).

While bullying and violence in U.S. schools have been slowly declining (U.S. Department of Education, 2016; Perlus, Brooks-Russell, Wang, & Iannotti, 2014), National Voices for Equality, Education, and Enlightenment (NVEEE, 2016) report that a child is bullied every 7 minutes and that adult intervention occurs 4% of the time, peer intervention occurs 11% of the time and 85% of the time, no intervention occurs. While the decline is reassuring, the incidents of bullying and violence that result in the harm or loss of any youth to suicide or homicide are tragic and unacceptable. For example, cyberbullying, a form of online bullying, threatens youth and "evidence suggests that victimization is associated with serious psychosocial, affective, and academic problems" (Tokunaga, 2009, p. 277). Moreover, bullying and cyberbullying have been linked to suicidal ideation, with victimization being "more strongly related to suicidal thoughts and behaviors than offending" (Hinduja & Patchin, 2010, p. 206).

Cyberbullying through social media, email, text, chat messages, and picture sharing sites and apps poses real threats to youth who are connected to smart phones and online environments, especially since over 97% of U.S. youth have access to the Internet (Tokunaga, 2010). Since, bullying occurs where respected adult presence is lacking (Haber & Daley, 2011), the influx of technology results in youth potentially being subjected to bullying even in the safety of their homes (Mustacchi, 2009). Bullies can operate anonymously and cause greater psychological damage, while victims can feel more alone and vulnerable. Therefore, we must provide youth with skills to manage their emotions and social interactions and teach alternatives to the pattern of meeting violence with violence when they are young

The ability to effectively address violence and bullying at a young age has the potential to free people from the tension, anxiety, and stress that are endemic of aggression and bullying (Majcherova, Hadjuova, & Andrejkovic, 2014, p. 465). Salmivalli (2009) explains that "raising

children's awareness of the role they play in the bullying process, as well as increasing their empathic understanding of the victim's plight, can reduce bullying" (118). Therefore, programs such as the READING PEACE PALS program, are needed in order to uncover the effectiveness of bullying programs as well as attempt to gain insight into children's perceptions of peace and/or conflict resolution programs.

Mentoring programs are another way of addressing issues of social injustice by offering youth the opportunity to observe alternatives by pairing them with older responsible individuals. In fact, peer mentoring programs in school settings have demonstrated behavioral and well-being improvements (Mentoring and Befriending, 2011). For example, one study led to a 78% increase in bullying awareness among those mentored with 65% learning how to effectively address bullying (Gladson, 2011).

This study recognizes the challenges in current education when it comes to peace education; therefore, the researchers were interested in discovering the role that mentorship may have on promoting literacy and peace education for youth and the impact this learning has on society. From the onset of this study, the interest was to discover if mentorship might provide a systemic approach in teaching youth about peace education while promoting literacy.

#### Utilization of Art with Children

While many people may not associate the arts in the forms of dance, drama, drawing, film, poetry, storytelling, and others "as conventional forms of conflict resolution . . . They are indeed powerful platforms to promote peace, change and conflict transformation" (Farahat, Goesel, & Georgakopoulos, 2016, p. 37). In fact, the utilization of art with youth has proven successful because youth are able to connect the stories and songs they hear to their lives and surroundings (Barkhordari, et al., 2016, p. 226). Barkhordari et al. (2016), in their literature review on the importance and use of arts-based curriculum in peace education, concluded that "[a]rts education through various methods including visual arts, performing arts, cinema, and music provides different methods for revolutionizing the mind" and that "art is a key to promoting peace in young learners and can facilitate this promotion through emotional and communicative tools, methods, and contents" (p. 220).

Engaging in the arts provides "a momentary space where children can act like children and build confidence through the refinement of a skill such as drawing, writing, rapping, or dancing" (Marie & Williams, 2008, p. 8). In addition,

One of the most powerful protective factors for youth is a caring, supportive relationship with an adult. Trustful relationships with artists offer youth opportunities to enliven hopes and dreams through art and to communicate their fears, problems, and frustrations. CR processes help complex and challenging youth-adult relationships to succeed (Klink & Crawford, 1998, p. 1).

Teri Williams (2011) explains that "[f]or youth, there are often minimal constructive outlets for

expressing concerns regarding violence. Without channels for creative, constructive approaches to conflict issues, youth are often ill-equipped to respond to violence" (p. 11). Although the cycle of violence facing youth has been well documented, "youth often do not have adequate vehicles by which to respond to the violence they encounter. This disempowerment continues to fuel the cycle of conflict" (Williams, 2011, p. 19).

#### **Evaluation of Programs**

Evaluation "is natural for human beings. We do it all the time. We collect information, we process it, we give it meaning and a value and we act or react according to it" (Kloosterman, Giebel, & Senyuva, 2007, p. 7). Yet, the relationship between evaluation and peace education has at times been as tumultuous as the relationship between peace education's place within the hierarchical and power structure of traditional education. Some argue that if peace education enters the realm of general education, it will undoubtedly lose its unique status as fighting for social justice and become a part of the system of dominance and control (Burns, 1981; Galtung, 1985; Haavelsrud, 1976; Jares, 1999). Others argue that peace education must become a part of the common vernacular in order to make the greatest impact on the most people (Wintersteiner, 2015). Similarly, there are those who argue that evaluation in general and evaluation of peace education programs in particular have the potential to cause more harm than good because they argue that the very nature of evaluation ultimately negates the very value the program originally sought to overcome. However, if "transformative agency" inherent in peace education (Bajaj & Brantmeier, 2011, p. 221) remains the focal point, peace education programs and philosophy will maintain "its core and distinguishing features" (Brahm, 2006, p. 1).

Until recently, the evaluation of peace education programs has not received adequate attention or scholarly focus (Ashton, 2007; Nevo & Brem, 2002). When evaluation has occurred, it has often been inconsistent (Ashton, 2007) mostly because peace education operates in a multitude of varying contexts and settings with distinct goals and outcomes (Salomon, 2004). Thonon and Ospina (2015) explain that "few peace education initiatives take into account, while defining monitoring or evaluating, the context in which they are developed" (p. 243). Hence, "evaluation needs to assess how the context (the whole) determines a peace education project (the part), but also how a peace education project (the part), has an impact in its context (the whole)" (Thonon & Ospina, 2015, p. 244). The *impacts as well as the specific goals/purposes* of peace education appear to be significant in the assessment of peace education programs; thus, impacts and goal/purposes may be worthwhile to investigate. The current study focuses directly on assessment with these elements.

Antibullying program creators and practitioners, like peace education program creators must be cognizant of the fact that changes might take years (Harris, 2003 – presentation at American Education Research Association Conference) and that by their very nature, these programs are often unpredictable and dynamic (Stave, 2011). Therefore, program creators and organizations must define their "own evaluation practice and tools, respond to external demands, and be prepared to engage in constructive in-depth dialogue about various visions of success" (Felice, Karako, & Wisler, 2015, p. xix).

It appears from the above survey of research that a one size fits all approach is counterintuitive in peace education; therefore, the current authors argue a successful peace education program should not be evaluated by the same yardstick, but rather by purposeful forms of assessments that aim to investigate outcomes that are relevant and meaningful. The current authors take the approach that peace education represents a form of education and in the context of education, the outcome and assessment of effectiveness has widely and popularly relied on learning outcomes (Kearney & Beatty, 2004). In this vein, the established focus on learning outcomes as a means to evaluate the effectiveness of a course or teacher presents a compelling framework for examining the effectiveness of a peace education program and assessing the perceptions of the people who deliver it, such as the mentors in this study.

## **Research Questions**

This study addresses peace education learning and is guided by the main overarching purpose of determining the effectiveness of the READING PEACE PALS peace education program through the following research questions: RQ1: Do youth perceive affective, cognitive, and behavioral learning in relation to this peace education program? RQ2: Do students perceive impact in relation to their learning in this peace education program? RQ3: Are youth and mentor perceptions of impact significant? RQ4: Will the effectiveness of the READING PEACE PALS program be established in this study?

## Methodology

The purpose of this study was to determine if the READING PEACE PALS program would enhance children's perceptions of affective, cognitive, and behavioral learning of literacy, as well as peace education (understood here as teaching them positive conflict resolution skills, and perceived impact on society). This program was created and designed by the first author with funding from a grant intended to address some of the most serious problems being faced by those in the community with the main purpose to improve the quality of life of community members.

#### Conceptualization of learning outcomes

Affective learning

Bloom (1956) classified affective and cognitive learning as two areas in his original classification of learning, where affective learning denotes the positive emotions that result when learning occurs. The most frequently used measure of affective learning was originated by Andersen (1979) and later modified by Kearney, Plax, and Wendt-Wasco (1985), and has been confirmed and validated in repeated studies (Rubin, Palmgreen, & Sypher, 2004). We altered this questionnaire to squarely address youth and mentor perceptions of the READING PEACE PALS program instead of a generic course.

Five questions were given to students and four to mentors to measure their response to affective learning. Students were instructed to respond to the following scales in terms of the READING PEACE PALS program they had just completed. Questions included the following: 1) The behaviors recommended by my mentor were? 2) The topic/content/subject matter read by my

mentor was? 3) The training I received by my mentor was? 4) The skills learned by my mentor were? 5) My mentor was? Mentors were asked to what extent they perceived affective learning for youth in the peace program with questions such as the following: 1) The behaviors stressed in the program for the student have been ... for his/her life? 2) The topic/content/subject matter stressed in the program for the student has been ... for his/her life? 3) The training stressed in the program for the student has been ... for his/her life? 4) The skills in the program for the student have been ... for his/her life? Both youth and mentor questionnaires utilized a seven-point Likert-type scale with the student version response scale using bad-to-good and the mentor questionnaire as worthless-to-valuable.

## Cognitive learning

The process and the amount of knowledge gained is cognitive learning. While cognitive learning assessments have been less consistent, a widely-accepted measure consists of student self-reports regarding perceptions of their own learning (Kelley & Gorham, 1988; Richmond, McCroskey, Kearney, & Plax, 1987; Rubin, Palmgreen, & Sypher, 2004). Based on the general consensus that cognitive learning can be captured through self-reports of student learning, survey questions were created and constructed that invited youth to self-report their own cognitive learning after having participated in the READING PEACE PALS program. Mentors were asked to share their perceptions of youth cognitive learning by rating the youth they mentored.

Seven questions were given to students and three to mentors to measure perceptions of cognitive learning. A few examples for the student survey are as follows: 1) How much did you learn about effective behaviors from your reading peace pal? 2) How much did you learn that you liked from your reading peace pal? 3) How much did you learn about how to read from your reading peace pal? Mentors questions consisted of questions such as: 1) How much do you perceive that the student learned from you as a reading peace pal? 2) How much do you perceive that the student learned about how to read from you? 3) How much do you perceive that the student learned about peace and conflict from you? Based on a seven-point Likert-type scale, the student version was labeled as nothing-to-everything and the mentor questionnaire as worthless-to-valuable.

#### Behavioral learning

Skinner (1953) popularized behavioral learning and discussed how learning can impact behavior. Behavioral learning has often been measured by looking at the degree to which students take another course with the same teacher or if they take similar courses, and if students conform with the behaviors addressed in the class and by the instructor (Kelley & Gorham, 1988; McCroskey et al., 1996). This study utilized a Likert-scale survey based on this conceptualization of behavioral learning.

Four questions were provided to both the students and mentors to measure their response to behavioral learning. To measure behavioral learning, students responded to the following prompts:

1) I will engage in behaviors recommended by my reading peace pal in my life. 2) I will apply the topic/content/subject matter recommended by my reading peace pal. 3) I will use the training I

received in my life. 4) I will use the skills recommended by my reading peace pal in my life. Mentors also responded to the following prompts to assess their perceptions of youth behavioral learning: 1) I perceive that the student will engage in the behaviors recommended by me as a reading peace pal in his/her life. 2) I perceive that the student will use the training she/he received by me as a reading peace pal in his/her life. 3) I perceive that the student will use the skills that I recommended as a reading peace pal in his/her life. Responses ranged from 1 to 7 with seven representing the highest score and 1 the lowest score.

All the Likert-scale surveys utilized in this study were designed and developed by integrating the Kirkpatrick (2016) model of training evaluation to determine effectiveness. Three constructs of learning and impact/results are illustrated in Table 1. We assessed youth and mentor perceptions of the READING PEACE PALS program based on the Kirkpatrick (2016) model.

## Effectiveness conceptualized in term of learning outcomes

Kirkpatrick and Kirkpatrick (2016) define effective training as "well-received training that provides relevant knowledge and skills to the participants and the confidence to apply them ..." (p. 5). In the learning environment, learning has popularly been connected and associated as an outcome to effectiveness (Gibbons, McConkie, Seo, & Wiley, 2009; Honebein & Honebein, 2015). However, learning outcomes are often caught up in the Instructional Design Iron Triangle (Honebein & Honebein, 2015) of effectiveness, efficiency, and appeal, where effectiveness measures student achievement, efficiency measures the cost and/or student time, and appeal measures continuous student participation (Reigeluth, 1983). A successful instructional method "is defined as the achievement of learning goals and instructional outcomes (effectiveness, efficiency, and appeal)" (Honebein & Honebein, 2015, p. 940).

In addition, Thweatt and Wrench (2015) argue that "affectively learned content should impact multiple aspects of an individual's life, over time, and thus must be measured in these terms" (p. 499). Additionally, Housley, Gaffney, and Dannels (2015) argue that affective and cognitive learning should not be viewed as separate constructs but should be viewed in tandem. They argue that "sophisticated and thoughtful attention to affective learning could [...] teach students how to recognize, be aware of, respond to, value and enact with the world around them" (p. 501). Moreover, Mottet (2015) states that "cognitive and affective learning are so closely connected and interdependent that separating them is an artificial bifurcation that is no longer theoretically valid or empirically supported [...] researchers today strongly suggest that cognition and emotion are 'two sides of the same coin'" (p. 508). Furthermore, Immordino-Yang and Damasio (2015) explain that "knowledge and reasoning divorced from emotions and learning lack meaning and motivation and are of little use in the real world. Simply having the knowledge does not imply that a student will be able to use it advantageously outside of school (p. 5). Mottet (2015) concludes by arguing that "new measures of learning should capture cognitive and emotional processes involved in learning as well as how they interact to impact and are impacted by learning" (p. 509). Lane (2015) argues that

We have the opportunity to triangulate research methods to test and refine instructional

message theories that explain and ultimately predict student transformational learning related to each of the three domains of learning . . . Moreover, if we continue to incorporate advanced quantitative statistical modeling techniques (i.e., hierarchical linear modeling and structural equation modeling) that use nested designs to test our instructional theories, we will be more confident in our results as we reduce random error as well as violations associated with assumptions of independence that frequently occur when we aggregate data across multiple instructors, types of courses, and class times. (p. 514)

Therefore, the three forms of learning and impact/results viewed collectively will determine the effectiveness of a program. This study seeks to uncover if the READING PEACE PALS program increases the perceptions of affective, behavioral, and cognitive learning of literacy for youth and if there are positive impacts.

## Reading Peace Pals Mentorship Program

In this mentorship peace education program, mentors paired with one or two children to work on art projects and read a peace-themed book. The art comprised drawings and creating lyrics as creative forms of expression for sight and sound respectively. First, youth were given a choice to draw art or develop lyrics. In the Peace Art activity, youth were asked to contemplate different perspectives of peace and then draw what peace looks like to them. Upon completion of the artwork, mentors asked them about the meaning and importance of their art. Alternatively, some youth chose to compose Peace Lyrics. Children who selected this activity developed song lyrics to address how they would prevent or stop youth violence, or included lyrics to a song about a past bullying incident they witnessed and how they would have resolved the situation.

After integrating peace into the arts, youth and mentors discussed the meaning of their art, how they could apply their creation of art into their lives, and their feelings about peace in the schoolyard, at home, in their communities, and/or in the world. In the last stage of the program, mentors paired with children and each mentor listened to a youth read a book that focused on peace education. All books were pre-selected by the researchers as age appropriate and focused on peace, anti-bullying, and conflict resolution. Mentors assisted youth in reading the book to aid their literacy and concluded by discussing the main contributions of the books. Mentors also asked youth what they could do to make their lives more peaceful and how they could promote peace around them. Following the completion of the Peace Pal Mentorship Program, all mentors and children received Likert surveys to evaluate student learning and outcomes and the effectiveness of the program.

#### **Participants**

Sixty-five adult mentors and 110 children from Boys and Girls Clubs participated in the program and were asked to complete the questionnaires. Fifty-six mentors and 95 children returned completed questionnaires. Mentors were recruited through e-mail and invitation throughout the community, and students were recruited through the director of the Boys and Girls Club. All participants filled out consent forms, and minors were required to secure parental consent prior to the start of the study. Participant demographics are displayed in Table 2.

#### Model

The analysis approach employed structural equation modeling. Structural equation modeling (SEM) is a more powerful alternative to multiple regressions (Arminger, Clogg, & Sober, 1995). Advantages of SEM compared to multiple regression include more flexible assumptions (particularly allowing interpretation even in the face of multicollinearity), use of multiple indicators per latent variable, the opportunity of testing models overall rather than coefficients individually, and the ability to test models with multiple dependent variables (Bollen, 1989).

#### **Model Assumptions**

Sample Size and Power

SEM is based on covariances that are less stable with small sample sizes. Based on the work of Bentley and Chow (1987), the ratio of five observations to one free parameter is needed. *Multivariate Normality* 

Multivariate normality was tested using Mardia's coefficient. Mardia's coefficient (P < 0.05) indicated non-normal multivariate data. We treated our data as continuous because response scales varied between seven and nine choices; nevertheless, it is common to have a departure from normality when treating ordinal scales as continuous (Hutchinson & Olmos, 1998). Therefore, we used robust standard errors using the method developed by Satorra and Bentler (1988) in our statistical model.

## Structural Model Steps

Model Specification

First, the model is specified to describe which relationships are hypothesized to exist or not to exist among observed and latent variables.

## Model Identification

SEM's goal is to find the most parsimonious summary of the interrelationships among variables that accurately reflects the associations observed in the data. Both the structural and measurement models are described in this step.

#### Estimation

After specifying the model, determining that the model is identified is the next goal. Collecting data from a sufficiently large sample of participants and addressing any problems with the data, the researchers were at the point of estimating the model.

#### Model Fit and Interpretation

Once estimated, the model's fit to the data must be evaluated. The objective is to determine whether the associations among measured and latent variables in the researchers' estimated model adequately reflect the observed associations in the data. For the students, the SEM modeled the latent variables affective, cognitive, and behavioral, along with the demographic measures age, grade level, gender, and race, on the dependent variable "Do you think your learning from the

Reading Peace Pal will impact positive results in your community, society, or world?" For the mentors the SEM used latent variables affective, cognitive, and behavioral, along with the demographic measures age, job, gender and race, on the dependent variable "Do you think your learning from the Reading Peace Pal will impact positive results in your community, society, or world?" The dependent variable was measured on a seven-point scale with higher scores indicating a more positive response.

#### Additional Analysis

Descriptive statistics were calculated for each study dimension. Multivariate normality was examined and the demographic variables were included as the following groups: gender, grade level, race, mentor gender, mentor race, and mentor education. The statistical analysis was conducted using R 3.2.2 and LAVAAN. Statistical significance was found at p < 0.05, and 95% confidence intervals were presented for measures of effect size.

#### Results, Data Findings, Analysis, Discussion

The average age of the children was  $7.5 (\pm 0.75)$ , the majority of the students were in the 1st or 2nd grade (69%), there were slightly more boys than girls in the sample (53% to 47%, respectively), and most of the students in the sample identified as African American (75%). The average mentor's age was  $36 (\pm 12.10)$ , 32% of the mentors identified as educators, 87% were female, and 34% were white. Demographics are presented in Table 2. Descriptive results are presented in Table 3.

#### Student Responses

A total of 95 students returned complete surveys. Using Maria's multivariate test, evidence was found that indicated the data did not conform to the normality assumption, chi-square = 6368, p < 0.001. Therefore, the structural equation was modeled using robust standard errors with the Satorra-Bentler adjustment.

The reliability for each construct was calculated using Cronbach's alpha and omega reliability. In addition, the amount of variance extracted for each construct was calculated and reported. Coefficient omega may be a more appropriate index of the extent to which all of the items in a test measure the same latent variable. Both measures of reliability were within an acceptable range (Table 4). The average variance explained for the three constructs ranged from 43% for the cognitive subscale to 57% for the behavioral.

The final structural equation model was statistically significant, and all tests indicate a very stable model: (1)  $\chi^2$  (95) =196.33, p =0.165; (2) CFI = 0.913; (3) TLI = 0.901; (4) RMSEA = 0.033 [95% CI:0.000 to 0.053]. Results are presented in Table 5.

Students responded positively to all items on the survey (Table 5). This indicates that they rated the peace education program favorably. Nevertheless, the final SEM model indicates that adjusting for the covariates age, grade level, gender and race, the behavior measure is the only variable that significantly predicts the Reading Peace Pal program (Table 5) ( $R^2 = 0.36$ , P < 0.01). Interpreting

the standardized parameter estimates indicates that a one-unit change in behavioral score increases the likelihood that students believe the Reading Peace Pal will impact positive results in their community, society, or world by 0.45 of a standard deviation.

#### **Mentor Responses**

A total of 56 mentors returned complete surveys. Using Maria's multivariate test, evidence was found that indicated the data did not conform to the normality assumption, chi-square = 1085, p < 0.001. Therefore, the structural equation was modeled using robust standard errors with the Satorra-Bentler adjustment.

The reliability for each construct was calculated using Cronbach's alpha and Omega reliability. In addition, the amount of variance extracted for each construct was calculated and reported. The reliability estimates were acceptable for the cognitive and behavioral constructs, but marginal for the affective measure. The average variance explained for the three constructs was good, as it ranged from 42% for the cognitive subscale to 75% for the behavioral.

The final structural equation model was statistically significant and all tests indicate a very stable model: (1)  $\chi^2$  (55) = 97.3, p = 0.359; (2) CFI = 0.986; (3) TLI = 0.983; (4) RMSEA = 0.029 [95% CI:0.000 to 0.075]. Results are presented in Table 5.

Mentors also responded positively to all items on the survey (Table 5). This indicates that they were generally pleased with the program. The final SEM model indicates that adjusting for the covariates age, job, gender and race, the cognitive measure and race significantly predict the impact of the Reading Peace Pal program (Table 5) ( $R^2 = 0.51$ , P < 0.01).

Interpreting the standardized parameter estimates indicates for every one unit increase in cognitive score, the likelihood that mentors believe the Reading Peace Pal will impact positive results in their community, society, or world will increase by 0.48 of a standard deviation. Furthermore, African Americans believed that the results would have less of an impact in their community, society, or world than other racial groups by almost one-half of a standard deviation.

#### **Discussion**

Youth and mentors rated the READING PEACE PALS program favorably, yet the final SEM model demonstrates that the behavioral learning component was the most significant as evaluated by youth. In other words, the program had the largest impact on addressing youth-perceived behavioral learning. The findings of this study supported that youth are not just passive actors in their worlds, but they perceive that they can affect change; thus, equipping youth with the skills to enable them to be agents of positive change may very well be fundamental to creating a more peaceful society. Therefore, it is imperative that youth are given the tools and the outlets to "comprehend the problems they face, the reasons why they should invest themselves as agents of change, and a willingness to move forward against the tide to construct practical, sustainable systems for peace" (Williams, 2011, p. 57).

Mentors perceived that the most valuable learning construct was the cognitive measure. In other words, the more knowledge youth gained, the more mentors perceived that the program will

positively impact communities and societies. Interestingly, though all racial groups viewed the program favorably, African American mentors felt the program would have less of an impact than did other racial groups. Without further follow up with these mentors, it is difficult to ascertain why they held this view. However, we must be wary of overgeneralizing this finding and be cognizant that this is only one variable and that all groups perceived the program would have an impact.

The READING PEACE PALS program evaluation clearly demonstrated that both youth and mentors were satisfied with the program and that youth were positively impacted by the READING PEACE PALS program. Therefore, this study clearly demonstrates the effectiveness of the peace education program in relation to Kirkpatrick and Kirkpatrick's (2016) framework for evaluating a training program. This research adds to the growing body of literature on peace education effectiveness as well as the growing body of evidence in research that it is powerful to infuse the arts, literacy, and mentorship within peace education programs to enhance their effectiveness. In the current study, the effectiveness of the program was evidenced in the positive learning outcomes (affective, cognitive, and behavioral) As well as participants' favorable responses as to the perceived benefits of the program.

## Strengths and Limitations of the Study

The strength of the current study is that it points to a positive relationship in peace education with pervasive learning outcomes and impacts/results for society along with a powerful framework inherent in the Kirkpatrick and Kirkpatrick (2006, 2016) model of training evaluation to analyze the effectiveness of the peace training program. If youths' along with their mentors' perceptions are accurate, then it appears that the findings in this study may very well provide evidence in support of teaching youth the following: 1) learning alternatives to violence at a young age through the acquisition of conflict resolution skills and techniques; 2) taking personal ownership in promoting peace by allowing youth to have a voice to express peace themselves; 3) partnering with mentors who serve as good role models to accompany them on their journey to learn about peace with the added value of learning other vital life skills such as literacy; and 4) becoming positive agents of change in their own lives and within their families, schools, communities, and world. Since the findings pointed to youths' strong perceptions that peace can grow and spread throughout society and create a more peaceful world, it seems to be even more essential that the role of modern society must be "to educate people to have high moral standings, which will benefit their personal lives and all of society. The end of bullying requires people with great senses of responsibility who understand themselves, others and the world in which they live" (Majcherova, Hadjuova, & Andreikovic, 2014, p. 465).

A limitation of the study could be the number of participants in the study. Ideally it would be beneficial to have more youth populations from various states and countries; however, the goal of this preliminary program was to find evidence that it supported positive finding to further roll out this peace program on a national and international level in the future.

#### **Future Research**

This research demonstrates the effectiveness of the READING PEACE PALS program regarding the three constructs of learning as well as the impact/results of the program to add to the growing body of research regarding program effectiveness in peace education programs. In addition, this study adds to the growing body of research that incorporates the use of the arts in peace education and conflict resolution.

Future research could continue to evaluate the relationship between affective, cognitive, and behavioral learning as addressed above. In addition, future research is needed to evaluate the effectiveness of peace education programs whose effectiveness is often cloudy due to the dynamic nature and context in which such programs occur as well as the diversity in programs and participants. Moreover, future research could replicate this study with a larger number of participants across several schools or clubs that address marginalized students as well as contexts in which violence is rampant. Furthermore, future research could look at what relationships exist between perceptions of peace education programs and race. Future research could also compare the positive perceptions of peace education programs that incorporate a mentorship component with those that do not to see if mentorship improves peace education in general. Finally, a longitudinal study that tests the true impact of the program would go a long way toward demonstrating the effectiveness of this and similar peace education programs.

#### Conclusion

This research provided strong evidence that peace education can be significantly impactful when youth learn alternatives to bullying and violence by being empowered to express their conceptualizations of peace with strong mentorship from their communities. This study has profound implications for practice and research in conflict resolution as the findings in this study supported the effectiveness of this peace education program based on the positive impacts in the form of various learning outcomes. Youth along with their mentors perceived that youth can successfully tackle bullying and violence, and perceived that they can be active peace makers and agents of change in their societies. This study illustrates that peace can grow with youth, and it may permeate throughout society and aid in creating a more peaceful world.

#### References

- Andersen, J. (1979). Teacher immediacy as a predictor of teaching effectiveness. In Nimmo, D. (ed.), *Communications Yearbook 3* (543-559). New Brunswick, NJ: International Communications Association.
- Arminger, G., Clogg, C. C., & Sober, M. E. (Eds.). (1995). *Handbook of statistical modeling for the social and behavioral sciences*. New York, NY: Plenum Press.
- Ashton, C. V. (2007). Using theory of change to enhance peace education evaluation. *Conflict Resolution Quarterly*, 25(1), 39-53.
- Bajaj, M., & Brantmeier, E. J. (Eds). (2011). The politics, praxis, and possibilities of critical peace education. *Journal of Peace Education*, 8(3), 221-224.
- Barkhordari, M., Nasrabadi, N. B., Heidari, M. H., & Neyestani, M. R. (2016). The importance of art-based curriculum in peace education. *Review of European Studies*, 8(2), 220-231.

Bentley, P. M., & Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods and Research*, 16, 78-117.

- Bloom, B. (1956). *Taxonomy of educational objectives. Handbook I: Cognitive domain.* New York, NY: David McKay.
- Bollen, K. A. (1989). *Structural equations with latent variable*. New York, NY: Wiley. Brahm, E. (2006). Peace education. *Beyond Intractability*. Retrieved from <a href="http://www.beyondintractability.org/essay/peace-education">http://www.beyondintractability.org/essay/peace-education</a>
- Burns, R. (1981). Can we educate for disarmament in the present world order? In Haavelsrud, M. (Ed.) *Approaching disarmament education*, (pp. 28-51). Surrey, England: Westbury House.
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- deLara, E. W. (2012). Why adolescents don't disclose incidents of bullying and harassment. *Journal of School Violence*, 11(4), 288-305.
- Farahat, F., Goesel, C., & Georgakopoulos, A. (2017). The intersection of improv and mediation. In A. Georgakopoulos (Ed.), *The mediation handbook: Research, theory, and practice* (pp. 37-47). New York, NY: Routledge.
- Felice, C. D., Karako, A., & Wisler, A. (Eds.). (2015). *Peace education evaluation: Learning from experience and exploring prospects*. Charlotte, NC: Information Age Publishing.
- Freire, P. (2000). Pedagogy of the oppressed. New York, NY: Bloomsbury.
- Galtung, J. (1985). Sobre la paz. Barcelona, Spain: Fontamara.
- Gibbons, A., McConkie, M., Seo, K., & Wiley, D. (2009). Theory for the design of instructional simulations and microworlds. In *Instructional-design theories and models*, *Volume III (pp. 167-197)*. New York, NY: Routledge Publishing.
- Georgakopoulos, A., Duckworth, C., Redfering, K. J., and Silverman V. (2017) Supporting literacy and peace education with youth: A community engagement study. *Journal of Peace Studies*, 54(4), 24-40.
- Georgakopoulos, A., Goessel, C., & Redfering, K. (2017). Peace education and youth: A scholarship of engagement study infusing arts and mentorship. In S. Byrne & T. Maytok (Eds.), *Routledge Companion to Peace and Conflict Studies*. New York, NY: Routledge Publishing.
- Gladson, J. (2011). *Peer mentoring reduces bullying in Campbell County schools*. University of Wyoming Extension Impacts 2011. Retrieved from <a href="https://www.uwyo.edu/uwe/pubs/impact-statements/2011/impacts-2011-p10.pdf">https://www.uwyo.edu/uwe/pubs/impact-statements/2011/impacts-2011-p10.pdf</a>
- Haavelsrud, M. (1976). The hidden connection. In J. Xesus (Ed.), Educacion para la paz. Su teoria y su practica. Madrid, Spain: Popular.
- Haber, J. D., & Daley, L. A. (2011). Cyberbullying protection plan. *Camping Magazine*, 84(2), 32-37.
- Harris, I. (1988). Peace education. Jefferson, NC: McFarland and Company.
- Harris, I. (2003). *Peace education evaluation*. Paper presented at American Education Research Association Conference (AERA), Chicago, IL.
- Harris, I. (2008). History of peace education. In M. Bajaj (Ed.), *Encyclopedia of peace education* (pp. 15-24). Charlotte, NC: Information Age Publishing.

Harris, I., & Morrison, M. L. (2003). *Peace education* (12th Edition). Jefferson, NC: McFarland. Hinduja, S., & Patchin, J. W. (2011). Cyberbullying: A review of the legal issues facing

- educators. Preventing School Failure: Alternative Education for Children and Youth, 55(2), 71-78.
- Honebein, P. C., & Honebein, C. H. (2015). Effectiveness, efficiency, and appeal: Pick any two? The influence of learning domains and learning outcomes on designer judgments of useful instructional methods. *Education, Technology, Research, and Development, 63*(6), 937-955.
- Housley Gaffney, A. L. & Dannels, D. P. (2015). Reclaiming affective learning. *Communication Education*, 64(4), 499-502.
- Hutchinson, S. R., & Olmos, A. (1998). Behavior of descriptive fit indexes in confirmatory factor analysis using ordered categorical data. *Structural Equation Modeling: A Multidisciplinary Journal*, *5*, 344-364.
- Immordino-Yang, M. H., & Damasio, A. R. (2007). We feel therefore we learn: The relevance of affective and social neuroscience to education. *Mind, Brain, and Education, 1*(1), 3-10.
- Jares, X. (1999). Educacion para la paz. Su teoria y su practica. Madrid, Spain: Popular.
- Kerney, P., & Beatty, M. J. (2004). Measures of instructional communication. In R. Rubin, P. Palmgreen, & H. Sypher (Eds.), *Communication research measures: A sourcebook* (pp. 7-20). New York, NY: Routledge.
- Kearney, P., Plax, T., & Wendt-Wasco, N. (1985). Teacher immediacy for affective learning in divergent classes. *Communication Quarterly*, *33*, 61-74.
- Kelley, D. H., & Gorham, J. (1988). Effects of immediacy on recall of information. *Communication Education*, *37*(3), 198-207.
- Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating training programs: The four levels* (3rd ed.). San Francisco, CA: Berrett-Kohler Publishers.
- Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's four levels of training evaluation*. Alexandria, VA: ATD Press.
- Klink, M., & Crawford, D. (1998). Fact sheet: Conflict resolution and the arts. *Office of Juvenile Justice and Delinquency Prevention*, 80.
- Kloosterman, P., Giebel, K., & Senyuva, O. (2007). *Educational evaluation in youth field* (T-Kit 10). Strasbourg, France: Council of Europe. Retrieved from <a href="http://pjp-eu.coe.int/documents/1017981/1667909/T-Kit\_10.pdf/8d85c6ac-05e5-4715-8f43-0f9c3018772a">http://pjp-eu.coe.int/documents/1017981/1667909/T-Kit\_10.pdf/8d85c6ac-05e5-4715-8f43-0f9c3018772a</a>
- Lane, D. R. (2015). The instructional communication affective learning paradox. *Communication Education*, 64(4), 510-515.
- Majcherova, K., Hadjuova, Z., & Andrejkovic, M. (2014). The role of the school in handling the problem of bullying. *Aggression and Violent Behavior*, 19, 463-465.
- Marie, R., & Williams, C. (2008). The status and praxis of arts education and juvenile offenders in correctional facilities in the United States. *Correctional Education*, *59*, 107-126.
- McCroskey, J. C., Fayer, J. M., Richmond, V. P., Sallinen, A., & Barrachough, R. A. (1996). A multicultural examination of the relationship between nonverbal immediacy and affective learning. *Communication Quarterly*, 44(3), 297-307.

Mentoring and Befriending Foundation. (2011). Peer mentoring in schools: A review of the evidence base of the benefits of peer mentoring in schools including findings from the MBF outcomes measurement programme. Retrieved from <a href="http://www.mandbf.org/wpcontent/uploads/2011/02/Peer\_Mentoring\_in\_Schools.pdf">http://www.mandbf.org/wpcontent/uploads/2011/02/Peer\_Mentoring\_in\_Schools.pdf</a>

- Mottet, T. P. (2015). Affective learning from a cognitive neuroscientific perspective. *Communication Education*, 64(4), 508-510.
- Mustacchi, J. (2009). R U Safe? Educational Leadership, 66(6), 78-82.
- National Center for Education Statistics. (2016). Student reports of bullying: Results from the 2015 school crime supplement to the National Crime Victimization Survey. U.S. Department of Education. Retrieved from https://nces.ed.gov/pubs2017/2017015.pdf
- National Voices for Equality, Education, and Enlightenment (NVEEE). (2016). *National Voice for Equality, Education, and Enlightenment*. Retrieved from <a href="http://www.nveee.org/bullying-statistics/">http://www.nveee.org/bullying-statistics/</a>
- Nevo, B., & Brem, I. (2002). Peer mentoring in schools: A review of the evidence base of the benefits of peer mentoring in schools including findings from the MBF Outcomes Measurement Programme. Retrieved from <a href="http://www.mandbf.org/wp-content/uploads/2011/02/Peer\_Mentoring\_in\_Schools.pdf">http://www.mandbf.org/wp-content/uploads/2011/02/Peer\_Mentoring\_in\_Schools.pdf</a>
- Oberski, D. (2014). Lavaan.survey: An R package for complex survey analysis of structural equation models. *Journal of Statistical Software*, *57*(1), 1-27. Retrieved from <a href="http://www.jstatsoft.org/v57/i01/">http://www.jstatsoft.org/v57/i01/</a>
- Perlus, J. G., Brooks-Russell, A., Wang, J., & Iannotti, R. J. (2014). Trends in bullying, physical fighting, and weapon carrying among 6th- through 10th-grade students from 1998 to 2010: Findings from a national study. *American Journal of Public Health*, 104(6), 1100-1106.
- R Core Team. (2015). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. Retrieved from <a href="http://www.R-project.org/">http://www.R-project.org/</a>
- Reigeluth, C. M. (1983). Instructional design: What is it and why is it? In C. M. Reigeluth (Ed.), *Instructional-design theories and models: An overview of their current status* (pp. 3–36). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Richmond, V. P., McCroskey, J. C., Kearney, P., & Plax, T. G. (1987). Power in the classroom VII: Linking behavior alternation techniques to cognitive learning. *Communication Education*, 36(1), 1-12.
- Rubin, R., Palmgreen, P., & Sypher, H. (2004). *Communication research measures: A sourcebook.* New York, NY: Routledge.
- Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior*, 15(2), 112-120.
- Salomon, G. (2004). Does peace education make a difference in the context of intractable conflict? *Journal of Peace Psychology*, 10(3), 257-274.
- Salomon, G., & Nevo, B. (Eds.). (2002). *Peace education: The concept, principles, and practices around the world.* Mahwah, NJ: Lawrence Erlbaum Associates.
- Satorra, A., & Bentler, P. M. (1988). Scaling corrections for chi-square statistics in covariance structure analysis. 1988 Proceedings of the Business and Economic Statistics Section of the American Statistical Association, 308-313.

- Skinner, B. F. (1953). Science and human behavior. New York, NY: Macmillan.
- Stave, S. E. (2011). *Measuring peacebuilding: Challenges, tools, actions*. Norway: The Norwegian Peacebuilding Resource Centre (NOREF). Retrieved from <a href="http://www.alnap.org/resource/22698">http://www.alnap.org/resource/22698</a>
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, 26(3), 277-287.
- Thonon, C. B., & Ospina, J. (2015). Assessing peace education at the national level: Challenges and possibilities. In C. D. Felice, A. Karako, & A. Wisler (Eds.), *Peace education evaluation: Learning from experience and exploring prospects* (pp. 239-256). Charlotte, NC: Information Age Publishing.
- Thweatt, K. S., & Wrench, J. S. (2015). Affective learning: Evolving from values and planned behaviors to internalization and pervasive behavioral change. *Communication Education*, 64(4), 497-499.
- Ttofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011). Do the victims of school bullies tend to become depressed later in life? A systematic review and meta-analysis of longitudinal studies. *Journal of Aggression, Conflict and Peace Research*, 3(2), 63–73.
- U.S. Department of Education. (2015). New data show a decline in school-based bullying. U.S. Department of Education. Retrieved from <a href="https://www.ed.gov/news/press-releases/new-data-show-decline-school-based-bullying">https://www.ed.gov/news/press-releases/new-data-show-decline-school-based-bullying</a>
- Williams, T. (2011). *Violence prevention and the arts: An autoethnographic case study for a youth-based community project* (Doctoral dissertation). Nova Southeastern University, Fort Lauderdale, FL.
- Wintersteiner, W. (2015). Towards a more complex evaluation of peace education: Peace education, the evaluation of business, and the need for empowering evaluation. In C. D. Felice, A. Karako, & A. Wisler (Eds.), *Peace education evaluation: Learning from experience exploring prospects* (pp. 19-38). Charlotte, NC: Information Age Publishing.

Table 1
Kirkpatrick and Kirkpatrick's Model Applied to the Current Study

Step	Question
Step 1: Reaction	How well did the youth like the learning process? (Affective
Assessment	Learning)
Step 2: Learning	What did youth learn? (Cognitive Learning)
Assessment	
Step 3: Behavior	What new skills resulted from the learning process for the youth?
Assessment	(Behavioral Learning)
Step 4: Results	What are the results/impact of the learning process for the youth?
Assessment	(Impact/Results of Learning)

Table 2\*
Participant Demographics

Participant Demograph Child Variable	Measure	Count (Percent)
Age	6 – 7 Years Old	42 (44.7%)
	8 – 9 Years Old	52 (55.3%)
Grade	Grades 1 - 2	65 (69.1%)
	Grades 3 - 4	29 (30.9%)
Sex	Male	49 (52.7%)
Sex	Female	44 (47.3%)
Race	African American	70 (75.3%)
	Other	23 (24.7%)
Mentor Variable	Measure	Count (Percent)
Occupation	Education	18 (32.1%)
	Mental Health	7 (12.5%)
	Social Science	6 (10.7%)
	Student	10 (17.9%)
	Other	15 (26.8%)
Sex	Male	7 (13%)
	Female	48 (87%)
Race	African American	18(27.7%)
	Hispanic	14(21.5%)
	White	19(29.2%)

Other		5(7.7%)
No Response	9(13.8%)	

<sup>\*</sup> *Note*. Not all participants chose to respond to every demographic question.

Table 3

Descriptive Statistics for Study Variables (Mean +/- SD)

		Grade		Sex		Race	
Student	Overall	1-2	3-4	Female	Male	AA	Other
Impact (N = 95)	6.54	6.45	6.72	6.39	6.65	6.57	6.51
	(1.12)	(1.29)	(0.59)	(1.38)	(0.83)	(1.31)	(1.07)
Affective $(N = 95)$	6.67	6.70	6.55	6.69	6.62	6.75	6.62
	(0.80)	(0.82)	(0.75)	(0.58)	(0.97)	(0.51)	(0.88)
Cognitive (N = 95)	6.34	6.37	6.26	6.22	6.42	6.43	6.29
	(0.98)	(0.90)	(1.16)	(1.15)	(0.81)	(0.58)	(1.09)
Behavioral (N = 94)	6.53	6.55	6.47	6.59	6.45	6.62	6.48
	(0.90)	(0.94)	(0.83)	(0.74)	(1.04)	(0.66)	(0.98)
		Occupation		Sex		Race	
Mentor	Overall	Education	Other	Female	Male	AA	Other
Impact (N = 56)	6.19	6.13	6.22	6.10	6.57	6.15	6.33
	(0.96)	(0.93)	(1.06)	(0.99)	(0.79)	(0.93)	(1.07)
Affective (N = 56)	6.35	6.03	6.47	6.22	7.00	6.34	6.40
	(0.86)	(1.06)	(0.74)	(0.90)	(0.10)	(1.02)	(0.83)

Cognitive (N = 56)	5.38	4.93	5.58	5.27	5.95	5.38	5.39
	(1.48)	(1.67)	(1.31)	(1.51)	(1.08)	(1.25)	(1.55)
Behavioral (N = 56)	5.94	5.81	6.03	5.89	6.43	5.97	5.85
	(1.18)	(1.21)	(1.10)	(1.17)	(0.75)	(1.40)	(1.13)

Table 4.

Constructs Reliability Measures

Student	Affective	Cognitive	Behavioral
Alpha	0.79	0.83	0.80
Omega	0.79	0.83	0.81
Variance Extracted	0.49	0.43	0.57
Mentor	Affective	Cognitive	Behavioral
Alpha	0.69	0.80	0.92
Omega	0.63	0.80	0.92
Variance Extracted	0.42	0.64	0.75

Table 5
Final SEM Model Parameter Estimates

Measure	Estimate	SE	Z-value	P(>  z )	Std.Dev.
Affect	-0.07	0.15	-0.46	0.65	-0.04
Cognitive	0.36	0.25	1.43	0.15	0.17
Behavioral	0.59	0.17	3.55	0.00	0.45
Age	0.15	0.13	1.16	0.25	0.15
Grade	0.09	0.23	0.39	0.70	0.09
Sex	0.16	0.17	0.96	0.34	0.16
Race	0.20	0.20	1.03	0.30	0.20

Measure	Estimate	SE	Z-value	P(> z )	Std.Dev.
Affect	-0.05	0.14	-0.37	0.71	-0.05
Cognitive	0.39	0.14	2.74	0.01	0.48
Behavioral	0.26	0.16	1.63	0.10	0.23
Age	0.01	0.01	1.47	0.14	0.01
Job	0.31	0.23	1.32	0.19	0.31
Sex	-0.03	0.31	-0.10	0.92	-0.03
Race	-0.47	0.21	-2.23	0.03	-0.47