

Professional Knowledge of Adverse Childhood Experiences

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Abstract

Adverse Childhood Experiences (ACEs) is a hot topic in education. Research exists to clearly identify the implications that ACEs have on adults in terms of physical and mental health. Less is known about the implications of ACEs while the person is still in childhood, and how effective early intervention is for treating those with ACEs. The researcher wanted to know what professionals that worked with children in different capacities know about ACEs and the impact that ACEs has on the children that they serve. Also, the researcher wanted to know if professionals that worked with children knew where to obtain further resources about ACEs. Participants in the study from the fields of education and social work completed a survey and data was compiled to answer specific research questions. It is the hope of the researcher that online training modules could be developed in order for professionals that work with children who have ACEs will have more access to resources.



Institutional Review Board Decision Tree

Based on your responses, you do not need approval from the IRB.

It looks like your study is exempt from IRB approval. **You should have your study approved by the highest person in the department or area overseeing the targeted participants.** For example, a campus-wide survey should be approved by the President, a student or faculty survey should be approved by the Academic Dean, and a survey specific to a certain major should be approved by the Area Chair.



[Refer to 45 CFR 46.101\(b\)\(5\)](#)

However, you should carefully review all procedures and questions to ensure that anonymity is protected especially in the case of institutional surveys where questions such as age, race and gender could be used to identify participants even if they are not asked for their names.

Return to Beginning

Activate Windows
Go to Settings to activate Windows.

Table of Contents

Abstract.....	2
IRB.....	3
Table of Contents.....	4

Chapter

1	Introduction.....	6
	Statement of the Problem.....	7
	Purpose of the Study.....	8
	Significance of Study.....	8
	Research Questions.....	8
	Limitations of the Study.....	9
	Definitions of Terms.....	9
	Overview of Study.....	10
2	Review of Literature.....	11
	What is ACE?.....	11
	Intervention strategies for students with ACE.....	12
	The implications of ACE for teachers.....	13
	The implications of ACE for students.....	14
	The impact of ACE on peer relationships.....	15
3	Methodology and Procedures.....	17
	Introduction.....	17
	Population.....	17
	Instrumentation.....	18
	Data Collection.....	18
	Research Questions.....	18
	Procedures.....	20

- 4 Data Analysis.....21**
 - Data Collection.....21**
 - Research Questions.....21**
 - Study Results.....23**
 - Summary.....27**

- 5 Findings, Recommendations, and Implications.....28**
 - Introduction.....28**
 - Summary of Findings.....28**
 - Interpretation of Findings.....29**
 - Limitations of the Study.....32**
 - Recommendations.....32**
 - Conclusions.....33**

- References.....34**

- Appendices.....38**
 - Appendix A.....39**

Chapter 1

Introduction

Adverse Childhood Experiences, or ACEs, is a study that was formulated in the late nineties to determine consistencies in experiences with adults who encountered negative experiences as a child such as exposure to familial drug use, violence, neglect and/or abandonment, etc. The ACEs questionnaire was originated by Dr. Vincent Felitti in 1985. This questionnaire contained questions about family dynamics such as whether one came from a traditional family dynamic where both parents were in the home, or were in a single parent household, or even raised by other family members (i.e. grandparents, aunts, uncles, siblings, etc.) (Albaeck, et al 2018). Some other aspects of the questionnaire dealt with whether one witnessed or was subjected to the use of alcohol and/or drug use in the home, and questions about physical and/or mental abuse as a child. There were approximately ten questions on the survey and for each yes answer one point was assigned. The groundbreaking study indicated that the higher the ACEs score, or points a person had, then the more likely that person was for repeating those negative patterns which in turn produced negative societal outcomes. Within the study, further research suggested that trauma experienced in childhood was more likely to beget trauma experienced into adulthood (Albaeck, et al 2018). This generational cycle of behavior has led to treatment for individuals such as physical and mental health counseling, detox programs for those effected by drug or alcohol related abuse, and support programs for those effected. These programs were implemented as interventions as opposed to relying solely on consequences for behaviors such as incarceration.

With regards to education the ACEs study brings a better understanding of the effects of ACEs which has led to improved teaching strategies for students as one way to provide intervention to individuals. This ACEs research has paved the way to better understand the effects of trauma and toxic stress in childhood and its impact on the development of the adult psyche. ACEs is currently a hot topic within the field of education as professionals seek to cognize the effects that ACEs has on childhood development and effective intervention strategies. Working in collaboration with professionals that work with children and are unfamiliar with ACEs is important to furthering the original research study in how to help both children and adults. Further study in this field with current socio-political circumstances, ideologies, pedagogical approaches is important to staying abreast to the latest research and formulating cohesive approaches to working with children and families with ACEs.

Statement of the Problem

Professionals in various disciplines that work with children undergo specialized training in their respective fields. Most of the research concerning ACEs has been conducted after one has entered adulthood and reflects on their experiences in childhood. Little is known about ACEs in childhood where research has proven for early interventions to be most effective. In order to provide appropriate strategies and intervention to help children in childhood experiencing adverse experiences, more must be known. Understanding about how much knowledge professionals across different disciplines that work with young children have about ACEs and how they access specific research and information is one way to address this lack of knowledge.

Purpose of the Study

The purpose of this study is to determine what a selection of our area professionals that work with children and families in different capacities in the educational and social work field know and understand about ACEs and how they access resources for more information.

Significance of Study

If it is discovered that professionals that work with children across different disciplines do not know what ACEs is or how to access informational resources for working with children and families who have ACEs, then comprehensive training modules can be developed to better understand ACEs. These professionals need to know how to alter their approach in working with children who have experienced ACEs. Implementing uniform training to reach different disciplines would allow for a holistic therapeutic approach to be accessed for those working with children and families on a regular basis.

Research Questions

RQ1: Is there a significant difference between the education levels of professionals that work with children in education and social work, and how knowledgeable they feel about ACEs?

RQ2: Is there a significant difference between professionals in the fields of education and social work and how knowledgeable they feel about ACEs due to their field?

RQ3: How knowledgeable about ACEs do professionals in education and social work feel, and would they be interested in more training in ACEs?

RQ4: Do professionals in education and social work feel confident that they fully understand what ACEs is and can find resources about ACEs?

RQ5: Do professionals in education and social work feel confident in finding resources for those affected by ACEs and would they care to know more about the effects of ACEs in their work?

RQ6: Do professionals in education and social work fully understand what ACEs means and believe that professionals that work with children are well trained in ACEs?

RQ7: Do area professionals in education and social work feel that ACEs impacts the children that they serve and would care to know more about the effects of ACEs in their work?

Limitations

It is important to note that there are a few limitations in this study. This study seeks to determine what professionals that work with children know about ACEs and how to access resources for more information. The researcher assumes that those that do not know about ACEs may want to know more, in which case they would want to work in collaboration with other professionals for better therapeutic approaches and will seek out those resources available. Factors outside of the researcher's control is not knowing the quality of interactions between families and professionals impacting their work with children and families.

Definition of Terms

Adverse: preventing success or development; harmful; unfavorable

Social work: work carried out by trained personnel with the aim of alleviating the conditions of those in need of help or welfare

Therapeutic: treatment of disease or disorder; a healing effect

Trauma: a deeply distressing or disturbing experience

Overview

This study encompasses five chapters. Chapter one offers an introduction to this research study. Chapter one also provides a statement of the problem, the purpose of the study, and its significance. Research questions are provided for review as well as limitations of the study, definitions of terms used, and an overview of the study. Chapter two includes a review of the literature related to this topic. Chapter three provides information about the methods and procedures used within this study. Chapter four presents the analysis of the data and chapter five examines the results of this study, implications, the conclusion, and the recommendations for future research regarding this topic.

Chapter 2

What is ACEs?

The acronym ACEs stands for Adverse Childhood Experiences and it originated from a study by Dr. Vincent Felitti that was developed in the late eighties. Dr. Felitti was studying weight gain in adults and observed that adults who lost weight rapidly tended to put it back on within a short period of time. He collected data on the physical causation for this behavior and with a slip of the tongue, accidentally asked a question of a test subject that led his research in another direction. Instead of asking a woman how old she was when she began gaining weight, Dr. Felitti asked a woman how much she weighed at a certain age which led to the woman opening up about a sexual assault when she was a child. Dr. Felitti's research veered towards finding commonalities in other people with similar experiences in order to explain some medical reason for the fluctuation of weight gain in adults. His research concluded that the weight gain was a direct result of ACEs (Albaeck, et al 2018).

The ACEs study that Dr. Felitti developed identified ten major adverse experiences that one may have experienced in childhood and the impact of those experiences on adulthood (Albaeck, et al 2018). Adverse experiences include exposure to familial drug use, violence, and physical and/or mental abuse. A correlation was discovered that the more adverse experiences one had, or the higher their ACEs score, the higher incidence of negative impact in adulthood (Anna et al, 2018) For example, in the study if one were exposed to drug abuse and/or violence in any way in childhood, there was a higher likelihood for that person to repeat those experiences

in adulthood. The literature about ACEs has consistently been linked to psychological distress as well as poor physical health in adulthood (Anna L, et al).

Numerous studies have identified the significant direct association between ACEs scores and later psychological, mental (including emotional), and physical distress in adulthood (Shin et al, 2018). Identifying ACEs as well as explaining the impact on society will help to further educate professionals across various disciplines that work with children. This includes but is not limited to the fields of education and social work. This deeper understanding of ACEs combined with information on brain research about resiliency to toxic stress will further help to identify research-based interventions and practices. Employing research-based and evidence-based interventions and practices across the various disciplines that work with young children will help to avoid negative adult outcomes thus resulting in a healthier society (Sciaraffa et al).

Intervention strategies for students with ACEs

Most of the research available about ACEs is retroactive, meaning that it is comprised mostly of adults reflecting on their past experiences as a child. More research is needed to better understand the effects of ACEs on children while still in childhood. In this research “childhood” refers to children of elementary school age and beyond. However, early intervention in reference to identifying ACEs and applying therapeutic practices could be accomplished as early as toddler and preschool age. Intervention strategies have been formulated with what is known at present. These strategies such as education during pregnancy can and should be implemented as early as and during prenatal care (Mercer, et al, 2018). Offering education and counseling for mothers-to-be that have ACEs can be one intervention explored to help bring awareness of the importance of breaking generational cycles of abuse. Offering support via counseling and coaching of life-skills is another way to foster healing for the mother and accountability in making better choices

for her unborn child. As the child approaches the age of making and maintaining friendships, other interventions are needed to foster positive relationships outside of the home influence.

In the *Journal of Youth and Adolescence* publication, intervention strategies concerning students and peer relationships was studied to determine the effect of only positive peer relationships for those overcoming exposure to trauma (Moses et al, 2017). Students with similar experiences are more likely to befriend a peer that understands them and what they have been through. Thus, cultivating positive peer relationships in a classroom or school setting is another way to increase accountability for positive behavior and academic outcomes. Children overcome setbacks to developmental progress and thrive with consistency and positive interactions (Steele et al, 2016). Teachers that understand this research can cultivate positive peer relationships as a classroom management strategy. Doing so they can provide their students with help resulting in decreased challenging behaviors and increased academic success. From my experience working with infants, toddlers and school age children, children experiencing any trauma or dysfunction in their early years show more resiliency in overcoming adverse experiences in early childhood than their adolescent counterparts. The earlier that ACEs is identified and addressed, the better.

Surveys completed on school absenteeism and students with ACEs scores show a correlation with negative outcomes. In order to adequately address ACE in youth, teachers and other professionals such as those in the fields of social work and medicine, should be well trained about ACEs and trauma-informed practices in order to improve school attendance, graduation rates and overall health (Stemple et al, 2017).

The implications of ACEs for teachers

Studies show that the implications for teachers with students who have ACEs directly impacts the quality of learning for students both in traditional face-to face classes and online formats (Johnson R, 2018). Teachers that have not been adequately trained in ACEs are less familiar with the social and emotional behavioral needs of this specific set of students. This lack of understanding of these types of students can be disruptive to the teacher's classroom management and ultimately affect the student and their peers in a negative way. Another implication for the teacher of a student with ACEs is the application of academics and the assessment of learning. A student that has experienced trauma may perceive information differently than typical students and will need additional supports in the classroom even if they do not have an Individualized Educational Plan or the equivalent.

Parents view parent-teacher and student-parent interactions as motivational, but that future research should look past quantity of interactions and address the quality of interactions in order to improve student outcomes (Borup J., 2013). For example, frequent contact with families is a positive strategy for not only maintaining but also for increasing family involvement in the school and improving academic learning. Confirming this ideology of positive family involvement better explains the importance of medical personnel that lack a full understanding of the implications of ACEs and the population that they serve (Wen et al 2017). The information in the above research contributes and facilitates conversations and possible informative training opportunities with families for a holistic therapeutic approach.

The implications of ACEs for students

In addition to academic performance and building relationships with family and peers, the implications of ACEs for students can be better explained at a neurological level. Studying behavior management strategies and individualized neuro-education such as students with acquired brain injury can be synthesized to achieve success with students with ACE (Asworth J., 2013). For example, children with acquired brain injury can have trouble developing independence, achieving academic potential and interacting positively with family, peers, and other adults. Implementing individualized strategies can intercede with behavior management and therapies in all environments including the classroom, home and commitments within the community. Thus, implementing consistent strategies can have a positive impact on the development of cognitive, communication and adaptive skills to name a few (Shin et al, 2018).

A recent trend in educational practices for classroom management and behavior modification is referred to as positive guidance strategies. Positive behavior guidance strategies are the standard in school discipline procedures in place of corporal punishment in order to manage childhood aggression which can be a side effect of ACEs. Students that have been the victim of physical and/or emotional and mental abuse do not respond well to further acts of aggression such as the authoritarian response of corporal punishment. To further decrease positive inclinations or opinions towards corporal punishment as in spanking, this article expands on other strategies (Burkhart et al 2018). One article, *Spanking and Adult Mental health Impairment; The Case for the Designation of Spanking as an Adverse Childhood Experience* asserts that spanking can be deemed as physical and emotional abuse. In this article corporal punishment, in regards to the ACEs questionnaire, was associated with increased odds of suicide attempts, moderate to heavy drinking, and the use of street drugs in adulthood (2017).

Researchers have found that children experiencing inconsistent home placement such as thru the child welfare system display symptoms of post-traumatic stress disorder same as those with ACEs (Villodas et al, 2016).

The impact of ACEs on peer relationships

When guardians seek advice from medical professionals on how to address challenges, academic or otherwise, concerning raising children with ACEs, those professionals look to supplemental information in video-based training programs to guide their patients (Wen et al, 2017). Studies show that toxic stress physically alters the construction of the brain (Sciaraffia et al, 2018). However, this article by Sciaraffia, et al, describes including early childhood educators and other professionals to build positive attributes necessary for resiliency such as self-regulation in those with ACEs. Narrowing optimal timeframes for intervention strategies with those experiencing ACEs starting with maternal health could in essence identify, assess, and correct those negative generational patterns of behavior (Racine et al, 2018).

Chapter 3

Methodology and Procedures

Introduction

The purpose of this study was to investigate what professionals in the fields of social work and education know about ACEs. The researcher also wanted to know the educational level and how long said professionals have been working in their respective fields, and if they knew where to go for more resources on ACEs. The researcher questioned if one field was more familiar with ACEs than others as well as if professionals would be willing to obtain further training if offered. From this study the researcher was also hoping to determine if different professionals are willing to collaborate with others for a holistic therapeutic approach to working with children with ACEs.

Population

The population for this study are state workers at the Tennessee Early Intervention Services state office in Johnson City, a class of Northeast State Community College students in the Early Childhood Program at the Blountville campus, a random selection of social workers for the Department of Human Services in Elizabethton, and a random selection of teachers in the Carter County school system. I would expect the total number of participants to equal approximately forty. Participation will be sought through personal contact from researcher with a full explanation of the study. Participants will complete a survey in the presence of researcher.

Instrumentation

An original survey titled ACEs survey was developed by researcher consisting of approximately 16 items for the purpose of data collection. In order to address Research Questions #1, #2, and #3, additional demographic questions have been added to the instrument and asked of respondents. In the presence of the researcher, respondents will be instructed to respond to each statement and submit the survey to researcher upon completion.

Data Collection

Participation will be sought through personal contact from researcher. Once participants agree to the survey, the researcher will schedule a time for the survey to be administered and/or obtain an email address to send the survey. Participants will be informed that the survey will require approximately 5-10 minutes to complete, and that their responses would remain confidential. The survey will be administered during a four-month period extending from mid-November through mid-March. All data collected will be stored both at the home office of the researcher and electronically.

Research Questions and Null Hypotheses:

RQ1: Is there a significant difference between the education levels of professionals that work with children in education and social work, and how knowledgeable they feel about ACEs?

H₀: Area professionals in education and social work do not feel knowledgeable about ACEs irrespective of their level of education.

RQ2: Is there a significant difference between professionals in the fields of education and social work and how knowledgeable they feel about ACEs due to their field?

H₀: No, there is not a significant difference between those that work in education and those that work in social work and how knowledgeable they feel about ACEs due to the field they work in.

RQ3: How knowledgeable about ACEs do professionals in education and social work feel, and would they be interested in more training in ACEs?

H₀: They feel knowledgeable about ACEs and would be interested in more training.

RQ4: Do professionals in education and social work feel confident that they fully understand what ACEs is and can find resources about ACEs?

RQ5: Do professionals in education and social work feel confident in finding resources for those affected by ACEs and would they care to know more about the effects of ACEs in their work?

H₀: No, they are not confident in finding resources and would care to know more about the effects of ACEs on their work.

RQ6: Do professionals in education and social work fully understand what ACEs means and believe that professionals that work with children are well trained in ACEs?

H₀: No, they do not fully understand what ACEs means and do not believe that professionals that work with children are well trained in ACEs.

RQ7: Do area professionals in education and social work feel that ACEs impacts the children that they serve and would care to know more about the effects of ACEs in their work?

H₀: No, they do not feel as though ACEs impacts the children that they serve and would not care to know more about the effects of ACEs on their work.

Procedures

Researcher contacted the District Administrator (DA) in the state of Tennessee Early Intervention Services (TEIS) office to obtain permission to administer survey to staff. DA granted permission and suggested a date for researcher to attend a state staff meeting in order to administer survey. Researcher introduced herself, explained the purpose of the research, and gave specific directions for completing the survey. Upon completion, the researcher collected the surveys and thanked everyone for their time and participation. This same process was completed with an adjunct teacher in the Early Childhood Development program at Northeast State Community College at the Blountville campus and the Department of Human Services in Elizabethton. Researcher sought out teachers in the Carter County School system and explained the purpose of the research and asked for permission to administer the survey. Permission was granted and the researcher administered the ACEs survey at times convenient for teachers in the morning before students arrived.

Chapter 4

Data Analysis

The purpose of this study was to investigate what a select number of professionals in the fields of education and social work know about ACEs. This study investigated what professionals that work with children know about ACEs. The researcher also wanted to know the educational level of said professionals working in their respective fields, and if they knew where to go for more resources on ACEs. The researcher wanted to know if one field was more familiar with ACEs than others as well as if professionals would be willing to obtain further training if offered.

Data Collection

The timeframe for data collection was approximately three months. The researcher distributed approximately 100 surveys and received 47 responses. Surveys completed in the presence of the researcher were the 47 responses collected. Discrepancies in data collection were due to several surveys containing unanswered questions. All participants in the study were from either the field of education or the field of social work and routinely work with children.

Research Questions

RQ1: Is there a significant difference between the education levels of professionals that work with children in education and social work, and how knowledgeable they feel about ACEs?

H₀: Area professionals in education and social work do not feel knowledgeable about ACEs irrespective of their level of education.

RQ2: Is there a significant difference between professionals in the fields of education and social work and how knowledgeable they feel about ACEs due to their field?

H₀: No, there is not a significant difference between those that work in education and those that work in social work and how knowledgeable they feel about ACEs due to the field they work in.

RQ3: How knowledgeable about ACEs do professionals in education and social work feel, and would they be interested in more training in ACEs?

H₀: They feel knowledgeable about ACEs and would be interested in more training.

RQ4: Do professionals in education and social work feel confident that they fully understand what ACEs is and can find resources about ACEs?

H₀: No, they do not feel confident that they fully understand what ACEs is and do not know where to find resources.

RQ5: Do professionals in education and social work feel confident in finding resources for those affected by ACEs and would they care to know more about the effects of ACEs in their work?

H₀: No, they are not confident in finding resources and would care to know more about the effects of ACEs in their work.

RQ6: Do professionals in education and social work fully understand what ACEs means and believe that professionals that work with children are well trained in ACEs?

H₀: No, they do not fully understand what ACEs means and do not believe that professionals that work with children are well trained in ACEs.

RQ7: Do area professionals in education and social work feel that ACEs impacts the children that they serve and would care to know more about the effects of ACEs in their work?

H₀: No, they do not feel as though ACEs impacts the children that they serve and would not care to know more about the effects of ACEs in their work.

Study Results

RQ1: Is there a significant difference between the education levels of professionals that work with children in education and social work, and how knowledgeable they feel about ACEs?

H₀: Area professionals in education and social work do not feel knowledgeable about ACEs irrespective of their level of education.

An independent-samples t-test was conducted to evaluate whether area professionals that work in education or social work feel knowledgeable about ACEs in correlation to their level of education. The level of education ranging from High School Diploma to Master's degree was the test variable and the grouping variable was the description of amount of knowledge that professionals felt that they had about ACEs. The test was significant, $p=8.91$. Therefore, the null hypothesis was rejected. Area professionals in both the field of education and in the field of social work do not feel knowledgeable about ACEs irrespective of their level of education. Therefore, the data does not suggest that one group of professionals feels more knowledgeable about ACEs than the other in correlation of their level of education. Professionals that held higher levels of education felt knowledgeable about ACEs ($M = .82$, $SD = .90$) and those with lower levels of education did not feel as knowledgeable about ACEs ($M = .34$, $SD = .58$). Professionals that held higher levels of education felt more knowledgeable about ACEs than those that held lower levels of education.

RQ2: Is there a significant difference between professionals in the fields of education and social work and how knowledgeable they feel about ACEs due to their field?

H₀: No, there is not a significant difference between those that work in education and those that work in social work and how knowledgeable they feel about ACEs due to the field they work in.

An independent-samples t-test was conducted to evaluate whether there was a significant difference in how professionals in the field of education and in the field of social work felt knowledgeable about ACEs due to the field they work in. The participants' career of either education or social work was the test variable and the grouping variable was whether the participant felt knowledgeable about ACEs. The test was significant, $p=.01$. Therefore, the hypothesis was rejected. There is a difference between the fields of education and social work and how knowledgeable professionals in those fields feel about ACEs. Professionals in both education and social work field ($M = .25$, $SD = .50$) tended to feel somewhat knowledgeable about ACEs ($M = .34$, $SD = .58$).

RQ3: How knowledgeable about ACEs do professionals in education and social work feel, and would they be interested in more training in ACEs?

H₀: They feel knowledgeable about ACEs and would be interested in more training.

An independent-samples t-test was conducted to evaluate how knowledgeable about ACEs professionals in education and social work feel and whether they would be interested in more training about ACEs. How knowledgeable participants felt about ACEs was the test variable and whether they would be interested in more training was the grouping variable. The test was significant, $p=.09$. Therefore, the null hypothesis was rejected. Participants surveyed

felt knowledgeable about ACEs ($M = .34$, $SD = .58$) and would be interested in more training about ACEs ($M = .17$, $SD = .41$).

RQ4: Do professionals in education and social work feel confident that they fully understand what ACEs is and can find resources about ACEs?

H₀: No, they do not feel confident that they fully understand what ACEs is and do not know where to find resources.

An independent-samples t-test was conducted to evaluate whether the average number of participants felt that they fully understood ACEs is and if that differed significantly from whether participants felt confident in finding resources about ACEs. The average number of participants that felt confident that they fully understood what ACEs is was the test variable and the grouping variable was whether participants felt confident in finding resources about ACEs. The test was significant, $p=.03$. Therefore, the hypothesis was rejected. Participants felt confident that they fully understood ACEs and confident that they knew where to find resources about ACEs. Professionals that felt that they fully understood ACEs ($M = .27$, $SD = .52$) tended to feel confident that they could find resources about ACEs ($M = .41$, $SD = .64$).

RQ5: Do professionals in education and social work feel confident in finding resources for those affected by ACEs and would they care to know more about the effects of ACEs in their work?

H₀: No, they are not confident in finding resources and would care to know more about the effects of ACEs in their work.

An independent-samples t-test was conducted to evaluate whether professionals feel confident in finding resources for those affected by ACEs and would care to know more about the effects of ACEs on their work. The average number of professionals that felt confident in

finding resources for those affected by ACEs was the test variable and the grouping variable was whether professionals cared to know more about the effects of ACEs on their work. The test was significant, $p=3.08$. Therefore, the null hypothesis was rejected. Professionals in education and social work do not feel confident in finding resources ($M = .41$, $SD = .64$) and tended to want to know more about the effects of ACEs on their work ($M = .12$, $SD = .35$).

RQ6: Do professionals in education and social work fully understand what ACEs means and believe that professionals that work with children are well trained in ACEs?

H₀: No, they do not fully understand what ACEs means and do not believe that professionals that work with children are well trained in ACEs.

An independent-samples t-test was conducted to evaluate whether professionals in education and social work fully understand ACEs and believe that professionals that work with children are well trained in ACEs. The average number of professionals that fully understand ACEs was the test variable and the grouping variable was whether those professionals in education and social work believe that other professionals that work with children are well trained in ACEs. The test was significant, $p=3.95$. Therefore, the null hypothesis was rejected. Professionals that work in education and social work that fully understand ACEs ($M = .27$, $SD = .52$) tended to believe that professionals that work with children are not well trained in ACEs ($M = .15$, $SD = .38$). Professionals that work with children across fields and disciplines are not well trained in ACEs.

RQ7: Do area professionals in education and social work feel that ACEs impacts the children that they serve and would care to know more about the effects of ACEs in their work?

H₀: No, they do not feel as though ACEs impacts the children that they serve and would not care to know more about the effects of ACEs in their work.

An independent-samples t-test was conducted to evaluate whether professionals in education and social work feels that ACEs impacts the children that they serve and if they would be interested in knowing more about the effects of ACEs on their work. The average number of professionals that feel that ACEs impacts the children that they serve was the test variable and the grouping variable was whether those professionals in education and social work would care to know more about the effects of ACEs on their work. The test was significant, $p=3.95$. Therefore, the hypothesis was rejected. Professionals that work in education and social work report that ACEs impacts the children that they serve ($M = .15$, $SD = .38$) and would like to know more about the effects of ACEs on their work ($M = .12$, $SD = .35$).

Summary

Participants in the survey work in either the field of education or the field of social work and held levels of education ranging from High School diploma to Master's degree. Irrespective to their levels of education, according to this survey, most participants felt somewhat knowledgeable about ACEs. The researcher wanted to determine if one field knew more about ACEs than the other. The data suggests that there is a difference between the fields of education and social work and how knowledgeable professionals in those fields feel about ACEs. According to the study, not only did participants feel knowledgeable about ACEs but did not feel confident in finding resources about ACEs and would be interested in more information. It is interesting to note that those surveyed that felt that they fully understood what ACEs and the impact of ACEs on their work did not believe that other professionals that work with children are

well trained in ACEs. Chapter 5 will explain the findings, recommendations, and the implication of this study.

Chapter 5

Findings, Recommendations, and Implications

Introduction

This chapter includes a summary of the findings, recommendations for future research studies, and implications of this study. Professionals in various disciplines that work with children undergo specialized training in their respective fields to some extent, some more than others. Most of the research concerning ACEs is retroactive, meaning that research has been conducted after that person has entered adulthood and reflects on their experiences in childhood (Albaeck, et al 2018). Little is known about ACEs in childhood where research has proven that interventions are most effective. In order to provide appropriate strategies and intervention to help children in childhood experiencing ACEs, more must be known. Understanding about how much knowledge professionals across different disciplines that work with young children have and how they access specific research and information is fundamental. The purpose of this study is to determine what a selection of professionals that work with children and families in different capacities such as educational, and social work fields know and understand about ACEs. How they access resources for more information is vital. The results of this study were derived from the data analysis described in Chapter 4.

Summary of Findings

The research questions addressed in this study were whether or not there is a significant difference in reported levels of knowledge about ACEs between professionals and their chosen field. Also, addressed in this study was whether professionals feel as though they fully

understand ACEs and would be interested in more training. This study asked if those professionals know where to find resources about ACEs, and whether or not professionals believe that other professionals that work with children are well trained in ACEs. Also it asked, whether or not those professionals feel that ACEs impacts their work with children. A comparison was made between those in the field of education and those in the field of social work through participation by completing a survey.

A significant difference in reported levels of education and knowledge about ACEs was discovered. More participants in the field of social work held higher levels of education than those in the field of education. Participants in both fields were interested in more training but did not know where to go for more resources about ACEs. Of those surveyed, most felt that ACEs impacts their work with children and that other professionals that worked with children were not well trained about ACEs.

Interpretation of Findings

Descriptive information such as levels of education and career choice was gathered as a basis of understanding prior knowledge. It was discovered that participants in the survey in the field of social work held higher levels of education than those in the field of education. Those in the field of social work felt that they were more knowledgeable about ACEs than those in the field of education. This understanding of ACEs, combined with information on brain research about resiliency to toxic stress will further help to identify research-based interventions and practices to employ in order to avoid negative adult outcomes. Understanding ACEs as well as the impact of ACEs on society, will help to further educate professionals across all disciplines that work with children irrespective of their level of education (Sciaraffa et al).

The majority of participants surveyed reported that they felt knowledgeable about ACEs and would be interested in more training. This finding supports the research that teachers that have not been adequately trained in ACEs are less familiar with the social and emotional behavioral needs of this specific set of students. This lack of understanding of these types of students can be disruptive to the teacher's classroom management and ultimately affect the student and their peers in a negative way (Johnson R, 2018). Further training in ACEs would help to implement consistent strategies specific to working with children that can have a positive impact on the development of cognitive, communication, and adaptive skills, among others (Shin et al, 2018).

Numerous studies have identified the significant direct association between ACEs scores and later psychological, mental (including emotional), and physical distress in adulthood (Shin et al, 2018). Even though research supports the significance of ACEs and the impact that they can have on adults and children alike, this study revealed that professionals in the fields of education and social work understand that ACEs impacts their work with children but do not feel as though they themselves are well trained. Employing research-based and evidence-based interventions and practices across the various disciplines that work with young children will help to avoid negative adult outcomes thus resulting in a healthier society (Sciaraffa et al).

The overwhelming majority of those surveyed to determine the knowledge that professionals have about ACEs responded that they did not know where to go for more resources. In order to adequately address ACEs in youth, teachers and other professionals such as those in the fields of social work and medicine, should be well trained about ACEs and trauma-informed practices in order to improve school attendance, graduation rates and overall

health (Stemple et al, 2017). The importance of training about this topic is evident. It is less clear however, where professionals can glean resources about this topic.

Limitations of the Study

It is important to note that there were a few limitations in this study. This study sought to determine what professionals that work with children know about ACEs. The researcher assumed that those that did not know about ACEs wanted to know more. The researcher also assumed that professionals in the fields of education and social work would want to work in collaboration with other professionals for better therapeutic approaches and will seek out available resources about ACEs. Factors outside of the researcher's control were not knowing the quality of interactions between families and professionals impacting their work with children and families. Of the 100 surveys distributed the researcher received 47 responses. Some surveys had questions that were unanswered which caused some generalizations in responses. Data collection was valid and reliable in that the researcher was present for the administration of the survey and collected them immediately so that answers could not be altered.

Recommendations

Recommendations for further research include a larger sample size to further ascertain the professional knowledge of ACEs of those that work with children. Another recommendation would be to alter the survey instrument to eliminate the option of answering "sometimes". Having participants answer definitively one way or the other would allow for a better quality of research to be obtained. This study sought to evaluate the professional knowledge about ACEs and more research is necessary to include other fields of professionals that work with children

such as those in the medical field. The research is out there on the impact of ACEs but further training is needed by professionals and the public that work with children in any capacity.

Conclusion

ACEs is a topic in which when it is mentioned, the speaker automatically has the attention of the audience. Those that do not know about it want to be informed, those that do know about ACEs want to know even more. It is a “hot topic” in education right now even though this study originated in the 1990’s. ACEs is a topic that is fundamentally important to the field of education and seems to carry a kind of respect at the mere mention of it. This is because if professionals that work with children can better understand behaviorism then their work with children will produce better results. When it is understood that children that are “acting out” in a negative way in any environmental setting are actually dealing with some lagging skills, then the professionals can view the problem from another perspective. When it is understood that children are in need of additional support with problem-solving skills because of trauma they have experienced, then professionals can address the root of the problem in order to better prepare the child in life by giving the child the tools they need to be a success. There is an old saying that “When you know better, you do better”. This is the case for ACEs; now that we professionals that work with children are diving into this topic and know better, we must do better. In taking personal responsibility for fully understanding ACEs, we can advocate for our youth in order to educate others. In doing so, professionals that work with children whether they be from education, the social work field, medical field, or some other capacity, can collaborate for the good of the child.

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Appendices

Appendix A

Professional Knowledge of Adverse Childhood Experiences Survey

This survey is part of a Master's thesis in researching what professionals that work with children across different disciplines (social work, education, medical, etc.) know about ACE. Please answer the following questions to the best of your ability. If a question does not apply to you mark N/A. Anonymity is of the utmost importance, so please do not include identifying personal information in your answers. All data collected will be synthesized into a culminating thesis and will be made available upon request. Thank you for your participation!

- 1) Which of the following is the most appropriate description of the amount of knowledge you currently have about Adverse Childhood Experiences (ACE)?

Very knowledgeable

Somewhat Knowledgeable

Not Knowledgeable

- 2) Which best describes the educational level you have obtained?

Doctorate

Masters

Bachelors

Associates

High School Grad

GED

- 3) What is your current profession?
- 4) How long have you been in your current profession?
- 5) Including the current year, how many years have you worked in this field?
- 6) In which content areas are professional development course offered in your workplace?
- 7) If you were offered training in ACEs would you be interested?
- 8) In terms of dealing with the general public, how would you describe your level of preparedness in your workplace as a direct result of professional development courses?
- 9) Do you offer input in your workplace on professional development topics about areas of interest?
- 10) I am confident in finding resources for those affected by ACEs. (Agree or disagree)
- 11) ACE has been mentioned in my workplace, but I am not confident I fully understand what that means. (Agree or disagree)
- 12) As a result of this survey, I now understand that I need additional training on ACEs. (Agree or disagree)

- 13) I do not care to know about ACEs and its effect on my work. (Agree or disagree)
- 14) I feel more pressures and stress in the workplace as a result of ACEs and how to interact with people. (Agree or disagree)
- 15) If information and training were provided, what area professionals do you believe should be informed and trained about ACEs?
- 16) Do you believe that professionals that work with children in any capacity (education field, medical field, social work, etc.) are well trained in ACEs?

This concludes the survey. Thank you for your participation in research about what area professionals that work with children across different disciplines know about ACE. This research is part of a larger vision to develop and implement training across disciplines in order to develop a more holistic therapeutic approach to working with children who have ACEs. Thank you for the work that you do!