5-2016

Interventions that Support At-Risk Children within School Settings: A Systematic Review

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A Systematic Review

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MSW Clinical Research Paper

Presented to the Faculty of the

School of Social Work

St. Catherine University and the University of St. Thomas

St. Paul, Minnesota

in Partial fulfillment of the Requirements for the Degree of

Master of Social Work

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Abstract

In this systematic review I examined current literature on interventions that help at-risk

children succeed in schools. To find clinical intervention studies that supported at-risk

children in the school system, I used exact keywords to search for the actual intervention.

Using the two databases, Social work abstracts and Clicnet, I located nine intervention

studies that provided key data on intervention offered, population served, and outcomes

collected. In these results I identified three main themes: yoga/mindfulness, school based

mental health support, and parental engagement. Based on these themes, I also

recommend further research into ways school professionals can implement different

interventions within a school day to help children who struggle academically.

Acknowledgments

I would like first and foremost to thank my son and my parents for their support over the last three years and especially during the nine months of this project. My son was a constant source of entertainment and support. He never once doubted in my ability to finish this project and continually encouraged me to do so. The understanding my son had of my very busy schedule and the willingness to be flexible to allow me to do my homework is something I will never forget. My parent's continued encouragement and rallying around to help me with anything I needed was a huge source of support. I will forever be grateful for all that you provided me with these past three years. I couldn't have done the last nine months of this project without you all. A million thank you's is far from enough for all of the love, guidance, and support you all have showed.

Next, I would like to thank my research chair Kari Fletcher. I greatly thank you for your patience, guidance, and support throughout this project. I am so appreciative of the time and feedback you also provided to me for this project. To my committee members, Laura Livesay and Lori Kinstad, I am so very thankful for your time and commitment to my project. Without your patience and support, this project would not have been possible. The expertise provided in school social work and with adolescents was very helpful.

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Introduction

Poverty in the United States is a becoming a more widespread problem as the income gap deepens between the rich, middle class, and poor. Children are the most common victims of this income gap (Masten, 2012). Low income children experience "more family turmoil, violence, separation from their families, instability, and chaotic households" than children from higher-income households (Evans, 2004, p. 1). These problems are not just contained to the home; they are likely to follow children into their school settings (Masten et al., 1997).

In the United States, families with children are three times more likely to experience poverty than older adults (Children's Defense Fund, 2014). In 2014, 29.15% of children living in urban areas were identified as poor (Children's Defense Fund, 2014). To be considered poor, a household of four must either have an annual income of $23,492 or less or earn $1,958 or less per month (Children's Defense Fund, 2014). The National Center for Children in Poverty (2015) found that 5.7 million children in the United States were living in poor families. In addition, children of color were at higher risk of living in poverty: one in three children of color were poor (Children's Defense Fund, 2014).

Generally, the United States has addressed poverty among children through the creation and implementation of policies aimed at reducing child poverty (Hamilton Project, 2014). A historical milestone that has had a direct impact on low-income children is the McKinney-Vento Homeless Assistance Act of 1987. This Act made

homeless children "automatically eligible for free meals at school" and dictated that they "cannot be excluded from any enrichment programs or supplemental services" (Mohan & Shields, 2014, p. 191). This meant a low-income child experiencing food insecurity at home was guaranteed two free meals at school. The U.S. Government mandated that these meals are nutritionally dense and representative of all food groups. Good nutrition helps children focus in school while poor nutrition will hinder a child's progress in the classroom (Jyoti, Frongillo, & Jones, 2005).

Even after policies are put into place to help children in poverty, barriers still exist that make it difficult to help these children. One significant barrier to helping children in poverty is how challenging it is to identify them. Poverty can be invisible, leading to a lack of knowledge within the school system as to who is struggling (Masten et al., 1997). Furthermore, families in poverty are often forced to be transient, leading to a lack of prolonged access to a child in any one school or community (Masten et al., 1997). Unless a child self-identifies as poor, it is very difficult to ascertain if he or she is struggling, and because children often attempt to hide their poverty to avoid special treatment or attention (Mohan et al., 2014), child poverty is very difficult to identify. Teachers and school officials also lack training in identifying or understanding poverty. According to Mohan and colleagues (2014), "Too few [school officials] have attempted to understand the lived experience of poverty and its impact on educational experiences through the eyes of children and youth" (p. 1).

Active relationship-building between teachers and parents is crucial, especially when parents are focused on basic survival like securing safe housing or finding food for their families (Masten et al., 1997). If a school is viewed as a safe zone it can play an

important role in helping children feel safe and comforted when their home life is chaotic. "Schools have the potential to provide developmental havens of safety, stability, and care for children living in poverty whose lives are complicated by homelessness or residential instability" (Masten et al., 1997, p. 43). Teacher support and parent relationship building is important to a low-income child and could possibly foster the desire to complete school and achieve success despite their circumstances.

Further understanding the issues children are facing outside of school is important to understanding how to help the child in school. One issue that many low income families face is lack of affordable housing. Without affordable housing, low income families can experience housing instability, which can lead to periods of homelessness, creating problems for children in school. A lack of affordable housing can be the biggest reason why a family is pushed into homelessness (Grineski, 2014). Masten (2012) found that "more than 1 million students (1,065,794) in the United States were identified as homeless" (p. 363). Fantuzzo, LeBoeuf, Chen, Rouse, and Culhane (2012) also reported that "eight percent of children from low-income families experience homelessness in the course of a year" (p. 393). Lack of affordable housing therefore contributes to school challenges, since "homeless and highly mobile students have even greater risk for academic problems" (Masten, 2012, p. 363). Shelters can be noisy and overcrowded which does not to contribute to a positive learning environment for after school homework.

Additionally, many families that are in shelters move to other cities or states due to finding more affordable housing after a short period of time. This mobility of families can also contribute to academic difficulties. For children, "experiencing both

homelessness and school mobility was the most detrimental for both forms of educational well-being" (Fantuzzo et al., 2012, p. 393). A child needs a safe place to live in order to experience success in school and to build up a relationship with one school. Mohan and colleagues (2014) found that "less than one-quarter of homeless elementary school students nationwide are proficient in math (21.5%) and reading (24.4%) as opposed to over one-third (39.6% and 33.8%, respectively) of their housed peers" (p. 191). Children that have changed schools several times may miss receiving the extra attention that is necessary to help better those numbers because of the school changes and/or missed school days (Masten et al., 1997).

Until the systemic causes of poverty in the United States can be fully addressed, the reality is that children who do not have safe homes or homes at all will be part of the U.S. school system (Masten et al., 1997). School may be the most stable part of these children's lives, yet they are at risk of failing in school due to factors resulting from their homelessness (Masten et al., 1997). Therefore, it is important to explore ways for schools and social workers to intervene to help poor and homeless children succeed in school. Teacher support during the school day can be beneficial in providing a calming environment to help the child learn. Homework help may also be available during this time of extra support, which the child may not receive at home (Davis, Gabelman, & Wingfield, 2011). This all contributes to a positive learning environment where the child can learn and succeed.

With this goal in mind, I conducted a systematic review of interventions that support at-risk children within school settings. This review discovered that yoga, school-

based mental health supports, and parental engagement were beneficial in helping

children succeed in school.

Literature Review

Research on school as an important area for helping low-income children succeed has continued to increase. School success can be achieved if schools actively help to break the cycle of poverty for a new generation. Reviewing research on school based interventions will continue to benefit low-income children struggling to succeed in school.

The cycle of poverty can be broken with education and a determination to succeed. A high school diploma and/or college degree is the key to achieving long term financial success and stability (U.S. Department of Education, 2015). The U.S. Department of Education (2015) reported that "in 2013 median earnings for young adults with a bachelor's degree were $48,500, compared with $23,900 for those without a high school credential, $30,000 for those with a high school credential, and $37,500 for those with an associate's degree" (p. 1). Education is the key to higher earning potential and breaking the poverty cycle (U.S. Department of Education, 2015). In order to motivate a child to achieve higher education, success has to be established at an early age (Evans, 2004). Throughout this literature review, several important themes emerged. First, further understanding is needed of the historical reasoning behind poverty and government response to it. Second, it is important that schools and social workers understand the potential for harm when working with children and the ethical concerns within that population. Third, these interventions should be based in a theory driven practice, a research and evidence based practice model, and an extensive literature review on the interventions that are successful in helping low-income children succeed in school.

In order to establish best practices for serving at-risk children in schools, it is important to have a thorough understanding of the historical and political context for poverty in the United States (Evans, 2004). It is also important to understand what government programs are available and how they are designed. Our modern understanding of poverty is a result of our industrialized world, and since the industrial revolution, children have been helpless victims of poverty (Evans, 2004). Early intervention programs were created by the federal government in the 1960's to combat the devastating effects of poverty on children (Schippers, 2014). These programs were created because "achievement gaps between children from low-and high-income families appear early in life and then persist through high school and afterwards" (The Hamilton Project, 2014, p.6). Early intervention programs aim to help at-risk children overcome barriers to education and achievement early to prevent them from continuing the cycle of poverty.

The first U.S. government initiative to combat poverty was the creation of the Head Start Programs (Anderson et al., 2003). Head Start was the initial start for children to see long-term success in schools. It was created in 1965 by the U.S. government to help prepare low income children for school by teaching school readiness skills (Anderson et al., 2003). The Head Start Programs were influential in changing lives and futures of low income children. The programs work with children under the age of 3 to help them gain school skills to achieve success after entering the school system. According to Keys and colleagues (2013), "School readiness encompasses physical, cognitive, language, and behavioral aspects of development" (p. 1171). A child that may be living in a chaotic environment where adult support is lacking may not have the ability

to develop these skills without early intervention. Attending a high quality preschool program like Head Start could help lessen the impact of that environment on the child.

More recently, additional intervention based in current research have been developed to help low income children succeed in schools (Masten et al., 1997). Research on the effectiveness of programs like yoga/mindfulness, school based mental health support, and parental engagement are showing promising effects on helping low income school age children succeed (Bergen-Circo et al., 2015; Alameda-Lawson, 2004; Powers et al., 2016). While Head Start has been effective at providing an early start to removing barriers for low-income children when they are younger (Anderson et al., 2003), these school based interventions are showing promise in helping children that may not have had an early start intervention.

Potential for Harm and Ethical Concerns

Children are a vulnerable population and need protection. An entire generation of at-risk children could miss out on opportunities to become successful as adults if necessary interventions are not provided in schools (Masten et al., 1997). This vulnerable population cannot advocate for themselves and need adults to guide their choices. If schools offer appropriate interventions for vulnerable populations, these children can achieve success (Masten et al., 1997). Understanding why this population is vulnerable will help tailor the interventions to make them suitable and effective.

The National Association of Social Workers (1999) has a code of ethics that dictates how to best handle situations within a vulnerable population. The primary mission of the NASW is "to enhance human well-being and help meet the basic human

needs of all people, with particular attention to the needs and empowerment of people who are vulnerable, oppressed, and living in poverty" (National Association of Social Workers, 1999). The age of a person determines the amount of vulnerability; children fall into an age group that is considered vulnerable. By continuing to follow the code, practice can be directed to ensure this vulnerable population is best served and needs are met.

The Importance of Theory Informing Clinical Practice

Theoretical research is important to the social work practice because it allows practitioners to "find the best evidence for selecting their interventions and the means to evaluate the effectiveness of their work" (Cooper & Lesser, 2014, p. 1). Chan and Chan (2004) also noted that studying theories is "an effective way of building practical knowledge" (p. 544). Clients will benefit if their practitioners have training based in both theory and practice.

A theory that impacts the homeless and highly mobile children and families is the Ecological Perspective theory. In this theory the client is viewed in relation "to the physical and social environments that contain the resources for or obstacles to meeting needs" (Anderson, 1988, p. 19). Within this theory are the concepts of adaptation, stress, and coping (Anderson, 1988). These three concepts directly impact how a person will be able to interact with and handle their environment.

The first concept, adaptation, refers to "the process in which people both shape their physical and social environments and are shaped by them" (Anderson, 1988, p. 19). Both people and our environments are constantly changing. We are required constantly to

change and adapt to our changing environment. An inability to cope with adaptation can create stress, which can in turn create friction in the environment.

The next two concepts are stress and coping skills. According to Anderson (1988), "The concept of stress increases our understanding of transactions that tend to upset the interactional processes between people and their environments in a way that is potentially damaging to either or both" (p. 19). When there is too much demand on a person and there is stress in their environment, coping skills must to come into play. Coping skills can either "reduce, eliminate, or accelerate stress" (Anderson, 1988, p. 19).

In the homeless and highly mobile population there is great stress in day-to-day life. Many barriers are faced daily but a major barrier to the homeless and highly mobile population is the poverty that they live in. Without first eliminating that barrier it will be very difficult for affected children to succeed in school (Masten et al., 1997).

It is important to note that while theories are important to social work practice, they should not be viewed as the only model to handling a problem. Continuing research is important to best understand all theories and methods available to solving the problem. As Chan and Chan (2004) stated, "If the framework can be developed, social workers would not get lost among the scattered theories. However, the assumption is not necessarily valid as there are many variables and uncertainties in practice" (p. 544). Often an issue or problem with a client in a social work practice differs from the previous problem, so it is important to have a varied and flexible approach when dealing with the presenting problem.

Research Informing Practice

Research is the core of the social work practice. It creates an understanding of why a behavior or situation is occurring. All of the options for the best treatment outcome can be presented when all of the research is complete (Drisko, 2013). Research provides a foundation for the social work practice and a way to appropriately practice and plan for work with clients. In addition to better understanding the situation or behavior, research "answers such questions through the application of tested procedures to social work problems" (Arkava & Lane, 1983, p. 3). Social workers that fully understand many of the research methods that are available will benefit the client due to this wide range of knowledge (Arkava et al., 1983).

However, understanding a concept in theory is simpler than implementing it in practice. Mullen, Bledsoe, and Bellamy (2008) found that "all too often, clinical practices and service system innovations that are validated by research are not fully adopted in treatment settings and service systems for individuals with mental illnesses" (p. 326). Having knowledge based in research will not help the client if it is not implemented into practice. The research has to be put to work for it to be effective and helpful to the client. It is also important to understand all of the research that is available on a given topic to provide the best intervention to a client.

Evidence Based Practices

An important area of research is the formulation of evidence-based practices (EBP). According to Drisko (2013), "The core of EBP is to promote the routine incorporation of the best available research evidence into practice efforts" (p. 123). Evidence based practice can be thought of as "a practiced decision-making process involving several steps between client and clinician. It is an intentionally interactive process promoting client input and feedback" (p. 124). Having the child work with a school social worker will promote the therapeutic relationship in evidence based practices because of the relationships.

It is important to mention the differences between evidence based practices and other similar terms. Drisko (2013) stated, "EBP is often confused with empirically supported treatments (ESTs), empirically supported interventions (ESIs) and 'best practices'" (p. 124). While evidence based practices promote the clinician and client to work together to develop a plan, ESTs "identify treatments that have some form of research supporting their effectiveness. That is, ESTs designate treatments as meeting some minimal standards for effectiveness" (Drisko, 2013, p. 124). This confusion can create a misunderstanding of what is occurring between client and clinician.

Interventions to Help Low Income Children Succeed in School

Starting on a path of success early in life will help a child be successful long-term. It is imperative that all children are encouraged and motivated to succeed in school. Low-income children are an especially important population to focus on because of their high risk of "falling through the cracks." The low-income population may not have the

supports that other children have like a parent available for homework help, stable and safe housing, or the proper nutrition to maintain focus while working on their homework (Masten et al., 1997). Historically, Head Start was the only program in the United States available to help low-income children succeed in schools by providing an early intervention preschool program (Grineski, 2014). Today, interventions like yoga/mindfulness, teacher/parent involvement and support, and school based mental health support are emerging as additional promising methods to help at-risk children succeed in school.

Conceptual Framework

Attachment theory was used as the framework for this research because of its focus on relationships; in particular, the importance of attachment in infancy, how individual attachment styles create reactions in relationships, and the way children handle stressful situations. A professional and personal lens will also be discussed as a motivation for this project.

Attachment Theory

Attachment theory, as described by Main (2000), "is the maintenance of proximity to attachment figures" (p. 1055). Attachment styles are usually assigned to children using what is called a "strange situation," in which the primary caregiver leaves the room and then returns. After the mother has returned to the room and the child's reaction is viewed, an attachment style is assigned to the child (Main, 2000). Children who "showed little or no distress at being left alone in the unfamiliar environment, and then avoided and the mother upon her return" are said to have a "secure attachment" (Main, 2000, p.1064). Avoidant attachment style is assigned to children that responded to the stressful situation by "being too distressed to engage in exploration or play even when the mother was present" (Main, 2000, p. 1064). A disorganized attachment style is described as "expectable whenever an infant is markedly frightened by its primary haven(s) of safety, i.e. the attachment figure(s)" (Hesse & Main, 2000, p. 1098). The type of attachment style that a child has will theoretically impact their relationship building ability later in life. Different interventions can change some parts of the attachment style and allow the child to thrive in different situations.

The attachment style a child develops during infancy will further impact the relationships formed and the way they react to the problems or issues (Main, 2000). Children with secure attachment patterns have the best outcomes later in life and are also "found to enjoy more favorable relations than others with their peers and teachers" (Main, 2000, p. 1058). The child with a secure attachment pattern may not be living in poverty and therefore is not exposed to a chaotic life. A child with an avoidant and/or disorganized attachment pattern may be living in an environment that is chaotic and more stressful. This chaos could be long-term and have possibly impacted the child. To change the trauma of a chaotic environment, it is important to understand the attachment style so interventions can be implemented into the classroom with the best success. Mikulnicer and colleagues (2001) found that "the sense of attachment security significantly contributes to subjective well-being, affect regulation, high self-esteem, positive person perception, and well-adjusted interpersonal cognitions and behaviors" (p.1205). A child that has an insecure attachment may struggle in the classroom because of their affect regulation, which could then impact the relationship being formed with the teacher. A child with a secure attachment pattern may not have those same struggles and will display more confidence in the classroom. Children with secure attachment are more likely to ask for and receive help than those with a less secure attachment.

Interventions like yoga/mindfulness, school based mental health interventions, and parental engagement can support children with secure, avoidant, and disorganized types of attachment. By allowing children with disorganized and/or avoidant types the space and time to learn to trust an adult, the intervention can be successful (Main, 2000). Parental engagement interventions will be especially beneficial to children with

disorganized and/or avoidant types because it brings the parent and child together (Main, 2000). Despite the attachment style a child has, a new type of attachment can grow and replace the previous type of attachment when the conditions are right in the primary relationship (Main, 2000).

For the purpose of this systematic review, it was important to look at school based interventions from an attachment theory lens because of its importance in relationship building. Relationships are the building blocks of all things in life. Without a secure form of attachment, children will significantly struggle throughout life with relationship building (Main, 2000). Attachment theory can also help put into perspective some of the experiences at-risk children may have dealt with in their lives. A good understanding of attachment theory will help children achieve academic success in schools with knowledgeable teachers and other school professionals.

Professional Lens

In my professional life, I have worked for the last year and a half in the county government as a human services representative. I work directly with families needing assistance from the government for help with basic needs. If the program from which they are receiving help is cut off, those basic needs are not met. The amount of stress and anxiety that results from being cut off from a program impacts parents' ability to focus on their health and their children's, maintaining employment, and the overall well-being of the family.

In my career I also see clients who must work multiple jobs in order to keep their families financially stable. This requires a mom/dad/caregiver to be away from the home

and from children most of the time, making it difficult for a child to get help before and/or after school with homework. Children who are already struggling in school but do not have a parent or caregiver available after school will not get their questions answered and may continue to struggle. Based on personal observation of families I work with, the lack of a caregiver presence significantly impacts a child's academic success. It also lessens the child's ability to resist other temptations that are available, which can have a substantial impact on academic success.

Personal Lens

The topic of this project came out of my own personal life. I am a single mom of a ten year old. My time after work and before my son goes to bed is stretched incredibly thin. However, I know how important it is to be available for homework help and to just be present with him. I wanted to conduct this systematic review to see what resources were available for children who might not have the option of a parent at home to help them. I see some of the interventions that are in place at my son's school but I only see the parent side, not the educator side. I conducted this systematic review so I could see all options available to children who might be struggling and the best way to help within a school setting.

Due to the extensive amount of research found on school based interventions with low-income children, it was necessary to conduct a systematic review to establish the best intervention and to establish any themes that emerged. A systematic review was also used "to comprehensively locate and synthesize research that bears on a particular question, using organized, transparent, and replicable procedures at each step in the process" (Littell, Corcoran & Pillai, 2008, p.1).

This systematic review on school based interventions for at-risk children aimed to further understand the best interventions for helping at-risk school aged children. I conducted it with the purpose of answering one main research: What is the best intervention to promote academic improvement in an at-risk child? Other questions related to the main question were: Are there any interventions that are not successful? How does a school setting implement the intervention? Once I gathered the data on the research, I analyzed it to determine if a school setting was more useful than others in implementing the intervention.

Selection Criteria

The objective of this systematic review was to review all intervention studies that identified successful interventions in helping at-risk children achieve academic improvement in schools. In the initial search of school based studies many were identified as being successful in helping children obtain school success. The intervention studies had to mention the term *school* as a setting for the intervention, the term *children*,

and the term *at-risk* in the title and/or abstract as inclusion criteria. All intervention studies were then reviewed to see if they met the systematic review criteria.

Search Criteria

The literature review was conducted from September 2015 to January 2016 using the social work databases Social Work Abstracts and Clicnet and using the terms *school based interventions*, *at-risk*, and *children*. The preliminary search results returned only 16 studies.

An expansion of search terms was necessary to obtain more research. The intervention terms that were identified for this study were: *yoga/mindfulness*, *school based mental health*, and *parental engagement*. Searching for each intervention individually returned the most results in both databases and provided the best number of articles to review for inclusion in this systematic review. In the yoga/mindfulness intervention studies, 65 intervention studies fit criteria for this systematic review. The school based intervention studies had 50 intervention studies, and the parent engagement had 57 intervention studies; however, not all studies fulfilled all requirements of the review. Within *yoga/mindfulness*, 62 studies were discarded, 46 were discarded from *school based*, and 55 studies from *parental engagement* were discarded before reviewing the remaining studies to see if criteria was met. In all, nine intervention studies fit the inclusion criteria for age of study participants, a clinical intervention that was school based, and specifically measuring for academic success. The outcome of the search and selection process is shown in Figure 1.

Intervention studies that support at-risk children in schools: yoga/mindfulness, school based mental health services, parent engagement through Social Work Abstracts

Intervention studies that support at-risk children in schools: yoga/mindfulness, school based mental health services, parent engagement through CLICnet

Total number of records identified:

Yoga=1236

School based=42580

Parent engagement=32357

Articles excluded based on research criteria:

Yoga=1071

School based=42530

Parent engagement=32300

Full text intervention studies assessed:

Yoga=65

School based=50

Parent engagement=57

Full intervention studies excluded:

Yoga=62

School based=46

Parent engagement=55

Studies included in systematic review: Yoga=3

School based=4

Parent engagement=2

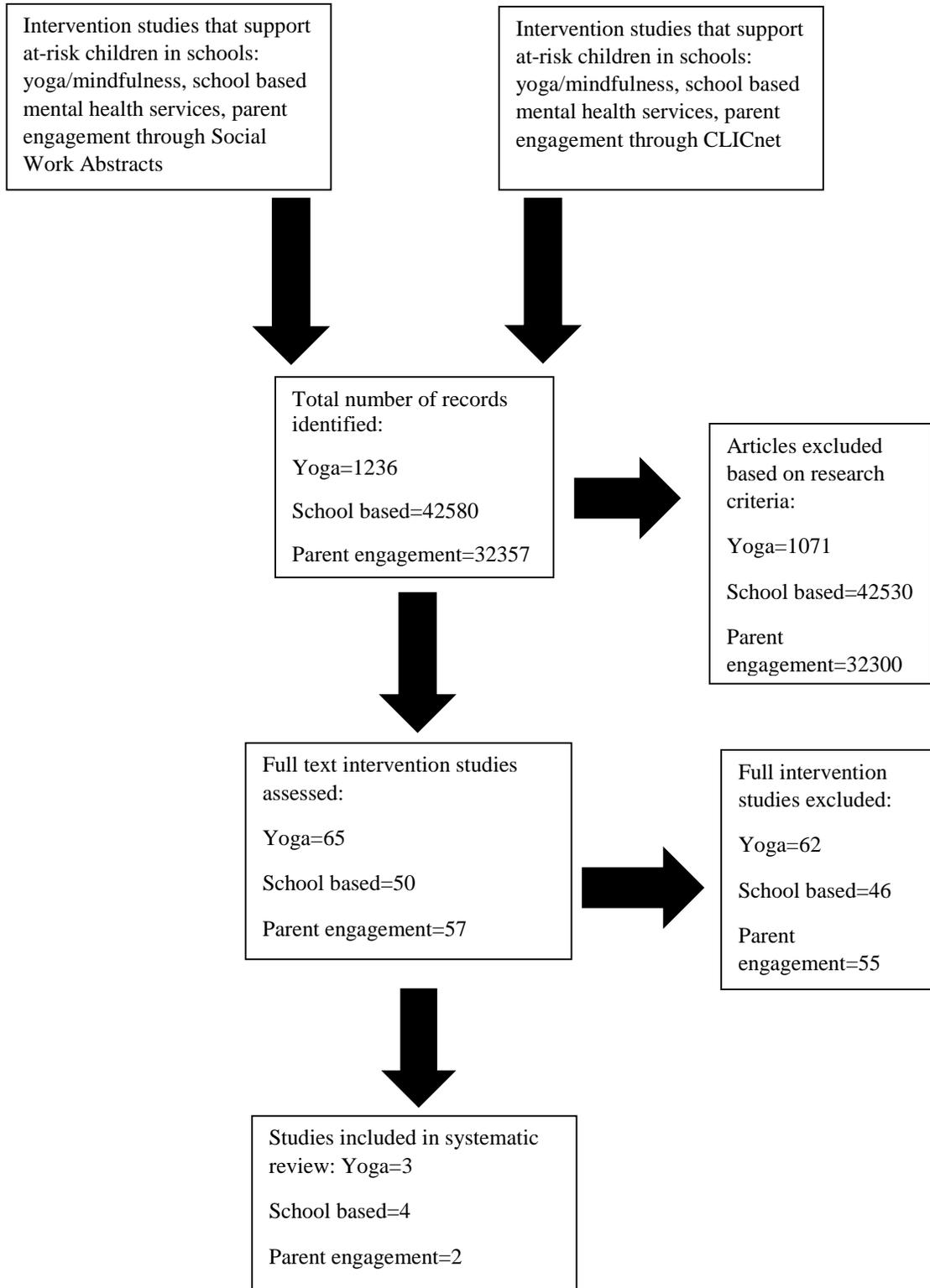*Figure 1*. Search and selection chart

Data Abstraction and Analysis

Each of the nine intervention studies picked for review was analyzed several times to extract relevant data. The first review of the intervention study was to determine if the study meet the criteria of population served and if it was a clinical study. The next review was to look at the measures and findings of the study. Finally, the intervention study was reviewed to extract all of the necessary relevant data on the evaluation aim, sample size, inclusion criteria, and the design and selection criteria of the study. After all data was pulled from the study it was put into a summary table for analysis.

Limitations

Only two databases were used for intervention study selection and nine studies were picked to be reviewed. Many intervention studies were available with information about ways to help at-risk children succeed in schools but they had to be excluded because of the lack of a clinical study. School based supports is a newer area of research. While there is a lot of research for early intervention programs like Head Start, the amount of published research on school based support is lacking. Finding credible clinical intervention studies for this topic was difficult and hard to come by. To search for information on the topic of helping at-risk children succeed in schools, I had to come up with interventions to search as the original search only produced limited information.

Findings

Nine studies met selection criteria. These nine studies were subdivided into three theme areas:

- Yoga/mindfulness (three intervention studies)

- School mental health services (four intervention studies)

- Family engagement (two interventions studies)

Summary of Interventions Used in Systematic Review

In this systematic review, nine intervention studies were extensively reviewed and analyzed. This chapter first summarizes the studies and then fits the intervention studies into three different theme areas: yoga/mindfulness, school based services, and family engagement. I also closely examined each intervention study for the age of the study participants, location of the study, and intervention being offered. A brief summary of the nine clinical interventions can be found in Tables 1-3.

Table 1

Data Analysis Chart, Studies 1-3

School Research Study	Walter et al.	Kratochwill et al.	Bergen-Cico et al.
Year	2010	2009	2015
Study Question	Will mental health services create improvements in mental health status in students, improved mental health proficiencies in teachers, and an improved learning environment in schools?	Will a multi-family support group intervention program in a school reduce children's behaviors, increase parental involvement, and teacher perceptions?	Does yoga foster self-regulation to benefit academic performance among adolescents?
Evaluation Aim	Access to mental health services	Parental involvement	Yoga benefiting academics
Location	2 schools inner-city Midwest	Urban school district in a Midwestern university community	Public middle school in the Boston area
Sample Size	638 students	172 families	72 students-intervention 72 students-control group
Age	1st-8th grade	K-3rd graders	6th graders-mean age 11.4
Inclusion	All students and teachers	teacher referrals/universal participant	All students in the school
Intervention (IV)	Psych assessments/treatment	FAST family group	Yoga and mindfulness
Treatment	18 week afterschool program/4 hr weekly	8 week program	Yoga three times per week for 4 minutes/school year
Design	Pre, Post, follow-up	Pre, post, follow-up	Pre, post
Selection	Random	Random	Random
Measures	SDQ, SCS, Social Competence Survey	CBCL, Parent Report and Teacher Report Form, Social Skills Rating System, FACES	ASR-I
Statistical Analysis	Descriptive statistics. Inferential analyses	Cycle level analysis	t-tests, ANOVA
Fidelity	Not specifically discussed	Training by FAST staff, checklist	Not specifically discussed
Findings	Large need for MH services. AA success achieved. Teachers able to handle problems	Improved family functioning. Behavior reduction in students	Students felt calm/relaxed. Improved focus/concentration
Limitations	Teacher lack of confidence in skills. Engagement of parents.	Difficult to restructure school system	Small study. Staff personality/style
Recommend	Schools/mental health work together	Expanded assessment of student outcomes. Further research on family	Confidential data collection.

Measures: Strengths and Difficulties Questionnaire (SDQ), School Climate Survey (SCS), Child Behavior CL?? (CBCL), Family adaptability and cohesion evaluation scales (FACES), Adolescent Self-Regulatory Inventory (ASR-I)

Table 2 (Continued)

Data Analysis Chart, Studies 4-6

School Research			
Study	Black et al.	Alameda-Lawson	Gopalan et al.
Year	2013	2014	2013
Study Question	Does a mindfulness based curriculum improve teacher-reported scores of students 'classroom behaviors?	Do child demonstrate higher academic achievement when parents are involved in CPE? Does parental empowerment help children's academic achievement?	Does Project Step-up reduce the mental health difficulties and promote problem solving and life skills?
Evaluation Aim	Evaluation on behaviors with mindfulness intervention	Evaluation on academic achievement with parental involvement	Evaluation on academic/ behavioral issues
Location	Elementary school in Richmond, California	"Jeffersonville Manor"	Inner city high schools in Northeastern city
Sample Size	409 students	16 parents	46 students
Age	Kindergarten through sixth graders	Average age around 40	14-18
Inclusion Criteria	All students in school	Parents complete 40 hour program, child in third grade or higher, and reside in area	Students with academic/behavioral issues
Intervention (IV)	Mindfulness curriculum	Parent involvement program	After school program
Treatment	15 minute session three times/wk for 5 wks vs adding additional 1/wkly 15 minute session for 7 wks	Nominal Group Technique (NGT) for need assessment. 40 hour outreach training course. Community outreach.	Up to 44 hours of group sessions/year. 2 hrs/after school
Design	Pre/post	Post hoc, quasi-experiential	Pre/post
Selection	Random	Teacher referral/community outreach	Random
Measures	The Student Behavior Rubric by Kinder Associates	PI questionnaire and an empowerment inventory-Parents. SAT-9-children	Pediatric Symptom Checklist. Children's Depression Inventory
Statistical Analysis	MIXED model	OLS regression analysis	Chi-square and t-tests
Fidelity	Not specifically discussed	Not met	Not specifically discussed
Findings	Improvement in student behavior/ school environment.	Empowered parents improved academic success.	Ability to catch and treat mental health symptoms
Limitations	Control group not included. Teacher aware of intervention	Small sample size and limited statistical power	Money for participants. Session breaks
Recommend.	More research on mindfulness in schools	Further research on parent/child involvement	Revise curriculum. Further evals on control group.

Table 3 (Continued)

Data Analysis Chart, Studies 7-9

School Research			
Study	Walker et al.	Powers et al.	Berger et al.
Year	2009	2016	2009
Study Question	Does the First Step program improve behavioral problems and academic achievement?	What are the effects of school based services (SBS) on the social/behavior functioning of students referred to and served by the program?	Does participation in yoga improve emotional health or self-perception?
Evaluation Aim	Evaluate First Step's success in a large, urban school district	Evaluation of the benefits of school based mental health services	Evaluation of yoga on well-being
Location	Albuquerque public schools	Six elementary schools in SE USA	South Bronx, New York
Sample Size	Approximately 100 students	323 students participated in study	50 students in yoga group. 43 students in control group
Age	Children in grades 1-3	K-5th grade students	4,5th graders
Inclusion Criteria	Universal screening procedure	Students referred by teachers, parents	All fourth and fifth graders
Intervention (IV)	Universal screening, classroom intervention, and parent training	School based mental health services	Yoga
Treatment	Daily treatment goals/planning for 3 month duration	Services based on individual mental health needs	Yoga classes-1hr/wkly 12 weeks
Design	Pre/post	Pre/post	Pre/post
Selection	Random	Referral	Random
Measures	SSBD	Each child's report card	Harter's Global Self-Worth. Physical Appearance scale
Statistical Analysis	MANCOVA-baseline levels. ANCOVA	Hierarchical linear modeling	SPSS, Independent t-tests, chi-square analysis
Fidelity Findings	Fidelity was met Intervention group saw greater academic gains	Not specifically discussed Referral time impacted results. Early detection of mental health problems prevents falling behind	Not specifically discussed Yoga group used fewer negative behaviors
Limitations	EBD criteria not specified	No comparison group. Report cards can be subjective.	Small sample, yoga intervention was short
Recommend.	Implement program all year	A more thorough evaluation	Continued research on yoga benefits

Measures: Systematic Screening for Behavior Disorders (SSBD)

Demographics of Intervention Study

In all nine of the intervention studies reviewed, there were similarities between the demographics of populations served. Based on the topic of research, the selected intervention studies looked at at-risk children in school settings. Alameda-Lawson (2014) focused more on the parents as primary participants but an inclusion criteria of the study was to have a child in third grade. Gopalan and colleagues (2013) did look at older aged children (14-18) but the study was included in this review because of the criteria of school aged children and measuring for academic success.

While each study was based on its own geographic region, there were studies conducted in similar regions. The intervention studies by Berger and colleagues (2009), Bergen-Circo and colleagues (2015), and Goplan and colleagues (2013) were based on the East Coast. The intervention studies by Walker and colleagues (2009), Walter and colleagues (2010), and Kratochwill and colleagues (2009) were based in the Midwest. The study by Powers and colleagues (2016) was based in the Southeastern United States and was the only study from that area in the nine studies reviewed. Black and colleagues (2013) based their study out of California which was also the only study from that area. Alameda-Lawson (2014) did not specify a specific location; instead a pseudonym was listed for the area studied.

Intervention Studies

The first intervention study was conducted by Bergen-Cico and colleagues in 2015. Bergen-Cico and colleagues studied the benefits of yoga yoga's ability to increase self-regulation skills and enhance academic performance to adolescents. The study was based at a public middle school in Boston and focused on sixth graders. 72 students were chosen for the intervention group and 72 students for the control group. All students in the school were eligible to participate as long as parental consent was obtained. The study incorporated yoga into the school day three times a week for four minutes at a time. Selection was random and it was designed to be a pre and post study. Bergen-Cico and colleagues used the Adolescent Self-Regulatory Inventory, and found that, "one theme reflected the sense of calm and relaxation students experienced as a result of mindful yoga practice. This theme was shared in 30% (n=21) of the written responses" (p. 3455). Another finding was, "the second theme was that of improved focus or concentration, which was present in 25% (n=15) of student responses" (Bergen-Cico et al., 2015, p. 3455).

This study did have some limitations. The first limitation found was within the moderate to small control and treatment groups (Bergen-Cico et al., 2015). Environmental stressors like standardized testing were an additional limitation that could have impacted results of the study. Further research is needed on the benefits of yoga and academic improvements because of the newness of the intervention. It was also recommended to collect data in a more confidential way to promote students answering post-intervention surveys honestly.

The next intervention study was conducted by Black and colleagues in 2013. This study attempted to answer the question: "Does a mindfulness based curriculum improve teacher-reported scores of students' classroom behaviors? Do additional sessions provide an added benefit to student's classroom behaviors?" (Black et al., 2013). The study was conducted at an elementary school in Richmond, California with 409 kindergarten through sixth grade students chosen as the study sample. All students at the school were included in the study. The study provided treatment to one group of students in the form of 15-minute mindfulness sessions three times a week for five weeks. The other group received a once weekly mindfulness session for 15 minutes for seven weeks. The study design was pre and post with a random selection. To assess the benefits of mindfulness, The Student Behavior Rubric by Kinder Associates was used. The researchers found that "the mindfulness intervention was associated with improvements in various indices of student behavior via teacher report that lasted up to 7 weeks after the intervention period" (Black et al., 2013, p. 1245). Black and colleagues also found that "mindfulness based programs may possibly benefit not just students who are trained in mindfulness skills, but also the broader learning environment" (p.1245).

Identified limitations in this study include the fact that a control group was not used in this study and that teachers were not blind to the interventions. While the benefits of yoga/mindfulness were seen in this study, more research is needed on the benefits of mindfulness in a school setting.

The next intervention study was by Berger and colleagues (2009). This study was created to attempt to answer the following research questions: "Does participation in yoga improve self-perception, especially regarding global-self-worth and physical

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appearance? Also, does emotional health, including coping skills and self-regulation improve?''(Berger et al., 2009). The study was conducted in South Bronx, New York at an elementary school with fourth and fifth graders. All students who attended the school and were in the fourth and fifth grade were eligible to participate in the study. The study offered yoga classes for one hour per week for twelve weeks to study participants. The study design was pre and post with random selection. To assess for the benefits of yoga in the school, the Harter's Self-Worth and Physical Appearance Subscales was used. Berger and colleagues (2009) found that "postintervention, the yoga group had significantly better scores than the non-yoga group on the Negative Behaviors subscale (3.2 vs 2.9, P=0.4) indicating that they used fewer negative behaviors in response to stressors" (p. 40). The researchers also noted that "these results suggest that yoga may play a role as a preventive and protective tool with regard to children's emotional and physical well-being" (Berger et al., 2009, p. 41).

Several limitations were found in the study: small sample size, intervention was short in length and intensity, and attendance did not meet requirements. The study did indicate areas of further research in yoga in schools to promote emotional and physical well-being in children.

A study conducted by Walter and colleagues in 2010 aimed to answer this research question: "If mental health services were offered in schools would it improve the mental health status of students and in turn create an improvement in the learning environment in the school?" The study design was a pre, post, and follow-up study and with random selection. The question was studied by providing mental health services to two chosen public elementary schools in the Midwest that were located in inner-city

neighborhoods. The sample size of the study was 638 students. Inclusion criteria for this study were all teachers and children within the school. Assessments were first conducted to understand where the need was for treatment. After the initial assessment, the children identified as needing treatment attended an 18 week afterschool program for four hours per week. To understand how well the study worked on providing mental health services to children, different measures were used like the Strengths and Difficulties Questionnaire, the School Climate survey, and a Social Competence survey. The researchers identified a "large unmet need for effective clinical mental health services in these schools" (Walter et al., 2010, p. 191). They also found that "students exhibited significantly fewer mental health difficulties, less functional impairment, and improved behavior, and reported improved mental health knowledge, attitudes, beliefs, and behavioral intentions. Teachers reported significantly greater proficiency in managing mental health problems in their classroom" (Walter et al., 2010, p. 191). Findings in the study were encouraging for further research on the benefits of schools working in partnership with mental health providers. A major limitation in this study is relying on teachers to be the primary referral to mental health services in school and to implement mental health prevention type interventions in an already very full day.

A study conducted by Gopalan and colleagues in 2013 was the next intervention study reviewed. The study was modeled after Project Step-up which is a nationally known after school program. The Project Step-up study was looking to see if Project Step-Up could reduce the mental health problems inner-city Black and Latino adolescents faced, along with stimulating problem solving and life skills. This study was based in inner-city high schools in a large, urban Northeastern city. Forty-six students were chosen

for the study sample with an age of 14-18. Teacher referrals were used as inclusion criteria for students that were having academic and behavioral difficulties. Treatment in the study was conducted after school. Groups were held after school once per week for two hours with up to 44 hours of groups held during the school year. The study was designed as a pre and post design with random selection. To assess the studies' success in engaging youth in the program and reducing the negative behaviors they were experiencing, the Pediatric Symptom Checklist was used for one group and the Children's Depression Inventory Short Form with another (Gopalan et al., 2013). Gopalan and colleagues (2013) found that "a substantial proportion of Step-Up youth manifested clinically significant mental health symptoms, generally greater than what is typically reported from national rates" (p. 146). By finding these mental health problems, treatment can begin to help the youth find academic success. Money was given as an incentive to attend groups which is a possible limitation. Another noted limitation was that the second participant group experience a significant break in treatment due to a summer break right after the program started. Areas of further research are to expand the curriculum to include more multi-media formats and to include a control group so the program benefits can be seen clearer.

Next, an intervention study by Walker and colleagues (2009) was reviewed. This study asked the question: "Does the First Step to Success program improve behavioral problems and academic achievement?" (Walker et al., 2009). The First Step to Success study was designed after a previous study to determine if the intensive program benefited children. Fidelity was met in this study by observation by staff and through a checklist of First Step to Success requirements. This study was based in Albuquerque public schools

and chose 100 students in first through third grade. The inclusion criteria for this study were through a universal screening procedure to identify students that had the highest rate of negative behaviors. After identifying study participants a three month treatment plan was started with screening, classroom intervention, and then parent teaching. Daily treatment plans were made to assess progress. The study was designed to be pre and post with a random selection process used. To measure progress in the program, the Systematic Screening for Behavior Disorders was used (Walker et al., 2009). The study found that "the intervention group had significantly greater gains than the comparison group with respect to the SSRS Academic Competence Subscale" (Walker et al., 2009, p. 12). A limitation of the study was found that it didn't identify what percentage of students would eventually meet criteria for EBD programs. The sample and control group also had some limitations in the population that was studied. Further research is needed on the impact of running the First Step for Success program as is and then having a less intensive version run throughout the remainder of the school year.

The intervention study by Powers and colleagues (2016) aimed to answer the question: "What are the effects of school based services (SBS) on the social/behavior functioning of students referred to and served by the program?" The study was based in southeastern United States at six different elementary schools that had high needs. In total, 323 K-8th grade students participated in the study. Referrals to participate in SBS were mainly from teachers but parents/caregivers and clergy members could also refer a child to the program. Under the SBS program children received services such as, individual mental health counseling, group counseling, referrals to additional mental health services in the community, and support services like tutoring or mentoring for

academic support (Powers et al., 2016). The study was designed as a pre/post and selection for participation was by referral. SBS used the child's individual report card as a program measure. Findings were encouraging for SBS to be used in schools: "Early mental health intervention through participation in interventions such as the SBS program may be particularly important to prevent children from falling behind academically and socially" (Powers et al., 2016, p. 35). Powers and colleagues also found that "students in lower grades who were referred to the SBS program earlier in the school year had a higher average social/behavioral score than students in higher grades who were referred to the SBS program earlier in the school year" (p. 33).

The limitations of this program were that a comparison group was not used. Another limitation was in the measure used to determine if there was change in the academic/behavioral scores of students on their report card. Report cards can be subjective and are up to the teacher to determine the score. Recommendations for future research is a more thorough evaluation of the SBS program, particularly in regards to findings for African American participants

The study by Kratochwill and colleagues from 2009 was reviewed to evaluate the effectiveness of replicating the Families and Schools Acting Together (FAST) program. The FAST program is a nationally known program that has been implemented in over 800 schools (Kratochwill et al., 2009). This study aimed to determine whether parental support groups as an intervention will reduce children's behaviors in school, increase parental involvement, and enhance teacher perception. The study was based in the Midwestern within an urban school district where eight low-income elementary schools were picked. In this study it only looked at kindergarten through third graders. A total of

172 families were used for the sample size. Inclusion criteria were universal participation from half of the study participants and half were from teacher referrals for students with behavior problems. The study was designed to be random in selection and to have a pre, post, and follow-up design. As explained above, this study was designed after the FAST program. Fidelity was met with this study through a checklist of FAST requirements and training by FAST staff. To measure the study's question, the Child Behavior Checklist, Parent Report and Teacher Report Form, Social Skills Rating System, and the FACES evaluation were used. Kratochwill, et al. (2009) found that "FAST program results in some positive influences on the family and has the potential to improve parent/school relationships and develop protective factors for children at risk of developing SED" (p. 262). It was also noted that FAST participants had a reduction in negative behaviors and improved overall family functioning (Kratochwill et al., 2009). Recommendations for future research would be on furthering the information available on family dynamics to evaluate for change. A limitation of this study was found in the difficulty in restructuring a school system that is already dictated by federal laws to allow for the FAST program to be in all schools.

The final study reviewed was conducted by Alameda-Lawson in 2014. The study was designed to be similar to another study that was also implemented in a different low-income school. In the study reviewed the question to answer was to determine if Collective Parental Involvement increases children's academic achievements. The study was based in "Jeffersonville Manor" which is a fake name for a town that had high rates of poverty. Sixteen parents were studied and had an average age of 40. Inclusion criteria for the study were having a child in third grade or higher, residency in Jeffersonville

Manor, and to complete a 40 hour outreach training program. Referral for the study was conducted through teachers for students that had behavioral problems and through a community outreach event where parents were recruited. Parents were sent through a forty hour outreach training program to determine needs of the community. After the parents graduated from the program, their learning was then used to help design programs that would benefit their community. Both parents and children completed assessments to determine how much the Collective Parent Engagement benefited their community. The parents completed a PI questionnaire and an empowerment inventory (Empowerment Outcomes Assessment) and the children completed the SAT-9 assessment (Alameda-Lawson. 2014). Fidelity was not met in this study because it did meet all of the requirements of the other study. Alameda-Lawson (2014) found that "a one-unit increase in parent empowerment corresponds with a 2.5-point increase in student's standardized reading scores" (p. 206).

A limitation for this study was in the small size and the limited statistical power. More research is needed on the benefits of Collective Parental Involvement and children's academic success.

Intervention Studies by Category

Yoga/Mindfulness (three intervention studies). Three intervention studies were identified that focused on yoga/mindfulness as an intervention in helping children succeed in schools. These three studies were identified because they specifically incorporated yoga and/or mindfulness into their study to look at the benefits on children in schools. The studies conducted by Black et al. (2013), Berger et al. (2009), and Bergen-Cico et al. (2015) all researched the benefits of incorporating yoga/mindfulness

into a school day or after school program and if it created academic success. Bergen-Cico et al. (2015) found an improved ability in students to function appropriately in the classroom after the intervention. Behavior improvements were also see in the study conducted by Black et al. (2013). The study conducted by Berger et al. (2009) also saw improvement in regards to academics after the study was completed because of the decrease in behaviors that the yoga intervention program promoted.

School Based Mental Health (four intervention studies). Four intervention studies were identified as fitting under the school based mental health theme. The studies fit under that theme because the schools were working with community based mental health providers in the school or the school was providing referrals to after school programs that deal with mental health issues. The studies by Walter et al. (2010), Gopalan et al. (2009), Walker et al. (2009), and Powers et al. (2016) focused on researching if school based mental health supports achieved academic success in children. Walter et al. (2010) found the need for mental health services in schools because of the lack of effective services available to students in schools. By offering services in schools, it was found that students had an increased ability to function in the classroom and behaviors decreased (Walter et al., 2010). Gopalan et al. (2009) had similar findings in which mental health problems were diagnosed and treated in an after school program which benefited students in the classroom. Walker et al. (2009) implemented their study into the school day with screening, treatment planning, and then parent intervention and training. This study found the intervention group had greater gains on the measuring device of the SSRS Academic Competence Subscale (Walker et al., 2009). Finally, Powers et al. (2016) also offered mental health services in a school

setting through individual and group counseling, mentoring, and referral to additional community mental health organizations if needed. The study found that early detection of mental health problems through school based services prevented children from falling further behind in school (Powers et al., 2016).

Family Engagement (two intervention studies). Two intervention studies fit under the family engagement theme. The identified studies fit under the family engagement theme because they were studying the benefits of family participation and involvement in a child's school setting on a child's academic success. The studies conducted by Kratochwill et al. (2009) and Alameda-Lawson (2014) researched the benefits of parental engagement on children's academic success. Both studies reviewed were based off a national program model. Kratochwill et al. (2009) based their study off the FAST (Family and Schools Together) model. The study found an increase in family functioning which then reduced behaviors in students (Kratochwill et al., 2009). A study conducted by Alameda-Lawson (2014) was developed around the collective parental engagement program model. The study found that parents were empowered through the program which impacted the students' scores on a standardized test (Alameda-Lawson, 2014).

Components of Interventions

Within the nine intervention studies reviewed, several components were found. While all intervention studies researched different interventions, several similar components were found in the intervention studies. All intervention studies were conducted in a public school system. Population for those studies was school age children. An interesting component that was found in the Alameda-Lawson (2014) study

was parents took over the last part of the study and implemented the intervention that was taught to them in their own community. All other studies relied on the researchers to complete the intervention study.

Outcomes of Interventions

Of the nine intervention studies reviewed, all interventions studies had documented outcomes. Two articles though had more significant findings than others. Walker et al. (2010) found significant improvement in students after offering a school based mental health group after school hours. The findings indicated a dire need for school based mental health support because the diagnosis and treatment of a mental health problem will create the ability to function appropriately during a school day and learn what is being taught. Kratochwill et al. (2009) found that parents who were active participations with their child in school improved family functioning and decreased the behaviors of children in schools. By engaging parents in a school day, parents are more aware of a child's problem in school when it occurs and can take care of it quicker. An improved relationship with a parent can also help a child form a bond with a teacher, which will impact the work that is done in the classroom.

Discussion

A thorough review of nine intervention studies to support at-risk children revealed different approaches that can help children. Some studies focused on interventions that can help children individually and other studies focused on helping all children in a chosen school. In all of the studies, similarities were found along with differences and areas for future research opportunities. All populations treated were the same in each study but the location of treatment did vary between the studies. Positive results were found in all studies but there were negative results to report as well. While all of the studies had similar findings, it would be impossible to compare them exactly because of the many different approaches that exist in helping at-risk children succeed in schools. The primary theme that emerged from the studies is that children who are at risk of failing out of school need interventions that are "out-of-the box" and customized to their specific situation.

While some studies were developed by the researcher, other studies were based on a national program model. Three studies were found in the review to have been based on a national model. Walker and colleagues (2009) based their study on the First Step for Success program model. Their attempt to implement the study into a school setting in Albuquerque was successful. Academic success was seen in the children in the intervention group (Walker et al., 2009). Gopalan and colleauges (2013) also based their study on a national study model called Project Step-up. This study found mental health symptoms in a large number of the participants and discovered that by catching the mental health symptoms and treating the issue, success can happen in school. Kratochwill and colleauges (2009) also based their study on a national study. They implemented the

FAST program which incorporated parents into the intervention (Kratochwill et al., 2009). Findings indicated the benefits of including parents to help facilitate a relationship with the child and school. It also showed improvement in family functioning (Kratochwill et al., 2009).

The studies were also varied on the length of treatment provided. Several studies provided only short term, intense treatment while others offered treatment that lasted the entire school year. All studies that were included in this systematic review found positive results despite the length of time offered for treatment. Black and colleagues (2013) and Kratochwill and colleagues (2009) offered treatment groups for five to eight weeks. These treatment groups varied in location with the former offered after school and the latter offered during the school day. Powers and colleagues (2016) and Bergen-Cico and colleagues (2015) offered treatment that was throughout the duration of the school year. Both studies offered treatment in the school setting and found ways to implement treatment into the busy school day.

Strengths and Limitations

Strengths. This systematic review revealed two major strengths: interventions that were shorter in length to implement and programs that were connected to the school offered in an after school program format.

A major strength in the intervention studies was seen in the yoga/mindfulness group because of the short time to implement the intervention during the school day. Bergen-Cico and colleagues (2015) implemented yoga interventions into a regular school day for only four minutes per day, three days a week. This short duration intervention

still saw improvements in children and was easy for teachers to implement (Bergen-Cico et al., 2015). Black and colleagues (2013) also incorporated a mindfulness curriculum into the school day with 15 minute sessions three times a week. This brief intervention was found to benefit not only the students in the intervention but also the school (Black et al., 2013). Berger and colleagues (2009) also used yoga but offered the intervention in an after school program. While it was offered after school as opposed to during the school day, benefits of the yoga program were still seen during the school day. The skills learned in the study could be applied to the school day to help children succeed (Berger et al., 2009). These short duration interventions would be relatively easy for a teacher to incorporate into a school day with minimal disruption.

Another strength emerged from the programs that were connected to the school but offered in an after school format. An after school program intervention prevented the entire school day from having to be restructured, which was seen as a significant benefit. Walter and colleagues (2010) discovered that conducting an 18-week after school program for four hours per week identified mental health problems in students to help improve their functioning in school. By conducting the program after school, mental health treatment could still occur without disrupting the school day. Studies focused on family engagement also showed good success with after school programming. Kratochwill and colleagues (2009) found that engaging parents and children together increased the ability of the family to function as a team. When families participated in the intervention together, issues that arose both at school and at home could be dealt with more effectively, which promoted better academic achievement (Kratochwill et al., 2009).

Limitations. A major limitation that was highlighted in this review was various laws, required curriculum components, and national standards that schools are mandated to follow. These requirements can make it very difficult to implement new interventions to help children at risk of academic failure. The Every Student Succeeds Act (ESSA) was signed into law in December 2015 as a way to revise the current No Child Left Behind Act (U.S. Department of Education, 2015). The ESSA is intended to help the disadvantaged students that are attending failing schools by mandating that high academic standards are taught (U.S. Department of Education, 2015). While it is important to teach high academic standards, it is also important to use less traditional interventions that can address other areas of the student's life. Several studies listed teacher's busy schedules as a limitation to implementing the intervention during a school day. Black and colleagues (2013) found that teachers had concerns about implementing the changes recommended by the study into an already very full day. Alameda-Lawson (2014) also found that it was difficult to restructure a school structure that is already mandated by some laws. Studies that focused on after school interventions discovered additional limitations in the relative mental health of the study population. Gopalan and colleagues (2013) found that participants in their programming had more mental health symptoms than the national rate. One cannot learn in a school even with high academic standards if mental health symptoms are preventing learning from happening.

Implications for Future Clinical Social Work Practice

Social workers working with children in schools have many interventions available to achieve academic success, but there are still areas that need more study. After reviewing research on school based interventions to help at-risk children achieve

academic success in schools, gaps in the research have emerged. Less traditional interventions are a growing area of interest that needs further research. Research was conducted to better understand which clinical interventions do help at-risk children achieve academic success in schools and how best to implement this intervention. However, at the end of this systematic review it appears that more clinical research is needed around helping at-risk children achieve academic success in schools (Alameda-Lawson, 2014; Bergen-Cico et al., 2015; Berger et al., 2009; Black et al., 2013;).

Currently, the studies that are available are beneficial in providing information on interventions that can be implemented to achieve academic success in schools (i.e. Alameda-Lawson, 2014; Bergen-Circo et al., 2015; Berger et al., 2009; Black et al., 2013; Berger et al., 2009; Gopalan et al., 2013; Kratochwill et al., 2009; Powers et al., 2016; Walker et al., 2009; Walter et al., 2010) . Yoga and mindfulness is a growing practice and the benefits on children are being seen in schools (Bergen-Cico et al., 2015; Berger et al., 2009). However, because this is a newer area of practice, more research is needed before implementing it more widely (Berger et al., 2009). School-based mental health support is another area that is starting to grow. This is also another newer area that needs further research before schools adopt these programs (Powers et al., 2016). Schools are no longer seen only as academic institutions; schools are becoming the frontline in helping children who are struggling. By implementing some of the newer interventions like yoga or school based mental health support, at-risk children have a better chance of achieving academic success.

Implications for Future Research

Future research should be focused on looking at these three interventions further: yoga/mindfulness, school based mental health supports, and parental engagement. All three interventions showed promising benefits on children's academic success. Further research should also be focused on the task of implementing important interventions like yoga/mindfulness and school based mental health supports into the school day (Walter et al., 2010; Bergen-Cico et al., 2015). As discussed above, there are many mandates determining what is required to be included in a school day. Finding a way for teachers to implement more unconventional interventions can promote academic success for at-risk children.

At-risk children need help beyond the academics of school to succeed (Masten et al., 1997). The interventions studied showed promising results in helping children succeed. Social workers should continue to conduct research on interventions that can help at-risk children to work toward more academic success. By furthering research on helping at-risk children, more children will be empowered to finish school.

Conclusion

This systematic review focused on finding the best interventions for at-risk children within a school setting. Nine intervention studies were analyzed for relevant data and most listed positive outcomes of their research.

Within the intervention studies, yoga/mindfulness, school based mental health, and parental engagement interventions have been proven to be effective in increasing the academic achievement for at-risk children in schools. All studies reviewed in this

systematic review of interventions to support at-risk children in schools showed that the positives of academic achievement outweighed some of the negatives that were found. Further research needs to be done on the process of implementing these interventions into a school day already dictated by federal laws and curriculum requirements. As social workers with a duty to advocate for the best possible outcome for our client, it is important to continue to conduct further research on the interventions that best support at-risk children.

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*Articles marked with an asterisk identify the nine studies included in the systematic review.