ASSESSMENT OF TEACHERS AND PARAPROFESSIONALS' KNOWLEDGE AND BELIEFS ABOUT ATTENTION DEFICIT/HYPERACTIVITY DISORDER

BY

KATHERINE KIERNAN REISSNER

A Thesis Submitted to the School of Graduate Studies
In Partial Fulfillment of the Requirements for the Degree of
Master of Social Work

Southern Connecticut State University
New Haven, Connecticut

May 2013

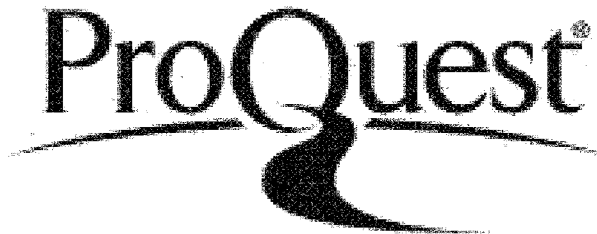
UMI Number: 1522915

All rights reserved

INFORMATION TO ALL USERS
The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript
and there are missing pages, these will be noted. Also, if material had to be removed,
a note will indicate the deletion.

UMI 1522915
Published by ProQuest LLC 2013. Copyright in the Dissertation held by the Author.
Microform Edition © ProQuest LLC.
All rights reserved. This work is protected against
unauthorized copying under Title 17, United States Code.



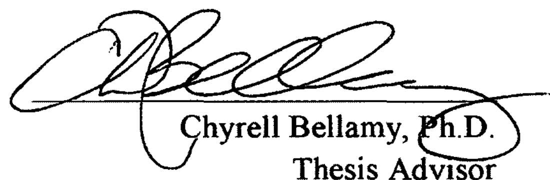
ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

ASSESSMENT OF TEACHERS AND PARAPROFESSIONALS' KNOWLEDGE AND BELIEFS ABOUT ATTENTION DEFICIT/HYPERACTIVITY DISORDER

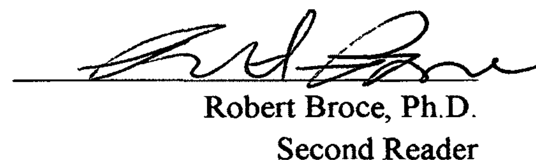
BY

KATHERINE KIERNAN REISSNER

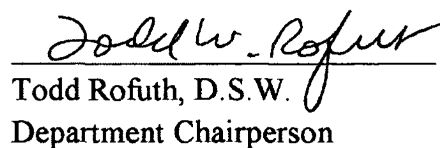
This thesis was prepared under the direction of the candidate's thesis advisor, Dr. Chyrell D. Bellamy, Department of Social Work, and it has been approved by the members of the candidate's thesis committee. It was submitted to the School of Graduate Studies and was accepted in partial fulfillment of the requirements for the degree of Master of Social Work.



Chyrell Bellamy, Ph.D.
Thesis Advisor



Robert Broce, Ph.D.
Second Reader



Todd Rofuth, D.S.W.
Department Chairperson

ABSTRACT

Author: Katherine Kiernan Reissner

Title: ASSESSMENT OF TEACHERS AND PARAPROFESSIONALS' KNOWLEDGE AND BELIEFS ABOUT ATTENTION DEFICIT/HYPERACTIVITY DISORDER

Thesis Advisor: Chyrell Bellamy, PhD

Institution: Southern Connecticut State University

Year: 2013

This study was conducted to gather information about the knowledge and beliefs of teachers and paraprofessionals about Attention Deficit/Hyperactivity Disorder. Twenty teachers and paraprofessionals responded to an online survey regarding Attention Deficit/Hyperactivity Disorder. This research was a modified version of research done using the Knowledge about Attention Deficit Disorder (KADDS) Questionnaire previously conducted using teachers only. The modifications included surveying paraprofessionals, as well as teachers. Additional modifications included using a "don't know" option for knowledge based questions. Findings from this research are consistent with previous research in that it found that teachers and paraprofessionals are able to identify trademark signs of ADHD, such as fidgetiness but are not aware of traits such as higher compliance to rules in the presence of father over the mother. Findings suggest that continuing education courses in ADHD would benefit teachers and paraprofessionals in school settings.

For the kids that can't sit still or pay attention. The kids that act and then think. The kids that believe they won't make it, the kids like me. And for those who love the kids that can't sit still or pay attention. Those who love the kids that act and then think. Those who love the kids like me. The ones who tell us we can, the ones who tell us we will, and the ones who are there when we finally do.

ACKNOWLEDGMENTS

To my parents Mary Jane and Joe, THANK YOU. There is not a thing that I have done or a thing I will ever do that isn't because of you. Your belief has made me who I am, and it is because of you that I go out every day and try to make this world a better place. "*Dear Mom and Dad,... Whatta ya know we made our dreams come true! And there are fancy cars and diamond rings, But you know that they don't mean a thing, Well they all add up to nothin' compared to you, Well, remember me in ribbons and curls...I still love you more than anything in the world. Love, Your Baby Girl*" (Sugarland, 2004) (Bush, Hall, Nettles, and Bieser, 2004).

To my siblings Joey, Beth, and Matthew, all I ever wanted to do was to make you guys proud. Thank you, the support you have given me has made it possible for your baby sister to go out into the world to help those that need it most. "*Stronger than I've ever been now, Never been afraid of standing out, Do I make you proud?*" (Taylor Hicks, 2006) (Ackerman, Watkins, and Wilson, 2006).

To my nieces and nephews, Robbie, Casey, CJ, Kevin, Riley, Tyler, Paul, Dylan, Morgan, Lyla, Lena, Luca, Dakota, Amanda, Daniel, Eli, Riva, Meredith, Evan, and Manny each of you have brought joy into my life and it is my goal to return some measure of that into yours. All that I do is to make the world you live in a place where you can find safety, see hope and have happiness. Thank you for helping me to see the goodness in the world. "*I will help you*

through, When you've done all you can do, And you can't cope, I will dry your eyes, I will fight your fight, I will hold you tight, And I won't let go" (Rascal Flatts, 2011) (Robson and Sellers, 2011).

Maura, my friend and sister, thank you for being calm when I was spinning, for seeing the big picture when I had tunnel vision, and for ALWAYS believing in me. "*Who can say if I've been changed for the better? I do believe I have been changed for the better, Because I knew you, I have been changed for good.*"(Idina Menzel and Kristen Chenoweth, 2003) (Schwartz, 2003).

To Hermione, thank you for your encouragement and understanding. You have helped me to stay calm and to pull through and your kindness continues to amaze me. "*Love you like a love song*" (Selena Gomez & The Scene, 2011) (Armato and James, 2011).

To Lori, thank you for seeing me for who I want to be and "redefining cool in my image." Your belief and encouragement helped me to continue when I wanted to give up. "*If you're looking for a fight, I'm your man*"(Brandi Carlyle, 2009) (Carlyle and Hanseroth,2009)

To Lexi, Double C, and Sam, it's been a long 3 years, but we made it. I am so happy and proud to have made this journey with you three! Thank you for being my friends and colleagues! "*School's out for the summer, School's out forever*" (Alice Cooper, 1972) (Cooper, Bruce, Buxton, Dunaway, and Smith, 1972).

To Chyrell Bellamy, thank you for patience, faith and encouragement. This year may have gotten the best of me, if not for your calming ways and ability to help me to refocus.

To Ashley Clayton, thank you for sharing your knowledge of analysis with me and helping to make this thesis what it is.

To Robert Broce, thank you for encouragement and guidance. Your direction during my first placement was essential and your continued support is much appreciated.

To Stephen Monroe Tomczak, if not for your help my 1st semester, I'd have hung it all up. I truly would not have gotten here had it not been for you. Your guidance and enthusiasm throughout my time in the program has helped me to persevere and it behooves me to thank you!

To Dan, Bobby, Krissy, Carrie, Laura, Papa Rob and Granny Gale, Jen, and Dave, your presence in my life has made it possible for me to get here, thank you.

And finally to my girl Dink, you are my greatest stress reliever. Without you being happy to see me, every time I walked in the door the long days would have been longer. Thanks for being a distraction when I needed it and letting me focus when I needed to. Thanks for sitting with me on long nights writing this thesis and the proposal. Thank you for being my sweet girl.

TABLE OF CONTENTS

I. Statement of Purpose: 1

II. Literature Review: 1

a) Impact of ADHD 1

b) Teachers' Knowledge of ADHD 3

III. Results and Investigatory Procedures: 5

a) Methods: 5

1. Research Questions: 5

2. Study Sample: 5

3. Procedures: 5

4. Instrument: 5

5. Data Analysis Strategies: 6

b) Findings: 6

IV. Discussion and Implications for Social Work Policies and Practice: 10

V. Implications from this analysis that informs the writer's Clinical Social Work Practice: 11

VI. Summary: 11

APPENDIX A: IRB Approval Letter 13

APPENDIX B: Letter of Invitation to Participate in the Survey 14

APPENDIX C: Knowledge about Attention Deficit Disorder (KADDS) Questionnaire 16

REFERENCES 22

LIST OF TABLES

TABLE 1: Demographics..7

TABLE 2: Knowledge Questions Answered Correctly...8-9

TABLE 3: Ranking of Continuing Education Preferred Learning Methods.......................10

I. Statement of Purpose:

Attention Deficit Hyperactivity Disorder (ADHD) affects approximately 5.4 million children between the ages of 5 and 14 in America (US Department of Education, 2009). Children with ADHD have been found to be at greater risk of physical injury, have more peer conflicts, and to underperform in school. The US Department of Education states that "students usually are identified only after consistently demonstrating a failure to understand or follow rules or to complete required tasks. Other common reasons for referral include frequent classroom disruptions and poor academic performance" (US Dept. of ED, 2009). With the significant impact that ADHD can have, it is important to conduct further research to understand how children receive the diagnosis and when.

II. Literature Review:

a) Impact of ADHD

Attention Deficit Hyperactivity Disorder (ADHD) is a neurobehavioral disorder. Often diagnosed in children, it affects the ability to control behavior in the areas of impulsivity, attention and activity. Nearly 5.4 million children, between the ages of 5 and 14 in America have ADHD (Center for Disease Control and Prevention (CDC), 2010). Children with ADHD academically perform at lower levels than their non ADHD classmates. The CDC (2010) found that about 5% of children with ADHD also had learning disorders. Although 5% of children without ADHD also suffer from learning disorders, the United States Department of Education (US Dept. of ED) reports that students with learning disorders and ADHD had "lower average marks, more failed grades, more expulsions, increased dropout rates, and a lower rate of college

undergraduate completion" (US Dept. of ED, 2009). This shows the impact ADHD has on a child's ability to perform and succeed in school.

Although impulsivity, inattention and hyperactivity, which are the trademark symptoms of ADHD, are most often associated with academic performance, people with this diagnosis are also at a greater risk of injury and hospitalization. The CDC reports that of children incurring non-fatal injuries, children with ADHD incur injuries 2% more often than children without ADHD. And among children incurring serious injury, children with ADHD suffer 10% more major injuries than their non-ADHD cohorts (CDC, 2010). Children diagnosed with ADHD also show disproportionately higher rates in hospitalization stays (26% ADHD vs. 18% Non-ADHD), outpatient treatment visits (41% ADHD vs. 33% Non-ADHD), and emergency room visits (81% ADHD vs. 74% Non-ADHD) (CDC, 2010).

In addition to decreased school performance and risk of injury; people that suffer from ADHD also have a marked impairment in social relationships. Parents of children with ADHD report 3 times more peer conflicts than parents of children without ADHD and 10 times more problems maintaining friendships. Commonly thought of as a childhood disorder, ADHD symptoms continue into adulthood. ADHD is not a curable disorder but with accurate screening, diagnosis, and treatment many of the symptoms can be alleviated, giving children with ADHD the opportunity to perform better in school, incur less injuries, maintain better peer relationships, and grow into healthier adults.

Accurate diagnosis of ADHD has been found to be a complex process due to some complicating factors such as, behaviors being seen in one setting not seen in others (classroom vs. home), some of the symptoms are typical for the developmental stage children are in, and some symptoms of ADHD are similar to those of other developmental disorders. "Classroom

teachers have been considered one of the most valuable sources of information with regard to diagnosis because they have daily exposure to children in a variety of clinically relevant situations" (Sciutto, Terjesen, & Bender Frank, 2000, p. 115). School staff are often the first adults to see children in situations where they are expected to sit still for long periods of time, follow directions and wait patiently for their turn. These three situations are areas where children with ADHD struggle. It is vital to know if school staff have accurate knowledge, perceptions, and beliefs about ADHD.

b) Teachers' Knowledge of ADHD

There have been several studies done on assessing teachers' knowledge of ADHD. This review will highlight three studies in this area. Sciutto et al. (2000) used the Knowledge about Attention Deficit Disorder (KADDS) questionnaire with one hundred forty nine teachers in New York City. The KADDS offers questions with a response category of true/false/don't know format to reduce the likelihood of a teacher guessing and still coming up with a correct answer. Of the 149 participants, 19% worked primarily with special education students and 37% reported having worked in special educations classrooms within their career. Fifty percent (50%) of the participants reported having requested ADHD evaluation for students and 52% reported teaching in a classroom where at least one student was diagnosed with ADHD. Sciutto et al found that teachers in the sample were most knowledgeable about the symptoms and diagnostic criteria, such as fidgeting, and distractibility. While they found that teachers' ability to recognize symptoms was high; teachers lacked understanding of how situations affected behaviors, such as new vs. familiar settings, or the child's mother vs. father being present. While many teachers thought that children did better in familiar settings, over half of the teachers did not recognize that children are more compliant in the presence of their father over their mother. Their study

found that many teachers had misconceptions about the causes of ADHD, such as the effect that sugar intake and diet has on children. The study also found that teachers were unwilling to give up their misconceptions even when presented with research suggesting its invalidity.

Another study was conducted by Bruna Bekle (2004) which used a true/ false questionnaire to assess knowledge of ADHD. The instrument was developed by Jerome (1994). Thirty practicing teachers and 40 students in their final year of school to become teachers were surveyed. Bekle found that both the teachers and the students preparing to teach had a sound understanding of the characteristic of ADHD, with practicing teachers scoring slightly higher. Bekle found that there was a positive correlation between teachers' knowledge of ADHD and their attitude toward ADHD, meaning teachers that saw ADHD as a legitimate diagnosis scored higher on recognizing symptoms than those that saw ADHD as an excuse for poor performance.

Kos, Richdale and Jackson (2004) developed a true/false/don't know survey to assess the ADHD knowledge of 120 primary school teachers and 45 students in their final year of school. The survey by their team was developed based on personal communication with Sciutto as well as from other scholars in this area such as Jerome (1994). Results showed that practicing teachers scored slightly better than the pre-service students in correctly identifying symptoms of ADHD. This study found a non-significant relationship between years of experience and ability to accurately identify characteristics of ADHD.

The results of these 3 studies suggest that teachers are able to identify trademark symptoms of ADHD but have some misconceptions about the disorder itself and treatment options. This study hopes to replicate and further explore some of these findings using the KADD (Sciutto et al, 2000).

III. Results and Investigatory Procedures:

a) Methods:

1. Research Questions:

What knowledge do teachers and paraprofessionals have about ADHD? What are some of the beliefs and perceptions that teachers and paraprofessionals have about ADHD?

2. Study Sample:

Permission was granted by principals at two schools in Connecticut to conduct surveys with teachers and paraprofessionals; at a Kindergarten-4th grade elementary school and a 6-8th grade middle school. A list of 153 names was provided to the researcher.

3. Procedures:

A confidential survey was administered through the website, *SurveyMonkey*, an online survey tool, and was available between March18, 2013 and March 29, 2013. Participation in this survey was voluntary and informed consent was waived due to involvement having minimal risk, and there being no other record linking participants with the research. Participants received an e-mail or written letter with the link to the survey placed in their mailboxes (Note: The paraprofessionals were not included in the email list).

4. Instrument:

Originally developed by Sciutto et al. (2000), a 90 question survey that assesses knowledge of ADHD was modified for this project. This survey used a true/false/don't know format for knowledge based questions and a 5 point Likert scale for the beliefs questions. This varied from the original because Sciutto et al. did not offer a "don't know" option and the survey included the paraprofessionals where the original did not. The KADDS has now been used by

several researchers and has shown to be valid and reliable. Coefficient alphas for the KADDS have ranged from .71 to .81 (Sciutto, et al., 2000).

5. Data Analysis Strategies:

The analysis for this study will be descriptive. The data analysis will examine frequencies and percentages to get a sense of ADHD-related knowledge of staff at the school. The *SurveyMonkey* program was be used to gather responses and compute the descriptive statistics. Based on a review of the descriptive statistics and actual numbers of surveys collected, more advanced methods might be used such as regression analysis to examine demographic factors in relation to knowledge level.

b) Findings:

Sample Characteristics.

Of the 153 teachers and paraprofessionals that received the request, 20 responded. The 20 participants of this study were teachers and paraprofessionals from two schools, a Kindergarten-4th grade elementary school and a 6-8th grade middle school in a Connecticut town. The participants were 20% male (n =4) and 80% female (n =16). Eighty-three percent (83%, n =15) of the participants had a master's degree while only 6% (n =1) had not earned a college degree. All participants had achieved a high school diploma. Eighty (80%, n =16) of the participants were teachers, 10% (n =2) were paraprofessionals and 10% (n =2) chose not to disclose. Fifty percent (50%, n =10) of the participants had more than 14 years' experience and 15% (n =3) had less than 5 years' experience working in a school setting. Sixty-five percent (65%, n =13) of participants reported having a lot of experience working with students with ADHD, while only 10.5% (n =2) rated themselves as being very knowledgeable about ADHD. Only 25% (n =5)

reported having taken professional seminars regarding ADHD. Eighty percent (80%, n =16) of respondents reported having support in working with students with ADHD.

Table 1.

Demographics

Demographics (N=20)	n (%)
Gender	
Male	4 (20.0)
Female	16 (80.0)
Highest Degree	
High school	1 (5.6)
Bachelors	2 (11.1)
Masters	15 (83.3)
Teacher	16 (80.0)
Paraprofessional	2 (10.0)
Years working in school setting	
0-4	3 (15.0)
5-8	6 (30.0)
9-13	1 (5.0)
14+	10 (50.0)
Receive support from School Psychologist	7 (35.0)
Taken professional development seminars about ADHD	5 (25.0)
Hours of training on ADHD	
0	12 (60.0)
1-4	3 (15.0)
5-8	2 (10.0)
9+	3 (15.0)
Self-report of knowledge of ADHD	
Very knowledgeable	2 (10.5)
Somewhat knowledgeable	8 (42.1)
Moderately knowledgeable	8 (42.1)
Not very knowledgeable	1 (5.3)
Experience working with children taking medicine for ADHD	20 (100)
Number of children worked with who have taken medication for ADHD	
1-4	4 (20.0)
5-8	2 (10.0)
9-13	5 (25.0)
14+	9 (45.0)

Knowledge about ADHD.

Teachers and paraprofessionals were able to identify some of the trademark signs of ADHD. For example, all the teachers (100%, n=20) knew that children with ADHD are distracted by extraneous stimuli. And 84% (n=16) knew that ADHD was not the result of ineffective parenting. The teachers and paraprofessionals (90%, n=17) also knew the being physical cruel was not a sign of ADHD. 84% (n=16) knew that children with ADHD often fidget or squirm in their seats and 95% (n=18) knew that children with ADHD have trouble organizing tasks. Yet there were areas around diagnosis and treatment that the teachers and paraprofessionals did not know. The teachers and paraprofessionals (95%, n=18) did not know that in order to be diagnosed with ADHD the child's symptoms must have been present before age 7. Ninety percent (90%, n=17) did not know that children with ADHD are often more compliant with their fathers over their mothers. Additionally, 95% (n=18) did not know that antidepressants have been effective in treating symptoms of ADHD, while 84% (n=16) inaccurately thought reducing intake of sugar was an effective treatment.

Table 2.

Knowledge Questions Answered Correctly

Knowledge Question	*n* (%) Correct Answer
ADHD result of ineffective parenting	16 (84.2)
Children with ADHD frequently distracted	19 (100)
Children with ADHD more compliant with father	2 (10.5)
Symptoms present before age 7 for diagnosis	1 (5.3)
15% of school age children have ADHD	2 (10.5)
Symptom being physical cruel	17 (89.5)
Antidepressants effective treatment	1 (5.3)
Often fidget or squirm	16 (84.2)
Parent and teacher training effective with medication treatment	15 (79.9)
Inflated self esteem	9 (47.4)
Possible for Adult to be diagnosed	17 (89.5)

History of stealing	10 (52.6)
Insomnia and appetite reduction stimulant medication side effect	17 (85.0)
2 symptom groupings	10 (50)
Depression symptoms more often	7 (35.0)
More common in 1st degree biological relative	5 (25.0)
After treatment symptoms return	9 (45.0)
Individual therapy sufficient treatment	10 (50)
Children outgrow symptoms	9 (45.0)
Severe cases medication first	8 (40.0)
Symptoms in more than one setting	14 (70.0)
Demonstrate attention to TV or video games then demonstrate attention to school work	11 (55.0)
Reduce sugar intake alleviate symptoms	3 (15.0)
Diagnosis makes child eligible for special education	12 (60.0)
Stimulant drugs most common	4 (20)
Difficulty organizing	6 (30.0)
More problems in unfamiliar settings	18 (90.0)
Physical features that indicate ADHD	11 (55.0)
Prevalence equal among males and females	10 (50.0)
Very young children problem behaviors distinct	7 (35.0)
More distinguishable in classroom than in free play	5 (25.0)
Some degree of poor school performance	9 (45.0)
Symptoms also seen in children with chaotic homes	9 (45.0)
Behavioral/psychological interventions in severe cases	12 (60.0)
Treatments focus on punishment	17 (85.0)
If medication is involved educational interventions not needed	15 (75.0)
Born with biological vulnerabilities	6 (30.0)
Diagnosed in doctor's office	12 (60.0)
Always need quiet to concentrate	10 (50.0)
Medication is cure	19 (95.0)
Cause unknown	1 (5.0)
Diagnosis possible for children from any walk of life	19 (95.0)
Stimulant drugs lead to increased addiction in adulthood	4 (20.0)

Beliefs about ADHD.

Overall the teachers and paraprofessionals (79%, n=15) agreed that ADHD is valid and 95% (n=18) believe that ADHD is a legitimate educational problem, but 55% (n=10) believe ADHD is diagnosed too often. No teacher or paraprofessional endorsed the belief that children

with ADHD could control neither their behavior if they wanted to nor the idea that children with ADHD misbehave because they are naughty children.

Continuing Education on ADHD.

The participants in the study ranked order their preferred method for learning about ADHD. Workshops ranked the highest (1.65), followed by seminar presentations (2.20), written materials (3.25), website (3.55), and CD materials (4.45).

Table 3.

Ranking of Continuing Education Preferred Learning Methods

Learning Method	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	*Rank*	*N*
Workshop	**55.0% (11)**	35.0% (7)	5.0% (1)	0.0% (0)	5.0% (1)	0.0% (0)	1.65	20
Seminar Presentation	30.0% (6)	**45.0% (9)**	10.0% (2)	10.0% (2)	0.0% (0)	5.0% (1)	2.20	20
Written Materials	5.0% (1)	15.0% (3)	**40.0% (8)**	30.0% (6)	10.0% (2)	0.0% (0)	3.25	20
Website	10.0% (2)	5.0% (1)	**30.0% (6)**	**30.0% (6)**	25.0% (5)	0.0% (0)	3.55	20
CD Materials	0.0% (0)	0.0% (0)	15.0% (3)	25.0% (5)	**60.0% (12)**	0.0% (0)	4.45	20

IV. Discussion and Implications for Social Work Policies and Practice:

There are areas, particularly around trademark symptoms, that the teachers and paraprofessionals excelled at identifying. But the teachers and paraprofessionals also lacked important knowledge about ADHD in the areas of diagnosis and treatment. This research has

shown that further training about ADHD is need for teachers and paraprofessionals. In the future, school social workers may be a part of this training process. School social workers, given their position in the school, may have additional demands placed on them regarding training the teachers and paraprofessionals so that they may be more adept at identifying signs of ADHD and making referrals for testing. School social workers will also continue to be a useful advocate for students struggling with ADHD, within the school setting.

V. Implications from this analysis that informs the writer's Clinical Social Work Practice:

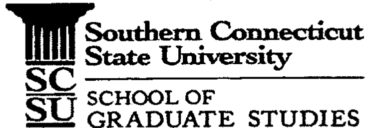
This writer gained an understanding of what knowledge and beliefs teachers and paraprofessionals hold. By having a greater understanding this writer recognizes that psychoeducation may be a major part of this writer's career. This writer knows that helping children understand their diagnosis will be vital to helping them to overcome their struggles. This writer also sees that she will have to provide some psychoeducation to school staff as they may not be as familiar with the signs of ADHD or current treatment practices. Additionally, this writer sees that she will be helping students to address their needs, regardless of whether or not the students' teachers understand their diagnosis.

VI. Summary:

This study focused on identifying and understanding the knowledge, beliefs, and perceptions held by school staff regarding ADHD. Increased understanding of school staff's knowledge will allow the field of social work to work more collaboratively to advance treatment practices for children with ADHD. Results support the need for education and continuing education for student teachers, teachers, and paraprofessionals. Social workers in school settings

could assist by providing in-service psycho-education courses. Schools should invest in providing these educational opportunities for staff members.

APPENDIX A: IRB Approval Letter



Date: 3/11/13

Attn: Ms. Katherine Reissner
85 Niles Hill Rd. Unit 8
New London, CT 06320

CC: Dr. Chyrell Bellamy, Social Work

Re: Protocol Review

Protocol Title: Assessment of teachers' and paraprofessionals' knowledge and beliefs about attention deficit hyperactivity disorder

Protocol Number: 13-054 Department: Social Work

Dear Ms. Reissner,

Your protocol has been examined and is considered exempt* from continuing IRB review. If during the conduct of your research any changes occur related to participant risk, study design, confidentiality or consent if applicable, data collection must cease and the IRB must be notified immediately so that appropriate review of the changes may be accomplished.

If you have submitted a consent document and it has not been returned with this letter, it does not require IRB date stamping. The use of your consent document in your research is strongly urged by the IRB.

Good luck with your research. If the IRB can be of any assistance please do not hesitate to contact me directly. Please be sure to include your IRB number in any correspondence.

Sincerely,

Dr. W. Jerome Hauselt, Chair
School of Graduate Studies
Voice: 203-392-5243, FAX 203-392-5221
Email: hauseltw1@southernct.edu

(Revised: 12/21/12)

*Please amend the cover letter to include the current IRB number, 13-054. Also, please send letters of participation from the schools that will be supplying the emails when they are received.

501 Crescent Street • New Haven, Connecticut 06515-1355 • (203) 392-5240 • FAX (203) 392-5236 • www.SouthernCT.edu/grad
AN INSTITUTION OF THE CONNECTICUT STATE UNIVERSITY SYSTEM • AN EQUAL OPPORTUNITY UNIVERSITY

APPENDIX B: Letter of Invitation to Participate in the Survey

Online Survey

Welcome! You are being invited to take part in a survey being conducted by Katherine K. Reissner, MSW Student at Southern Connecticut State University. This study was approved by the Institutional Review Board of Southern Connecticut State University.

What is the Purpose of the study? This research assesses knowledge and beliefs of teachers and paraprofessionals of ADHD. The information gained from this study will help social workers have an understanding of the knowledge and beliefs teachers and paraprofessionals have about ADHD, and will help social workers to help the children hat are referred for services by teachers and paraprofessionals.

Taking part in the evaluation study. The survey consists of (a) demographic questions about your experience in school settings as well as working with children with ADHD, (b) true/false/do not know questions about ADHD symptoms/signs, treatment and diagnostic criteria and(c) five part Likert scale questions about your beliefs about ADHD. The survey is completely online and will take about 10-20 minutes to complete.

What are the possible benefits of taking part? We will be grateful to you for your support to this project, which may help social workers to work more effectively with students in school settings. This data will be compiled and analyzed in order to further the knowledge base of School Social Workers and to make recommendations to the field on how to support teachers in order to improve the treatment of ADHD students.

What are the possible risks of taking part? There are no foreseeable risks associated with participation in this study. The information requested from you is benign in nature and there are no anticipated risks or discomforts associated with participation in this study.

What if I have questions or concerns? *If you have any questions or concerns about any aspect of the way you have been approached or treated during the course of this study, please feel free to email the principal investigator, Katherine K. Reissner at reissnerk1@owls.southernct.edu. If you would like to talk with someone other than the researcher to discuss problems, concerns, and questions, you may have concerning this research, or to discuss your rights as a research subject, you may contact the Southern CT State University Institutional Review Board, 501 Crescent Street, New Haven, CT 06515, 203-392-5243. Please include the protocol number 10-185.*

Will my taking part in this study be kept confidential? All information which is collected during the course of the research will remain anonymous, and all information will be kept strictly confidential. The information requested from you is intended for the sole purpose of this evaluation.

What will happen to the results of the research study? The results of the study will be documented in a thesis to be given to Southern Connecticut State University.

What happens next? If you agree to take part, please go to:

https://www.surveymonkey.com/s/WHNNQY8

Thank you,

Katherine Reissner, B.S., MSW Intern

APPENDIX C: Knowledge about Attention Deficit Disorder (KADDS) Questionnaire

Demographics:

1. Are you male or female? (Male, Female, Do not wish to disclose)

2. What is your highest degree conferred? (High school, Associates Degree, Bachelor's Degree, Master's Degree, PhD, Other, do not wish to disclose)

3. Are you a teacher or paraprofessional? (Teacher, paraprofessional, do not wish to disclose)

4. How many years have you been working in a school setting? (0-4 years, 5-8 years, 9-13 years, 14+ years, do not wish to disclose)

5. What grades do you currently work with? Choose all that apply (Pre-Kindergarten, Kindergarten, 1st grade, 2nd grade,3rd grade,4th grade, 5th grade,6th grade,7th grade,8th grade,9th grade,10th grade,11th grade, 12th grade , do not wish to disclose)

6. How much experience do you have working with children with ADHD? (No experience, very little experience, some experience, a lot of experience, do not wish to disclose)

7. Approximately how many children with ADHD have you worked with in your career? (0, 1-4, 5-8, 9-13, 14+, do not wish to disclose)

8. Did you receive support in dealing with your students with ADHD? (Yes, no, do not wish to disclose)

9. If you received support, from whom? Choose all that apply (Paraprofessionals, teachers, school system, parents, clinical psychologist, school psychologist, does not apply, do not wish to disclose, other)

10. Have you ever taken any professional development seminars about ADHD? (Yes, no, do not wish to disclose)

11. Approximately how many hours of professional development training have you completed on AHDH? (0, 1-4, 5-8, 9-13, 14+, do not wish to disclose)

12. How would you rate your knowledge of ADHD? (Very knowledgeable, somewhat knowledgeable, moderately knowledgeable, not very knowledgeable, unknowledgeable, do not wish to disclose)

13. Do you have experience with children that had taken or are currently taking medication as a form of treatment? (Yes, no, do not wish to disclose)

14. If you have experience working with students that had taken or are currently taking medication as a form of treatment of ADHD, approximately how many children have you experience with? (1-4, 5-8, 9-13, 14+, do not wish to disclose)

15. What would be the best way for you to learn more about ADHD? Please rank option (1= most preferred)

________ Seminar presentation

________ Workshop

________ written materials

________ CD materials

________ Web page accessible via the internet

________ Other (please specify)

Knowledge Questionnaire- True, false, Do not know

16. Current research suggests ADHD is largely the result of ineffective parenting skills.

17. Children with ADHD are frequently distracted by extraneous stimuli.

18. Children with ADHD are typically more compliant with their fathers than their mothers.

19. In order to be diagnosed with ADHD, the child's symptoms must have been present before age 7.

20. Most estimates suggest that ADHD occurs in approximately 15% of school aged children.

21. One symptom of children with ADHD is that they have been physically cruel to other people.

22 Antidepressant drugs have been effective in reducing symptoms for many children with ADHD.

23. Children with ADHD often fidget or squirm in their seats.

24. Parent and teacher training in managing a child with ADHD are generally effective when combined with medication treatment.

25. It is common for children with ADHD to have an inflated sense of self-esteem and grandiosity.

26. It is possible for an adult to be diagnosed with ADHD.

27. Children with ADHD often have a history of stealing or destroying other people's things.

28. Side effects of stimulant drugs (e.g. Ritalin) used for treatment of ADHD may include mild insomnia and appetite reduction.

29. Currently ADHD subtypes are grouped in terms of two sets of symptoms/signs. One of inattentive grouping and the other is hyperactive and impulsive grouping.

30. Symptoms/signs of depression are found more frequently in children with ADHD than in non-ADHD children.

31. ADHD is more common in the 1st degree biological relative (i.e. mother, father) of children with ADHD than in the general population.

32. When treatment of a child with ADHD is terminated, it is rare for the child's symptoms to return.

33. Individual psychotherapy is usually sufficient for treatment of most children with ADHD.

34. Most children with ADHD "outgrow" their symptoms by the onset of puberty and subsequently function normally in adulthood.

35. In severe cases of ADHD, medication is often used before other behavior modification techniques are attempted.

36. In order to be diagnosed with ADHD, a child must exhibit relevant symptoms in two or more settings (e.g. home and school.)

37. If a child with ADHD is able to demonstrate sustained attention to video games or TV for over an hour, that child is also able to sustain attention for at least an hour of class or homework.

38. Reducing dietary intake of sugar or food additives is generally effective in reducing the symptoms of ADHD.

39. A diagnosis of ADHD by itself makes a child eligible for placement in special education.

40. Stimulant drugs are the most common type of drug used to treat children in ADHD.

41. Children with ADHD often have difficulties organizing tasks and activities.

42. Children with ADHD generally experience more problems in unfamiliar situations than in familiar situations.

43. There are specific physical features which can be identified by medical doctors (e.g. pediatrician) in making a definitive diagnosis of ADHD.

44. In school age children, the prevalence of ADHD in males and females is equivalent.

45. In very young children (less than 4 years old) the problem behaviors of children with ADHD (e.g. hyperactivity, inattention) are distinctly different from age-appropriate behaviors of children without ADHD.

46. Children with ADHD are more distinguishable from children without ADHD from children without ADHD in a classroom setting than in a free play situation.

47. The majority of children with ADHD evidence some degree of poor school performance in elementary school years.

48. Symptoms of ADHD are often seen in children without ADHD who come from inadequate and chaotic home environments.

49. Behavioral/psychological interventions for children have been found to be an effective treatment for severe cases of ADHD.

50. Treatments for ADHD which focus primarily on punishment have been found to be the most effective in reducing symptoms of ADHD.

51. If medication is prescribed, educational interventions are often unnecessary.

52. Children with ADHD are born with biological vulnerabilities toward inattention and poor self-control.

53. ADHD can be diagnosed in a doctor's office most of the time.

54. Children with ADHD always need a quiet environment to concentrate.

55. Medication is a cure for ADHD.

56. The cause of ADHD is unknown.

57. Children from any walk of life can have ADHD.

58. Research has shown that prolonged use of stimulant medications leads to increased addiction (i.e. drugs, alcohol) in adulthood.

Beliefs Questionnaire (scored 1 to 5, 1= Strongly disagree 5= Strongly agree)

59. ADHD is a valid diagnosis.

60. ADHD is an excuse for children to misbehave.

61. ADHD is diagnosed too often.

62. ADHD is a behavior disorder that should not be treated with medication.

63. All children with ADHD should take medication.

64. Medications such as Ritalin and Dexamphetamine should only be used as a last resort.

65. ADHD is a legitimate educational problem.

66. Having an ADHD child in my class would disrupt the teaching.

67. I would feel frustrated having to work with a child with ADHD.

68. Young children with ADHD should be treated more leniently than older children with ADHD.

69. Children with ADHD should be taught by special education teachers.

70. I would prefer to work with a child that was over-active than inattentive.

71. Most students with ADHD don't really disrupt class that much.

72. Children with ADHD should not be taught in regular school.

73. The extra time teachers and paraprofessionals spend with students with ADHD is at the expense of students without ADHD.

74. Other students don't learn as well as they should when there is a child with ADHD in the classroom.

75. You cannot expect as much from a child with ADHD as you can from other children.

76. Children with ADHD could control their behavior if they really wanted to.

77. Children with ADHD misbehave because they are naughty.

78. Children with ADHD cannot change the way they behave.

79. Students with ADHD could do better if only they tried harder.

80. Children with ADHD have little control over the way they behave.

81. Children with ADHD misbehave because they don't like following rules.

82. Students with ADHD are just as difficult to manage in the classroom as any student.

83. Managing the behavior of students with ADHD is easy.

84. I have the skills to deal with children with ADHD in my class.

85. I have the ability to effectively manage students with ADHD.

86. I am limited in the way I manage a child with ADHD.

87. My school has policies that regulate how teachers and paraprofessionals manage a child with ADHD.

88. Other staff influence how I would manage a child with ADHD.

89. Other staff influence how I would manage a child with ADHD.

90. Parents of students with ADHD influence how I would manage a student with ADHD.

REFERENCES

Ackerman, T., Watkins, A., and Wilson, P. (2006). Do I make you proud. [Recorded by Taylor Hicks]. On *Do I make you proud* [Single CD]. Los Angeles, CA: Arista.

Armato, A., and James, T. (2011). Love you like a love song. [Recorded by Selena Gomez & The Scene]. On *When the sun goes down* [CD]. Burbank, CA: Hollywood.

Bekle, B. (2004). Knowledge and attitudes about Attention-Deficit Hyperactivity Disorder (ADHD): A comparison between practicing teachers and undergraduate education students. *Journal of Attention Disorders, 7*(3), 151-161.

Bush, K., Hall, K., Nettles, J., and Bieser, T. (2004). Baby girl. [Recorded by Sugarland]. On *Twice the speed of light* [CD]. Nashville, TN: Mercury Nashville.

Carlile, B., and Hanseroth, P. (2009). If there was no you. [Recorded by Brandi Carlile]. On *Give up the ghost* [CD]. Los Angeles, CA: Columbia.

Centers for Disease Control (CDC) (2012). *ADHD Topics*. National Center on Birth Defects and Developmental Disabilities. CDC. Retrieved from http://www.cdc.gov/ncbddd/adhd/index.html.

Cooper, A., Bruce, M., Buxton, G., Dunaway, D., and Smith, N. (1972). School's out. [Recorded by Alice Cooper]. On *School's out* [45" Record]. Burbank, CA: Warner Brothers.

Kos, J. Richdale, A. & Jackson, M. (2004). Knowledge about Attention-Deficit/ Hyperactivity Disorder: A comparison of in-service and pre-service teachers. *Psychology in Schools, 41*(5), 517-526.

Robson, S., and Sellers, J., (2011). I won't let go. [Recorded by Rascal Flatts]. On *Nothing like this* [Digital Download]. Nashville, TN: Big Machine.

Sciutto, M., Terjesen, M., & Bender Frank, A. (2000). Teachers' knowledge and misperceptions of Attention-Deficit/Hyperactivity Disorder. *Psychology in Schools, 37*(2), 115-122.

Schwartz, S. (2003). For good. [Recorded by Idina Menzel and Kristen Chenoweth]. On *Wicked: Original Broadway Cast* [CD]. New York, NY: Decca Broadway.

US Department of Education (2009). *Identifying and Treating Attention Deficit Hyperactivity Disorder: A Resource for School and Home*. Retrieved from http://www2.ed.gov/rschstat/research/pubs/adhd/adhd-identifying_pg4.htm l.