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SOCIAL WORK STUDENTS ABILITY TO IDENTIFY SIGNS OF AUTISM IN CHILDREN

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by

Heather Nicole Hopkins

June 2017

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Approved by:

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ABSTRACT

The purpose of this study was to examine the ability of students in the Master of Social Work (MSW) program to correctly identify signs of autism in children by completing a survey. This research project was conducted in collaboration with California State University, San Bernardino (CSUSB) and the MSW program by using MSW students as participants. The study used a survey designed with items that measured the knowledge of participants. The results of this study may be beneficial to the Director of Social Work, future MSW students, and professors to examine how well the current MSW program is preparing students to work with children that have autism. Ultimately, this study may improve the MSW program and curriculum that could benefit future social workers and their competence in the field.

The results of this study found significance between amount of previous work experience with children who have autism and their scores on the survey, as well as their experience with children who have autism from learning about it in a course, personal interaction, or work experience. However, there were not significant findings regarding MSW standing or field of interest and autism scores. This can be determined to mean MSW students have knowledge of autism from previous work experience, but there are no findings that indicate the MSW program at CSUSB is additionally preparing students with an understanding of the nature, primary symptoms of, and treatment of autism. This may also mean students are able to retain more knowledge regarding autism

based on their experiences directly working with children who have autism, rather than learning about it in a course. The findings of this study are beneficial to improve upon the CSUSB curriculum for the MSW program to incorporate autism into more courses to increase knowledge of autism symptoms, diagnostic criteria, and treatment options, as well as including more fieldwork opportunities with this population.

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CHAPTER ONE

INTRODUCTION

Problem Statement

The purpose of this study was to assess how successful master level students in the Social Work program (MSW) at California State University, San Bernardino (CSUSB) are at identifying signs of Autism Spectrum Disorder (ASD) in children. This problem presents a serious concern to social workers because research has shown that people, especially children, with autism are "falling through the gaps" regarding the lack of services they receive (Loynes, 2001). Autism is a lifelong neurodevelopmental disorder that is characterized by restricted, repetitive behaviors, impaired social skills, and impaired communication (Cashin, et al., 2012). According to the Center for Disease Control and Prevention, the high prevalence rate of autism is on the rise and is currently identified in 1 in 68 children as being on the ASD, with boys being 4 times higher at risk than girls (CDC, 2014).

Currently, awareness of autism is increasing, but not all social workers have received adequate training to be able to successfully identify the signs of autism. Parents often recognize concerning symptoms early in their child's development, but there may be considerable delay in confirming the diagnosis (Howlin & Asgharian, 1999). Autism Case Training (ACT) empowers practitioners to take appropriate action regarding a child's development by receiving training to become more proactive in the field and more educated on how autism may

appear in children (CDC, 2014). The ACT curriculum provides real-life scenarios that include early warning signs, screening, communicating concerns, making a diagnosis, early intervention and education, treatment for autism, and autism specific anticipatory guidance (CDC, 2014). Learning the signs would help social workers improve early identification, which is crucial when working with autism.

This issue of early detection and identifying signs of autism is important to all related parties. Not all parents or guardians have extensive knowledge of autism, especially those that are low socioeconomic status and do not have access to health care or resources to educate them on their child's health. However, many families receive assistance and support from social workers. If a social worker who works in case management, medical, or even private practice is knowledgeable of early warning signs of autism, they will be able to make a great difference in the child and family's life. They could provide the appropriate resources to aid the family in education and early intervention programs.

Purpose of the Study

The purpose of this study was to measure whether social workers from the MSW program are qualified to correctly identify signs of autism in children. This research is extremely important to identify how much knowledge current social work students receive regarding autism. There were many items that measured knowledge relating to identifying signs, diagnostic norms, affected population, and myths to identify whether or not social work students have the appropriate education and facts regarding autism. This research project was a quantitative

study and administered a survey to MSW students to identify their knowledge of autism. The data collected will be beneficial to share with the Director of Social Work at CSUSB to explain what the MSW program is doing successfully and what needs improvement in relation to education of autism. The data reflected a serious gap of education regarding diagnostic criteria and symptoms of autism that the program should reform and improve upon.

The faculty may attempt to solve this problem by incorporating the Autism Care Training (ACT) and making it mandatory for all students to ensure they will be educated and trained to help this population once they are working in the field. There are other educational options, such as hosting autism awareness workshops or inviting speakers to the university to educate social work students on the recent research regarding autism and training required.

Significance in the Project for Social Work

Early detection and intervention is a main predictor in functional outcome and social adaption in those who have autism (Bordini, et al., 2015). Late recognition of ASD may result in delays in accessing diagnostic services (Bordini, et al., 2015). With additional training on early warning signs in autism, social workers could play an instrumental role in improving the early diagnosis of children with autism. Social workers come in contact with families and children quite frequently and are able to help provide resources, especially to help families receive an early diagnosis if they can identify signs of autism in a child.

The topic of identification and diagnosis of autism is important to clients, agencies that provide early intervention services, social workers, CSUSB, and the field of social work. As social workers, we follow a generalist model that should encompass all aspects of micro and macro concerns as it relates to social work. Autism is a growing concern in our country and worldwide. In order to maintain social workers' dedication to ethical and professional competence, one would assume all social workers should be well versed in the detection and identification of autism to help guide families into programs and receive help as soon as possible.

This knowledge is extremely necessary and useful for social workers and all workers within the social sciences field. The results of this presents an opportunity to make a difference by increasing the awareness and knowledge amongst CSUSB students of social work and benefit the field of social work by improving upon the curriculum and exposure to education about autism. This research project studied MSW students ability to identify signs of autism in children based on their position in the program (foundation or advanced year), experience with children who have autism, work experience, and what field of social work they plan on working in (specialization).

CHAPTER TWO

LITERATURE REVIEW

Introduction

As previously discussed, it is necessary for social workers to be competent in working with children that have autism and be knowledgeable of the signs and diagnostic criteria. This section will provide an overview of research relating to background information regarding autism, improving care and treatment social workers provide to children with autism, how case management and assessments are currently handled by social workers, and limitations and lack of research currently presented involving social workers and children with autism. The purpose of this section is to gain insight from the literature and explore how social workers in the field are currently providing services and help to those who have autism and what barriers or limitations are presented. The literature will also help identify missing data and information that is necessary to understand social worker competency and will be further explored.

Literature Subsection One: Background

Kanner originally coined the term "autism" in 1943 to label a group of children who presented behaviors that lacked appropriate social communication and social interaction (Kanner, 1943). An extensive amount of research and findings have been conducted since then and now a major concern is treatment and awareness of autism. The Diagnostic and Statistical Manual of Mental Disorders (DSM) currently describes the diagnostic criteria for autism based on a

behavioral triad of impairment (Cashin, et al., 2012). The triad of impairment includes impaired abstraction, theory of mind, and linguistic processing (Cashin et al., 2012). This definition guides the diagnosis for autism, while presenting a basis for measurement in research and a framework for treatment interventions. Research explains that impaired communication and social interaction includes failure to develop peer relationships, a lack of social and emotional reciprocity, lack of seeking shared interests, lack of spoken language, inability to initiate conversation, and repetitive use of words. Typical behaviors that are observable in most children with autism include poor eye contact, disinterest in interaction with others, self-stimulating behavior (rocking, hand flapping), repeating same phrases or imitating others (scrolling, echolalia), and interest in repetitious activities (Cashin, et al., 2012).

Literature Subsection Two: Case Management

Research has indicated that parents are often the first to identify symptoms of autism early in their child's development (Hathorn et al., 2015).). However, there is sometimes delayed recognition that may result in delayed access to services (Hathorn et al., 2015). Social workers managing and providing child development resources are more likely to recognize children that are at higher risk for ASD (Davidoff et al., 2006). In the complex clinical environment, any observations that resemble signs of autism should be reported to help the child's early diagnosis. This article demonstrates the influential role social

worker's can fulfill by recognizing early signs of autism and referring for diagnosis and treatment when others have missed the signs.

Another study by Grether and colleagues in 2009 explored the increased diagnosis of autism in children by the California Department of Developmental Services. Possible explanations included broadened diagnostic criteria and increased awareness. However, many speculated that recent diagnoses may have previously been recognized as a different developmental disorder and now autism has become a "diagnostic substitution", rather than diagnosing a child as being intellectually disabled for example. This displays a scenario where social workers were aware of an accurate diagnosis for autism, but were over applying it to children that had symptoms of a different diagnosis than autism.

Casey and Elswick (2011) explored the importance of a social worker's role in the assessment of an ASD diagnosis. Social workers begin the assessment process in the "assessment phase" which includes having an extensive knowledge of possible diagnoses. An assessment is necessary for diagnosing a child with autism and for access to early behavioral interventions. Casey and Elswick explain that the more social workers understand the process involved, the more likely they will be able to explain the assessment process to the parents involved. Other practitioners, including pediatricians, may also complete an assessment, which will include a social worker in the referral process to provide available resources to help the family navigate the system.

Social workers provide support by preventing feelings of isolation and becoming overwhelmed as a parent, while linking the family with qualified professionals to begin the process of diagnosis for their child (Casey & Elswick, 2011). Social workers should encourage parents to engage in informal assessments that they can complete themselves, as well as other caretakers, to report any observable behaviors that would be identified as autism. These would include lack of eye contact, social skills, and communication. Social workers can also complete informal assessments and are asked to observe a child at home and in school to conduct observations and informal assessments to assist with the diagnostic process. It is also encouraged to then obtain a diagnosis from a well-trained child psychologist to ensure accurate results.

Furthermore, it is extremely important that social workers be educated on the importance of the assessment process, need for professional diagnosis, and providing support for parents (Casey & Elswick, 2011). Parents need help throughout this process and have many questions regarding the assessment process, diagnosis, and treatment options. The level of support varies for each parent, but most need consoling from their social workers as many have described their experience similar to the grieving process, as they grieve the loss of the "typical child" they thought they had (Ariel & Naseef, 2006). ASD is a difficult diagnosis for parents and social workers attempt to serve as a catalyst to provide and link support services for families. Most other helping professionals

do not provide this service, which is why it is crucial for the social worker to provide this support (Casey & Elswick, 2011).

<u>Literature Subsection Three: Improving Care and Training.</u>

Social workers are expected to respond to the rapid increase of children and families affected by ASD, but schools of social work have limited curricula related to topics regarding disabilities (Mogro-Wilson et al., 2014). An article by Mogro-Wilson and colleagues (2014) presented a course that could prepare social workers to work with individuals with ASD by taking an empowerment approach. This included focusing on services, rehabilitation as it relates to human rights, social inclusion, and quality of life. This article explains how social work has followed the biomedical model when teaching about individuals with disabilities, which focuses on overcoming a limitation (Roulstone, 2012). A course should be taught from a strengths-based and empowerment perspective by highlighting the capabilities and opportunities, rather than the impairments or disabilities of individuals.

Parents have reported that social workers do not always understand ASD and its causes, which shows that there is a need for ASD specific training in the field of social work (Preece and Jordan, 2007). In the USA, 75% of social workers have reported that they have worked with individuals with developmental disabilities, including autism (NASW, 2006). Additionally, the Council on Social Work Education (CWSE) mandates social work programs to teach diversity issues, which includes disabilities, but is not always included in the curriculum.

There was a course developed from this study entitled Autism Spectrum

Disorders: Social Work Practice and Policy Issues which could be offered as an elective within an accredited Master's in Social Work program to advance the competence of students with knowledge and skills related to ASD (Mogro-Wilson et al., 2014). A course similar to this could greatly improve MSW students knowledge and understanding of autism, increasing their ability to help children in the field as social workers.

Literature Subsection Four: Limitations

The literature discussed was plentiful as it related to autism, however, there was a gap in research concerning social workers' knowledge of this population. There were a few articles that explored the relationship amongst families with a child who had autism and working with a social worker, but did not specifically explore the knowledge and expertise that social workers were able to aid the family with.

Throughout the research, there were very small sample sizes used which limited the results. As mentioned, there was no data that measured the knowledge or effectiveness of social workers at identifying signs of autism and aiding the process with families. Because of this, data is greatly limited to explore the relationship and areas to improve upon. It would be assumed that each family's experience varies and that would be a limitation to ensure reliability in research studies since it is based on subjective opinions and individual experiences.

Theories Guiding Conceptualization

The theory guiding conceptualization with this population is an ecological approach to providing services, based on systems theory (Mogro-Wilson et al., 2014). In systems theory, the family is considered a whole dynamic that is each connected as a subsystem. Each layer is analyzed to ensure that each unit in the family is being supported in the process. When using systems theory, it is important that the whole is greater than the sum of its parts, meaning individuals can influence the environment and vice versa. In regards to this research, when completing an assessment a social worker should be interested in the needs of the child, family, school, community, etc. When the social worker encompasses all systems, it helps to ensure that there will be successful outcomes (Mogro-Wilson et al., 2014).

When working with a child that has autism, the child is the social worker's primary interest as their needs are most important. However, keeping systems theory in mind, it is just as important to link the family with support services to help them through this process. When making referrals, the child is looked at as a whole with many subsystems. Most importantly, early intervention services are essential in treating a child with autism as therapy is time sensitive and plays a crucial role in future functionality and developmental progress (Mogro-Wilson et al., 2014). However, it is just as important to link the child and family to services regarding future school opportunities and age appropriate services that will help the child throughout adolescence and beyond.

Preliminary Thoughts on Design

The purpose of this study is to explore the knowledge of students in the MSW program at identifying signs of autism in children. In order to receive the most accurate results, it was best to utilize a survey that allowed participants to self-report. This survey was distributed amongst MSW students by creating an online survey that was accessible to all students. An administrative assistant within the MSW program emailed all MSW students requesting they complete the survey, while providing informed consent and purpose of the study. It was found that the most efficient data source, as mentioned, was direct responses from social work students.

Independent variables within this study included MSW standing within the program, foundation year or advanced year. The second independent variable was participants' experience being exposed to autism (learning about it in a course, personal interaction, or work experience with children who have autism. The third independent variable was work experience with children who have autism, and the fourth independent variable was field of interest after graduation, (medical, child welfare, or mental health). These varied with each participant and it was assumed that placement in the program, experience with autism, or interest in the field would help vary the results amongst the population of students. Dependent variables will include the participants' answer to each item that is measuring their likelihood of identifying signs of autism and displaying accurate knowledge of the diagnosis.

Feasibility

In order to carry out this study, I have received approval from the Director of Social Work program, Dr. Laurie A. Smith. Dr. Smith is the Director of the program and had to approve the survey before I was able to distribute the survey to participants. Regarding the survey, more research was conducted to include items that would ensure the survey is a sound measurement with reliability and validity amongst all participants.

I also facilitated a pilot study with my finalized survey to identify any discrepancies or mistakes within the survey before I distributed the final version to my actual participants. I anticipated the likelihood of incomplete or unreturned surveys from participants since many students do not regularly check their email or complete surveys on the Internet. Because of it this, it was important to receive an adequate number of participants. Another issue with an online survey is the chance that some participants may have completed the survey more than once, which was out of my control because the survey is anonymous.

CHAPTER THREE

METHODS

Introduction

This chapter provides a clear overview of the research design, sample, and techniques used to collect data for this research study. The study was designed to be a quantitative study to gather information about MSW students' ability to correctly identify signs of autism in children. A survey questionnaire was developed for this study that participants completed and data was collected.

Study Design

The purpose of this research study is to explore the ability of students in the Master's of Social Work (MSW) program at CSUSB to identify signs of autism in children by administering a brief survey. The most effective research design to gather meaningful data is a quantitative study to clearly identify whether or not a student can report valid information needed to identify autism. A quantitative approach was successful because it allowed for control and authority over the design of the study and collecting data. When deciding to use a survey, it seemed most beneficial to keep questions closed ended to avoid any possible test-taker fatigue from requiring too much writing or an extended period of time on any question. Additionally, inputting the data was much more concise and clear, rather than coding and grouping individual qualitative responses that would differ greatly.

Limitations within this study include the lack of self-expression and explanations the participants were able to express when answering questions in the survey. Since a quantitative approach was chosen to better suit the validity of the study, it limited the diversity of answers and the opportunity for participants to explain their rationale for each answer. This may have been helpful to better explain why questions were answered incorrectly or to better identify why there was a lack of knowledge.

Sampling

Data was obtained by sampling MSW students that were currently attending CSUSB. The survey was created using an online database, SurveyMonkey, and participants were contacted via email and provided a hyperlink to access the survey online. Participants included full-time, part-time, and online students enrolled in the MSW program at CSUSB, which provided a sample size of approximately 250 students. However, the survey was only completed by 52 students, which was a reasonable sample size to use in this study due to the number of students in the MSW program that are available and willing to complete surveys for peers.

The type of sampling that was most efficient for this study was nonprobability sampling, better known as convenience sampling. This approach
allowed for a larger sample size to recruit more participants. However,
administering surveys online created limitations because not all students
completed them. Convenience sampling was appropriate due to the setting and

amount of participants within the MSW program to measure their ability to identify autism in children.

Data Collection

Most questions in this survey include items from a previous study researched by Gillespie-Lynch, et al. that used two scales: Autism Awareness Scale and Targeted Questions to Assess Specific Learning Objectives. These scales were combined to properly assess the participants' ability to identify and recognize common signs of autism in children (Gillespie-Lynch, et al., 2015). Items included statements that participants were able to answer as true or false, such as "Children that have autism are also intellectually disabled". All questions were closed ended and measured as nominal variables. Independent variables included students' standing within the MSW program: foundation year or advanced year (IV1), experience with children who have autism; none, learned about in a course, personal interaction, and work experience (IV2), experience working with children who have autism (IV3), and field of interest after graduation, i.e. medical, child welfare, or mental health (IV4). These variables were measured nominally and analyzed in SPSS using logistical regression, but there were not significant bivariate analysis findings. Because of this, ANOVA tests were utilized to measure significance between the independent variables and dependent.

These items addressed many aspects and symptoms of autism, as well as many myths that are commonly believed as truths to those who are not well

educated on the subject of autism. This survey was pretested in a pilot study to identify if the questions made sense to participants and were measuring what was intended. Limitations of the survey included the subjectivity of some questions that were written to express specific beliefs, leading participants in a certain direction to disagree or agree. Additionally, limitations included some technical difficulties when administering the survey online via SurveyMonkey to students via email.

Procedures

An email was sent to contact the director of the MSW program to explain the purpose of the study, clear assurance of protecting the confidentiality of participants, and request the survey be distributed to all MSW students enrolled in the program. Once approval was granted, the survey was emailed to participants by providing a hyperlink to access the survey on the SurveyMonkey website. Before beginning the survey, each participant was given a brief introduction that explains the purpose of the study and informed consent. The participants were informed that they could stop participating in the study at any time and they were completing the survey on a voluntary basis.

The survey took approximately 5-10 minutes for each participant to complete. The online survey was open on the database for two months, allowing ample time for participants to complete the survey. Participants were encouraged to take the survey in an environment to allow for comfort and focus when completing the survey.

Protection of Human Subjects

The anonymity of participants was protected by not collecting any identifiable personal information. Informed consent was provided to all participants that clearly stated the purpose of the study and informed participants that their participation was voluntary and they were able to withdraw at any time. Once students completed the survey, they were provided with a debriefing statement. The debriefing statement informed participants of who to contact if interested in results of the study or if there were any questions or concerns regarding the study.

Data was collected and inputted into the SPSS analytical software program. Data collected was saved on a password protected flash drive to protect data and anonymity of the participants. When the data is inputted and the study is completed, all data will be destroyed and the flash drive was reformatted.

Data Analysis

A quantitative method was utilized in this study to assess the MSW students' ability to recognize signs of autism in children. Because there were four independent variables measured, the measurement that worked most efficiently was One-Way ANOVA. As mentioned, the four independent variables included were MSW standing, experience with children who have autism, work experience, and field of interest within social work. The primary independent variable that was expected to show most importance in this study was IV1: MSW standing, which is measured by whether a participant is currently a foundation

year or advanced year student. When running One-Way ANOVA test, all four IV's were measured in relation to the autism scores on the survey. This is how significance was determined and found between MSW students work experience and their score on the survey (autism score).

Summary

This chapter provided an overview of the procedures and design of the study used to complete this research. The method design that was used was explained in detail, as well as the sampling procedures involved. Furthermore, data collection, survey instruments, data analysis, and protection of confidentiality were discussed in detail to further explain the process and methods involved in this research study. This study was conducted to explore MSW students' ability to identify signs of autism in children.

CHAPTER FOUR

RESULTS

Introduction

This chapter consists of data analysis, interpretation of findings, and implications for social work micro and macro practice. The demographics of the participants will be discussed, followed by the key variables, which include student's knowledge, experience with children with autism, and work experience.

Data Analysis

Demographic

The current study consisted of 53 participants (see Table 1). There were 25 foundation year students (47.2%) and 27 advanced year students (50.9), one participant did not identify their MSW standing.

Table 1. Demographic Characteristics of Participants

9 ,	Frequency	Percent
Variable	(N)	(%)
MSW Standing		
Foundation Year	25	47.2
Advanced Year	27	50.9

To gather further information about the participants, they were asked additional questions regarding experience and field of practice (see Table 2). Level of experience was categorized by how many areas a student had exposure to autism whether it be from a course, personal experience, or work experience. Many participants reported having experience in one area (54.7%), followed by no experience (20.8%), two areas (15.1%), and three areas (9.4%). Work experience was categorized by amount of years worked with less than one year being the highest (58.5%), followed by 2-4 years (24.5%), 5+ years (11.3%), and 3 participants did not answer. Lastly, the majority of students reported Mental Health (50.9%) being their preferred field of practice, followed by Child Welfare (22.6%), Medical (15.1%), Undecided (7.5%), and Other (2%).

Table 2. Experience and Field of Study of Participants		
	Frequency	Percent
Variable	(N)	(%)
Experience		
No Experience	11	20.8
One Area	29	54.7
Two Areas	8	15.1
Three Areas	5	9.4

Work Experience

	Less than one year	31	58.5
	2-4 years	13	24.5
	5+ years	6	11.3
	Unknown	3	5.7
Field of Practice			
	Mental Health	27	50.9
	Child Welfare	12	22.6
	Medical	8	15.1
	Undecided	4	7.5
	Other	2	3.8

The participants' demographic information was analyzed to measure significance in relation to their total scores on the knowledge-based questions about autism, referred to as "autism score". T-tests were utilized to measure significance; there were no significant findings regarding participant's MSW standing, meaning foundation year and advanced year students autism scores did not vary significantly. Similarly, there were not significant findings related to 'field of interest' and autism score.

However, there were significant findings such as 'experience with children who have autism' and autism scores. An ANOVA test was utilized and found

significant difference between means, (F (3, 48) = 4.52, p = .007). There was also significance found in relation to work experience and autism score. An ANOVA test was ran and found significance in years of work experience and knowledge of autism, (F (2. 46) = 3.47, p= .039). However, a Post-Hoc test could not identify significant differences within the groups themselves.

Knowledge

The survey included questions based on knowledge regarding symptoms and behaviors of autism that are beneficial for social work professionals in order to be best prepared when entering the field. There were 20 knowledge questions on the survey, the autism scores ranged from 13 to 20. The scores were evenly distributed as evidenced below in Figure 1.

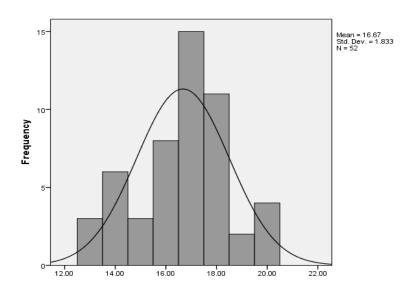


Figure 1. Number of Correct Answers on Knowledge Test

The most common score on the survey was 17 received by 15 participants (28.3%). Three participants scored 13, which was the lowest score, (5.7%); while four participants scored 20, the highest score (7.5%) as evidenced in Table 3. There were five questions that were discarded due to unclear wording that could have been interpreted several ways, making it difficult for the participants to answer correctly (#6, 8, 13, 17, and 22). There were 7 questions that more than 25% of participants answered incorrectly, which were #6, 10, 12, 13, 17, 18, and 22. However, #10 stated, "Autism cannot be successfully diagnosed until age 5", which 22 participants (41.5%) answered incorrectly. Another question that many answered incorrectly was #12. There were 21 participants who answered this question incorrectly (39.6%). The implications of these knowledge questions regarding diagnosis and symptoms of autism will be discussed further in Chapter Five. There were 7 questions on the survey that more than 90% of the participants answered correctly. Two of the questions 100% of participants were able to answer correctly were #15 and 24, about knowledge regarding treatment of autism and symptoms of social impairments.

Table 3. Autism Scores

Table 3. Autism Scores	Frequency	Percent
Variable	(N)	(%)
Autism Scores		
Autisiii Scores		
13	3	5.7
14	6	11.3
15	3	5.7
16	8	15.1
17	15	28.3
18	11	20.8
19	2	3.8
20	4	7.5

CHAPTER FIVE

DISCUSSION

Introduction

This chapter provides an overview of the major findings from this study, as well as the importance the findings are to the field and education of social work regarding having adequate knowledge of autism symptoms, diagnostic criteria, and treatment options. A brief discussion on how the limitations of the study could have influenced the researcher's findings are also included in the chapter. Lastly, this chapter also discusses recommendations for MSW programs to improve upon the curriculum and fieldwork opportunities to improve student's knowledge and better prepare them to work with children that have autism in the field after graduation.

Discussion

As mentioned, there were no significant findings regarding participant's MSW standing, which means foundation year and advanced year students autism scores did not vary significantly. This can be concluded to mean either autism information is being taught during the foundation year and retained to advanced year or students are entering the MSW program with previous knowledge regarding autism and do not continue to learn more. One would assume there would be some learning process that takes place during the beginning of foundation year to beginning of advanced year that would Similarly,

there were no significant findings related to 'field of interest' and autism score, which may also mean all students are exposed to same amount of material within the program regardless of specialization. This can be seen as a positive aspect, meaning students are learning from a generalist practice of social work with all students receiving the same education.

There were a total of five questions on the survey that were discarded because the correct answer was not as clear as other questions. For example, question #8 stated, "All children with autism are able to speak – True or false". This question was thrown out due to overgeneralization. Research has that shown children with autism can speak, but many struggle with communication skills and the ability to speak. Similarly, the other questions that were thrown out were measuring knowledge of symptoms and diagnostic features of autism, but could have been read as misleading or 'tricky 'and resulted in mixed answers. Another example is #13, which stated, "Children with autism do not show attachments, even to parents/caregivers." Questions that contained words such as 'always', 'do not', or any other definitive meaning were determined to be leading questions and lacked validity.

The questions that more than 25% got incorrectly are important to discuss because it identifies a gap of knowledge amongst the participants. For example, #10 states "Autism cannot be successfully diagnosed until age 5". This is a very straight forward question measuring participants knowledge of diagnostic criteria of autism and 41.5% of participants answered this incorrectly stating it was 'true'.

This is alarming because research states autism can be detected and diagnosed as early as 1-2 years old. The implications of social workers not knowing this means they may not be know to screen for symptoms of autism in children due to false assumptions of age, resulting in lack of resources, early intervention programs, and improvement with symptoms.

Additionally, question #12 stated, "One of the first signs of autism is delayed physical movement" which 39.6% of participants answered incorrectly by stating it was 'true'. The correct answer to this question is 'false' as one of the first signs of autism is delayed verbal communication. There is no research that suggests a symptom of autism is delayed physical movement. This could mean participants are confusing symptoms of autism with other disorders, such as cerebral palsy. Also, MSW students may later be incorrectly diagnosing or incorrectly identifying signs of autism because they lack factual knowledge of what the symptoms may look like.

However, positive findings included 100% of participants answering #15 and 24 correctly, which included knowledge regarding treatment of autism and symptoms of social impairments. This shows that MSW students are knowledgeable about appropriate treatment options for autism and are aware of social impairments, which is a major symptom of autism.

Recommendations for Social Work Practice

There were limitations of this study, which include a small sample size and lack of variety amongst participants as they are all in the same MSW program at

the same university. It may be beneficial in the future to sample a larger sample size as well as MSW students from several programs to research how specific MSW programs compare to others in providing education regarding autism. Another limitation was the wording of the questions in the survey and lack of validity that caused many of them being thrown out. They were measuring important aspects of autism and the results would have helpful to know if the questions were statistically sound. Future Social Work research should explore this topic further, as very little research was found when conducting this study. Social workers have an ethical obligation to provide best service to all clients and being informed about autism is an extremely important aspect, as many social workers work closely with children and families. Lastly, MSW programs should conduct annual surveys that measure specific knowledge level, such as autism, to ensure their programs are best educating and preparing MSW students to service many populations in the field.

Conclusion

This study explored how knowledgeable MSW students at CSUSB are regarding symptoms, diagnostic criterion, and treatment options for children who have autism. There was not a lot of research currently studying this research question, which can greatly impact the field of social work and MSW programs. Autism is continually increasing in children and will only become more important in this field. This study showed that knowledge of autism varied amongst participants, however, the majority of participants scored 17/20, meaning they

answered 85% of questions correctly. The questions that many participants answered incorrectly were discussed and recommendations were suggested for future research and MSW program development. Overall, most participants were able to correctly identify common symptoms, diagnostic criterion, as well as treatment options for children with autism.

APPENDIX A AUTISM SURVEY

1.	MSW	Standing

- a. Foundation year (1st year full-time, 2nd year part-time)
- b. Advanced year (2nd year full-time, 3rd year part-time)

2. Experience with children who have autism

- a. No experience
- b. Learned about autism in a course
- c. Personal interaction with children who have autism
- d. Work experience with children who have autism

3. Work experience with children who have autism

- a. Less than 1 year
- b. 2-4 years
- c. 5 + years

4. Field of interest you plan to work in after graduation

- a. Mental Health
- b. Child Welfare
- c. Medical
- d. Undecided
- e. Other

5. Autism is more common to be diagnosed in boys than girls.
a. True
b. False
6. Children that have autism are also intellectually disabled.
a. True
b. False
7. Autism can be recognized by distinct facial features.
a. True
b. False
8. All children with autism are able to speak.
a. True
b. False
9. Common behaviors found in children with autism include repetitive behaviors
such as rocking or hand flapping.
a. True
b. False
10. Autism cannot be successfully diagnosed until age 5.

b. False
11. Autism is one of the fastest growing developmental disorders in the U.S.a. True
b. False
12. One of the first signs of autism is delayed physical movement. a. True
b. False
13. Children with autism do not show attachments, even to parents/caregivers.
a. True
b. False
14. Children with autism have normal sensory abilities.
a. True
b. False
15. Children with autism can learn behaviors and make progress by receiving
early intervention therapy.
a. True

a. True

b. False
16. Children with autism must follow specific diets.
a. True
b. False
17. Children with autism have to be in special education classes.
a. True
b. False
18. A common sign of autism is repeating what others say.
a. True
b. False
19. Individuals with autism may engage in self-injurious behavior.
a. True
b. False
20. Children with autism rarely show signs of regression in early development
a. True
b. False

21. No eye contact must be present for an individual to be diagnosed with
autism.
a. True
b. False
22. Children with autism do not like to be touched.
a. True
b. False
23. Parental behavior is believed to be an element that causes autism.
a. True
b. False
24. Autism effects the communication and social areas of development.
a. True
b. False
25. Autism is primarily seen in middle class American families.
a. True
b. False
26. Autism is not a lifelong diagnosis.

- a. True
- b. False

Developed by: Heather Nicole Hopkins

APPENDIX B INFORMED CONSENT

College of Social and Behavioral Sciences School of Social Work

INFORMED CONSENT

The study in which you are asked to participate is designed to examine the ability of students in the master of social work (MSW) program at California State University, San Bernardino (CSUSB) at identifying signs of autism in children. The study is being conducted by Heather Hopkins, a graduate student, under the supervision of Dr. Carolyn McAllister, Associate Professor in the School of Social Work and the BASW Program Director at CSUSB. This study has been approved by the Institutional Review Board Social Work Subcommittee at CSUSB.

PURPOSE: The purpose of the study is to examine MSW students' ability to identify signs of autism in children.

DESCRIPTION: Participants will complete a survey regarding common facts about autism, which will be answered to the best of the participant's knowledge.

PARTICIPATION: Your participation in this study is completely voluntary. You may refuse to participate in the study or discontinue your participation at any time without any consequences.

DURATION: It will take approximately 5-10 minutes to complete the survey.

RISKS: There are no foreseeable risks to participants.

BENEFITS: There will not be any direct benefits to the participants.

CONTACT: If you have any questions about this study, please feel free to contact Dr. McAllister at (909) 5377-5559.

RESULTS: Results of the study can be obtained from the Pfau Library ScholarWorks database (http://scholarworks.lib.csusb.edu) at California State University, San Bernardino after July 2017.

	*	
Please place an X mark here		Date

909.537.5501

5500 UNIVERSITY PARKWAY, SAN BERNARDINO, CA 92407-2393

The California State University - Bakersfield - Channel Islands - Chico - Dominguez Hills - East Bay - Fresno - Fullerton - Humboldt - Long Beach - Los Angeles Maritime Academy - Monterey Bay - Northridge - Pornona - Sacramento - San Bernardino - San Diego - San Francisco - San Jose - San Luis Obispo - San Marcos - Sonoma - Stanislaus

APPENDIX C AGENCY SUPPORT LETTER

March 14, 2016

California State University, San Bernardino 5500 University Parkway San Bernardino, CA 92407

Dr. Smith,

My name is Heather Hopkins and I am a second year MSW student in the part-time program at CSUSB and am beginning my research project. The project is entitled, "Social Work Students Identifying Signs of Autism in Children". The purpose of this study is to examine the ability of students in the MSW program to correctly identify signs and of autism in children by completing a survey.

This study will utilize a quantitative research design specifically a survey, as mentioned. The survey will ask yes/no and true/false questions that will detect the knowledge students have regarding signs of autism in children. Most of the items in the survey were used in a previous study regarding signs and myths of autism. The purpose of the survey is to identify how likely MSW students are to answer questions regarding autism correctly and will predict their ability to identify children who have autism when working in the field of social work following graduation. The survey should take participants 5-10 minutes to complete. If this study is approved, fliers to advertise the study will be put in students' mailboxes in the resource room and sent out in an email to all MSW students.

Informed consent will be provided to each participant when they click the hyperlink to participate in this study. Informed consent will clearly state that all participation is voluntary and there are no incentives for participation. Additionally, all participants' identities will remain anonymous, as no identifying information will be requested. All surveys will be destroyed at the conclusion of the study. The results of the study will be given to you, the Director of the Social Work program at CSUSB. It is my hope that the results of this study will find whether students that graduate from the MSW program are qualified to work with this specific population, children with autism, by obtaining knowledge of identifying signs.

I appreciate your consideration of this research project request.

Respectfully,

Heather Hopkins, MSW Student

Developed by: Heather Nicole Hopkins

REFERENCES

- Ariel, C. & Naseef, R. (2006). Voices from the spectrum: Parents, grandparents, siblings, people with autism, and professionals share their wisdom. Philadelphia: Jessica Kmgsley.
- Bordini, D., Lowenthal, R., Gadelha, A., de Araujo Filho, G. M., J. Mari, J., & Paula, C. S. (2015). Impact of training in autism for primary care providers: a pilot study. *Revista Brasileira De Psiquiatria*, *37*(1), 63-66
- Casey, L. B., & Elswick, S. E. (2011). The social worker's role in the assessment of Autism Spectrum Disorder. *Children & Schools*, *33*(3), 176-183.
- Cashin, A., Gallagher, H., Newman, C., & Hughes, M. (2012). Autism and the cognitive processing triad: A case for revising the criteria in the diagnostic and statistical manual. *Journal of Child and Adolescent Psychiatric Nursing*, *25*(3), 141-148.
- Centers for Disease Control and Prevention (CDC) (2014). 'Prevalence of Autism Spectrum Disorders—Autism and Developmental Disabilities Monitoring Network, United States, 2014', Morbidity and Mortal Weekly Report, vol. 61, no.3.
- Davidoff, M. J., Dias, T., Damus, K., Russell, R., Bettegowda, V. R., Dolan, S., et al. (2006). Changes in the gestational age distribution among U.S. singleton births: Impact on rates of late preterm birth, 1992 to 2002. Seminars in Perinatology, 30(1), 8–15.
- Gillespie-Lynch, K., Brooks, P., Someki, F., Obeid, R., Shane-Simpson, C., Kapp, S., & Smith, D. (2015). Changing College Students' Conceptions of Autism: An

- Online Training to Increase Knowledge and Decrease Stigma. *Journal Of Autism* & *Developmental Disorders*, *45*(8), 2553-2566.
- Grether, J. K., Rosen, N. J., Smith, K. S., & Croen, L. A. (2009). Investigation of Shifts in Autism Reporting in the California Department of Developmental Services. *Journal Of Autism & Developmental Disorders*, 39(10), 1412-1419.
- Hathorn, C., Alateeqi, N., Graham, C., & O'Hare, A. (2014). Impact of Adherence to Best Practice Guidelines on the Diagnostic and Assessment Services for Autism Spectrum Disorder. *Journal Of Autism & Developmental Disorders*, *44*(8), 1859-1866.
- Howlin, P., & Asgharian, A. (1999). The diagnosis of autism and Asperger syndrome: findings from a survey of 770 families. Developmental Medicine and Child Neurology, 41, 834–839.
- Kanner, L. (1943). Autistic disturbances if affective contact. Nervous Child, 2, 217-426.
- Loynes F (2001) *The Impact of Autism.* The All Party Parliamentary Group for Autism.
- Mogro-Wilson, C., Davidson, K., & Bruder, M. (2014). An empowerment approach in teaching a class about autism for social work students. *Social Work Education*, 33(1), 61-76.

- National Association of Social Workers (2006) Assuring the Sufficiency of a Frontline Workforce: A National Study of Licensed Social Workers [online]. Available at: http://workforce.socialworkers.org/studies/natstudy.asp, accessed 19 May 2011.
- Preece, D. & Jordan, R. (2007) 'Social workers' understanding of autistic spectrum disorders: an exploratory investigation', British Journal of Social Work, vol. 37, pp. 925–936.
- Roulstone, A. (2012) "Stuck in the middle with you": towards enabling social work with disabled people', Social Work Education, vol. 31, no. 2, pp. 142–154.