

**Mindful Reading Strategy for Parents: Impact on Parental Perception of Behavioral Disorder
Problem Behaviors and Parent-Child Relationship**

Catalina Aragon, MSN, RN, DNP Student

Florida Atlantic University

Christine E. Lynn College of Nursing

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Shirley Gordon, PhD, RN, NCSN, AHN-BC, HWNC-BC

Janet V. Ward, MSW

Cynthia Sheppard

Michele Byrd, PMHNP- BC

Abstract

Clinical question: In parents with children 3-5 years of age with reported behavioral disorder problem behaviors (P), how does implementing a mindful reading strategy with their children, (I) compared to traditional reading or no reading (C) effect parents' perception of problem behaviors and parent-child relationship (O) within 8 weeks (T)? This quality improvement DNP project examined the effectiveness of an online video parent training program, Mindful Reading Strategy for Parents, created based on the recommendations of Susan Hendler Lederer, PhD (Lederer, 2018). The theory of Nursing as Caring by Boykin & Schoenhofer was used to ground this project in caring (Boykin & Schoenhofer, 2015; Boykin & Schoenhofer, 2019). A convenience sample of three English speaking participants with children aged 4 and 5 with parental reported behavioral disorder problem behaviors were recruited from an outpatient clinic and preschool. They were assessed prior to the video training and 8- weeks after using the *Parent Perception Survey* and *Pre- and Post- Parent Survey*. Parents reported improved parental perception of child's behavior, perception of at least one behavioral disorder problem behavior in their child, and perception of parent- child relationship. No changes in child's psychotropic medication regimen post-intervention were reported and 66% of parents read to their child at least 4 times per week during intervention. In this project, the Mindful Reading Strategy for Parents training program can have a positive effect on parents' perception of problem behaviors and parent-child relationship. Implications include increasing parent and provider education of benefits of early intervention of mindfulness embedded reading strategies for children. Based on participant feedback, shortening the video training program may improve parent participation.

Mindful Reading Strategy for Parents: Impact on Parental Perception of Behavioral Disorder Problem Behaviors and Parent-Child Relationship

Call for Nursing

Aaron, a 4-year-old patient seen at the outpatient clinic with his mother. Throughout the psychiatric interview the patient appeared inattentive and restless in his chair. The mother reports the patient constantly gets in trouble in school, “talks back” to her, has “multiple tantrums per week” where he “kicks and throws things,” and “doesn’t listen.” She reports not wanting to start psychotropic medications at this time. The mother reports feeling “stressed out” and “overwhelmed” with his behavior and states, “I’m constantly snapping at him and it makes this worse.” Mother reports her and the patient see a behavioral therapist weekly but would like to know what she can do with her child at home to help. The project leader is aware of many patients and parents reporting similar experiences and expressing a want for alternative approaches for care and determined this call for nursing can be answered with a caring, evidence-based approach.

Problem Statement

Behavioral disorder problem behaviors in children can impair parent-child relationships (Eşkisü & Kapçı, 2021; Ogundele, 2018; Kaminski & Claussen, 2017; Behbahani et al., 2018). Difficulties in the parent-child relationship can exacerbate or create psychopathological symptoms that could lead to psychiatric diagnosis in children or parents (Wamboldt et al., 2015).

Involvement of parents in early intervention of problem behaviors can decrease problem behaviors and improve parent-child relationships (Behbahani et al., 2018; Eşkisü & Kapçı, 2021; Xie et al., 2018; Kaminski & Claussen, 2017). Although, studies have identified relationship enhancing strategies as effective in improving parent-child relationships and mindfulness-based interventions as effective in improving behavioral problems in children, a gap in practice exists addressing the

effectiveness of a mindful approach to parent-child relationship enhancement strategies to improve behavioral disorder problem behaviors (Kaminski & Claussen, 2017; Klingbeil et al., 2017).

Project Purpose

The purpose of this quality improvement project is to evaluate the effect of a parent training program that is combined with evidence-based mindfulness and relationship enhancement reading strategy on parental perception of behavioral disorder problem behaviors and parent-child relationship perceptions.

Clinical Question

In parents with children 3-5 years of age with reported behavioral disorder problem behaviors (P), how does implementing a mindful reading strategy with their children, (I) compared to traditional reading or no reading (C) effect parents' perception of problem behaviors and parent-child relationship (O) within 8 weeks (T)?

Literature Review and Synthesis

A literature review was performed using OneSearch, CINHAL, Elsevier Science Direct, Sage Journals Online, ScienceDirect, Gale OneFile, EBSCOhost, PubMed, and Wiley Journal Online Databases. The key search words include mindfulness, mindful, reading, parent child, parent-child, child, youth, kids, children, book, reading, shared, shared book reading, ADHD, attention deficit hyperactivity disorder, behavioral problems, behavioral disorders, disruptive behaviors, disruptive disorders, parent child relationship, and child parent relationship. These terms resulted in various research articles with consistent themes that evaluated the impact of mindfulness-based, relationship-enhancing, and shared book reading interventions on behavioral disorders problem behaviors and parent-child relationship.

Evidence for the use of Mindful Reading Strategy for Parents

Behavioral Disorder Problem Behaviors. Behavioral disorders like conduct disorder (CD), oppositional defiant disorder (ODD), or attention-deficit hyperactivity disorder (ADHD) are characterized by problem behaviors that can substantially impact children by causing impairment and dysfunction in a societal, familial, and individual level (Eşkisü & Kapçı, 2021; Ogundele, 2018; Kaminski & Claussen, 2017; Behbahani et al., 2018). The persistence of behavioral disorder problem behaviors persists through different life stages (Keenen et al., 2010; APA, 2013). Keenan et al. (2010) reports 80% of preschoolers diagnosed with ODD and 60% of preschoolers diagnosed with CD continued to meet the same diagnostic criteria at 12-, 24-, and 36-month follow-ups. Additionally, a high persistence of childhood diagnosed ADHD continues into adulthood (APA, 2013).

Mindfulness. Mindfulness based interventions (MBI) have been studied and research supports positive effects toward problem behaviors during treatment (Klingbeil et al., 2017) and are a cost effective. According to Maglica et al. (2020), an estimated 36% of fathers applying the mindfulness concept of focusing attention with acceptance to parenting reported a decrease in externalizing behaviors in their preschool aged children which are commonly experienced in behavioral disorders. Additionally, children participating in MBIs had improvement in behavioral disorder problem behaviors as evidenced by a 0.6-4.5% increased attention post intervention (Razza et al., 2015), greater improvement in self-regulation, $F(1, 124) = 10.70, p = .001 (=0.079)$ compared to control group (Viglas & Perlman, 2017), decreased hyperactivity, ($z = -3.377, p = .001$) (Viglas & Perlman, 2017), and an average of 65% reduction in aggression (Singh et al., 2011). In a case study by Khaddouma et al. (2015), a 5-year-old boy with behavioral disorder problem behaviors exhibited statistically significant reductions in emotional reactivity, sleep problems, aggression, and ADHD problems post MBIs. Research extensively supports MBIs resulting in improvement of ADHD symptomology in children (Leeth et al., 2019; Zhand et al., 2017). In addition, a study by Olson et al. (2017) reports three-year-olds with low levels of effortful regulation will more likely show patterns of chronic behavior disorder problem behaviors.

Relationship-Enhancing Strategies. Relationship enhancement perspectives suggest that a child's problem behaviors can be attributed to a lack of positive involvement from parents (Leijten et al., 2018). Relationship-enhancing strategies are used in parent behavior therapy and may include engaging in joint activities and providing the child with positive attention (Kaminski & Claussen, 2017). Parent behavior therapy includes parent-child relationship strengthening that motivates children to behave in the way the parents want (Kaminski & Claussen, 2017).

Traditional Parent Child Shared Reading. Parent child shared reading, also known as shared book reading with parents, is a joint activity that involves an interactive process of engaging the child with text and illustration (Lederer, 2018; What Works Clearinghouse, 2015). In a study by Lam et al., (2012) the experimental group post- parent child reading reported better parent-child relationships, $t(162) = 2.26, p < .001$, Cohen's $d = .34$ when compared to control group. Additionally, significantly higher scores of parent-child relationship were also reported pre- and post- parent reading intervention, $t(84) = 4.20, p < .001$, Cohen's $d = .46$ (Lam et al., 2012). According to Ganotice et al. (2016), improvement was reported post parent reading intervention in parent-child relationships with increases of 23% in parental satisfaction subtype, 13% in communication subtype, and a decrease of 11% in social desirability subtype. Parent child shared reading may or may not provide the child with positive attention, however, evidence supports it can improve reported parent-child relationships.

Mindful Attention Shared Reading. Mindful attention shared reading, or mindful shared book reading, includes all major concepts of traditional shared reading, in addition to an embedded mindfulness practice (Lederer, 2018). Lederer (2018) describes using the READY, READ, REVIEW, REFLECT steps to encourage positive attention during shared reading with or without mindful themed books.

Project Goals and Objectives

The aim of this quality improvement project was to improve parental perception of behavioral disorder problem behaviors in children and the parent-child relationship by implementing a training

program for parents focused on mindfulness embedded shared book reading with their children. This intervention is in response to problem behaviors in young children leading to behavioral disorders later in life and dysfunctional parent-child relationships. The project was determined to be successful if the following objectives were met:

1. Eighty percent of project participants used the Mindful Reading Strategy for Parents with their children at least four times per week during project.
2. By eight weeks, thirty-five percent of participants reported an increased improvement in perception of child's behavior, as measured by question one in *Parent Perception Survey*.
3. By eight weeks, thirty-five percent of participants reported at least one improved child behavior, as measured by question two in *Post-Training Parent Survey*.
4. By eight weeks, thirty percent of project participants reported increased improvement in perceived parent-child relationship, as measured by question two in *Parent Perception Survey*.

Caring Theoretical Framework

The theory of Nursing as Caring was developed by Boykin & Schoenhofer and was used to ground this quality improvement project in caring (2019). Based on the theory of Nursing as Caring, nursing originates when a nurse encounters a shared lived experience that enhances the personhood of both the nurse and nursed, known as the nursing situation (i.e. See Call for Nursing) (Boykin & Schoenhofer, 2019). Through authentic presence and living and growing in caring, a nurse hears a call for nursing (i.e. See Call for Nursing) and a caring response can be created (i.e. project) (Boykin & Schoenhofer, 2019). In this project, participant interactions were guided to remain within the *caring between* to enhance personhoods and encourage bidirectional activity throughout implementation and evaluation (Boykin & Schoenhofer, 2015)

Translational Framework: The Iowa Model Revised

The translational framework used is the Iowa Model Revised (Appendix B). The Iowa Model revised has a multi-phase change process with feedback loops that is used for guidance in clinical practices that effect healthcare outcomes (Dang et al., 2019; Iowa Model Collaborative, (2017). The Iowa Model Revised can be used in healthcare to identify the need and provides a process to implement evidence-based practices (Dang et al., 2019). The Iowa Model Revised was used to identify triggering issues/opportunities (i.e. see Call for Nursing), identify purpose of issue (i.e. behavioral disorder problem behaviors and impact in parent-child relationships), form a team (i.e. faculty team leader, community team leader, and student project leader), assemble, appraise and synthesize body of evidence (i.e. see Literature Review and Synthesis), design and pilot the practice change (i.e. see Project Processes and Evaluation Plan), integrate and sustain the practice change (i.e. see Nursing Response, Project Processes, and Evaluation Plan), and disseminate results (i.e. see Dissemination Plan). The Iowa Model Revised was used/reprinted with permission from the University of Iowa Hospitals and Clinics, copyright 2015. For permission to use or reproduce, please contact the University of Iowa Hospitals and Clinics at 319-384-9098.

Role of the DNP

The DNP student's role includes development, implementation, measurement, evaluation, and dissemination of a training for parents using evidence-based mindfulness strategies in parent-child book reading. The DNP student lead the quality improvement project through interprofessional collaboration with team members.

Team Development

Shirley Gordon, PhD, APRN served as faculty team leader. Dr. Gordon's experience includes multiple publications, development of nursing theories, and focuses on caring for persons experiencing stigma. In addition, she is a nursing leader in the community and an educator at Florida Atlantic University, Christine E. Lynn College of Nursing. Janet V. Ward, MSW served as community team

leader. Mrs. Ward's experience consists of over 40 years of social services and is the founder/CEO of Parents Information & Resource Center, Inc. (PIRC); a community health clinic and a proposed project site. Michele Byrd, PMHNP-BC serves as community team collaborator, she has been working in outpatient and telehealth psychiatric services for over 3 years. Cynthia Sheppard serves as a community team collaborator and is the director of Precious Kidz, Inc., a preschool and daycare. She has provided childcare and therapeutic services for children for 30 years. The student team leader is a DNP student with an MSN in psychiatric mental health nurse practitioner and supervised clinical experience in psychiatric consultation liaison and psychiatric outpatient settings.

Project Processes

Approval to conduct this DNP project was obtained (Appendix A) from Janet Wards, Founder and President/CEO of PIRC, Inc., an outpatient mental health clinic in Pompano Beach, FL that provides mental health services to adults, older adults, and children. Approval was also obtained (Appendix H) from Cynthia Sheppard, Owner/Director of Precious Kidz, Inc, preschool and daycare. The permission letters were obtained via email by the DNP project leader.

Recruitment and Protection of Patients

The inclusion criteria consisted of (1) parents with children ages 3 to 5 years of age, (2) parental reported behavioral disorder problem behaviors in their children, (3) ability to speak and read English, (4) consent to participation, (5) expected date of delivery between July 1, 2022 and August 26, 2022. The setting was an online training video conducted by the project leader. Recruitment of participants were obtained through distribution of an information flyer (Appendix C) at PIRC's outpatient clinic and affiliated preschool. Additionally, three of the *Mindful Reading Strategy for Parents* props was demonstrated during the recruitment process at the affiliated preschool including bubbles, pinwheels, and Hoberman's sphere. The list of potential participants, their selected initials, email address, and phone number were placed in a locked cabinet located at PIRC and only assessable to the project leader. An

email was sent to list of potential participants with information on training program and link to initial survey. If initial survey was initiated by participant, it indicated participant has consented themselves and their child into *Mindful Reading Strategy for Parents* DNP student project. No E-PHI information was collected in the online survey. All survey data was de-identified.

Intervention (Nursing Response)

The *Mindful Reading Strategy for Parents* was an evidence-based mindful and relationship enhancing approach using the recommendations of Dr. Sussan Hendler Lederer for the practice of mindfulness and mindfulness embedded shared book reading focused on mindful listening, looking, and breathing (2018). First, disclaimer to participants, objectives, and project expectations and were reviewed. Second, education on mindfulness and reasoning of practice was discussed. Third, four steps were explained and demonstrated to guide the mindfulness embedded shared reading : (1) READY: Parents prepared the child for shared reading by doing one or more attention engaging mindful activity (i.e. resonating bell, breathing ball, singing, etc.), reinforcing reasoning for practicing mindfulness, and praising child's efforts, (2) READ: read book with child, (3) REVIEW: Review the books mindful concepts (i.e. sounds heard, breathing movement, etc.), and (4) REFLECT: Reflect on their experience of practicing paying attention (i.e. successes, challenges, or reasoning for practice). Fourth, tips for practicing mindfulness with child were discussed including a brief list of mindful themed books. Lastly, participants were educated to reinforce discussed tips and list of books with mindful themes by watching the presentation as many times as needed. The program was implemented to eligible participants and consisted of one video presentation, approximately 47 minutes in length, created by PowerPoint and distributed using YouTube. The video presentation included written examples, demonstration, tips, and recommendations for mindful themed books and provided two mindful themed books. Desired outcomes included reported improvement of one or more behavioral disorder problem behavior, improved parental perception, and improved parent-child relationships when compared with pre-intervention traditional reading or no reading.

Implementation of Activities

Emails were sent by the project leader which included links to online surveys in July 2022 and August 2022. Pre- intervention *Initial Survey* (i.e., <https://form.jotform.com/220937919207058>) which included (1) *Demographic Survey* (Appendix E), (2) *Pre- Training Parent Survey* (Appendix F), and (3) *Parent Perception Survey* (Appendix D) to completed pre- *Mindful Reading Strategy for Parents* training. The *Initial Survey* included demographic criteria of parents, age of child, gender of child, and relationship to child. Emails also included YouTube link to *Mindful Reading Strategy for Parents* training video available for participants to view as many times as needed. Two participating parents contacted project leader via phone number to obtain mindful themed books included in program. One participant contacted project leader in-person during visit to participating preschool to obtain mindful themed books included in program. Eight weeks post- intervention, the project leader emailed the three participants a link to online survey (i.e. <https://form.jotform.com/220971350415046>) which includes (1) *Parent Perception Survey* (Appendix D) and (2) *Post-Training Parent Survey* (Appendix G). In addition, if needed, a follow-up call was to be made to participants at 9 weeks to remind participants about completion of measurement surveys. No follow up calls were required due to completed *Post- Training Parent Surveys* by participants by 8 weeks post intervention.

Cost

The office space, telecommunications, and accompanying expenses came at no cost, as it was courtesy of Janet V. Ward, MSW community leader located at PIRC. The provided books purchased cost approximately \$177 and associated props cost approximately \$20. The printed flyers cost approximately \$33.

Instrument

To measure effectiveness of this training program, participants were asked to complete surveys consisting of 5- point numerical scales, *Parent Perception Survey* (Appendix D), and questionnaires, *Pre-*

Training Parent Survey (Appendix F) and *Post- Training Parent Survey* (Appendix G) designed by the project leader comparing pre- training program and 8-weeks post- training program. The faculty leader served as expert reviewer to appraise the content validity of surveys.

Parent Perception Survey: Question 1. Question one in the *Parent Perception Survey* (Appendix D) is a one item, 5-point numerical scale to measure rating of participating parent's perception of their child's behavior (i.e., "what would rate your child's behavior?"). The participants were asked to indicate which rating they would give their child's behaviors from 1 (worst behavior) to 5 (best behavior). A high score indicates good behavior perception in their children. The numerical scale was developed for this project and designed for ease of parental response and to be useful in practice.

Parent Perception Survey: Question 2. Question two in the *Parent Perception Survey* (Appendix D) is a one item, 5-point Likert scale to measure participating parent's perception of parent-child relationship (i.e., "how much do you agree with the following statement: 'I enjoy reading with my child'"). The participants were asked to indicate how much they agreed with this item from a scale of 1 (strongly disagree) to 5 (strongly agree). A high score indicates a good perception of parent-child relationship. This Likert scale was developed for this project and designed for ease of parental response and to be useful in practice.

Pre- Training Parent Survey and Post-Training Parent Survey. Question one of *Pre- Training Parent Survey* (Appendix F) and *Post-Training Parent Survey* (Appendix G) will assess frequency of participants reading to child by providing three options, "I do not read with my child," "1-3 times per week," and "4 or more times per week." Literature supports shared book reading programs to be completed several times per week, ranging from four to five times per week in randomized control trials (What Works Clearinghouse, 2015; Lam et al., 2012). Question two in the *Post- Training Parent Survey* (Appendix G) questionnaire which will determine what type of behavior the parent participant has perceived as improved in the child participant, if any. The behavior options in question two are supported by the literature to be behavioral disorder problem behaviors that could improve with mindfulness-based

interventions. When comparing participant's answers, an increased in frequency of reported behavior indicates parent training to be more effective towards improving chosen behavior or behaviors (i.e. Check the behaviors that you have seen improve in your child in the past 8 weeks). The participants were asked to choose from emotional reactivity, attention, impulsivity, hyperactivity, aggression, or none of the above. Question three and four in *Pre- Training Parent Survey* (Appendix F) and *Post-Training Parent Survey* (Appendix G), and question five in *Post-Training Parent Survey* (Appendix G), assessed if participating child was taking prescription psychiatric medications and/or any changes in the prescribed psychiatric medication regimen after eight weeks post training.

Timeline

Recruitment of participants, disbursement of video presentation, and data collection began in May 2022 to August 2022. Completion of data analysis was completed by September 2022. Project evaluation, manuscript development, and dissemination of results was completed between September 2022 to December 2022.

Analysis of Data (Results)

Demographic data was obtained via online survey included in *Initial Survey*. Numbers and percentages of sociodemographic characteristics of participants at baseline are reported in Table 1. Findings indicate a higher average of participants were mothers, male children, five-year-old children, and Black or African American parental demographic (See Table 1). Additionally, ages of children analyzed were limited to four and five years of age. No participants with three-year-old children participated in project.

Results for objectives and child's psychotropic medications were be obtained via online surveys created on JotForm where participants were evaluated at two different times, pre- *Mindful Reading Strategy for Parents*, and 8 weeks post- *Mindful Reading Strategy for Parents*. The data was collected from the 2 item 5-point Likert scales, *Parent Perception Survey* (Appendix D), and the 4 to 5 item

questionnaires, *Pre- Training Parent Survey* (Appendix F) and *Post-Training Parent Survey* (Appendix G), completed by the three participants. The tallied scores for each 5- point Likert scale question was averaged and compared pre- and post- intervention. The difference between those two numbers was calculated and represented in percentages. In addition, descriptive statistics was used to assess the responses of the 4 to 5 item questionnaires and compared pre- and post- intervention.

In general, the results of the analysis were positive. Overall, the findings indicated higher scores when comparing the pre- and post- *Parent Perception Survey* (Appendix D) results.

Objective 1

The overall frequency in which participants read to their child on a weekly basis increased from pre to post intervention. As shown in Table 2, there was a sixty- six percent increase in participants reading to their child four or more times per week. Additionally, the number of participants that read to their child one to three times per week decreased by fifty percent. During post-intervention no participants reported, “I do not read with my child.” This indicated a decrease of thirty-three percent when compared to pre intervention parental responses of the same question. Although, the frequency of participants reading to their child increased post intervention, the objective of eighty percent of project participants using the *Mindful Reading Strategy for Parents* with their children at least four times a week was not met.

Objective 2

For question one of the *Parent Perception Survey* (Appendix D), “from a scale of 1 to 5, what would you rate your child’s behavior?”, results indicate that one- hundred percent of participants reported an improvement in the perception of their child’s behavior eight weeks post- intervention (See Table 3 and Table 4). These results surpass the thirty-five percent goal by eight weeks post- intervention, meeting objective.

Objective 3

Table 5 shows the comparisons of the participant responses of question two of *Pre-Training Parent Survey* and *Post- Training Parent Survey*. From pre- to post- intervention, participant one reported improved attention and impulsivity in their child, participant two reported improved attention in their child, and participant three reported an improved emotional reactivity (See Table 5). The training program did not yield positive results for participants that reported wanting to see an improvement in hyperactivity or aggression (See Table 5). Results indicate that one- hundred percent of participants reported at least one improved child behavior, exceeding the target goal of thirty- five percent by eight weeks and meeting objective.

Objective 4

For question two of the *Parent Perception Survey* (Appendix D), “from a scale of 1 to 5, how much do you agree with the following statement: ‘I enjoy reading with my child’”, thirty-three percent of participants reported an improvement in perception of the parent-child relationship when comparing pre- and post- survey results (See Table 3 and Table 4). These results met objective of thirty- percent of participants reporting an increased in perceived parent-child relationship by eight weeks.

Child’s Psychotropic Medication

In *Pre- and Post- Parent Survey*, participants were asked about psychotropic medications prescribed to their child by a psychiatric provider and if any changes occurred to their child’s psychotropic regimen during the eight weeks after intervention initiation. As shown in Table 2, zero participants reported children were on psychotropic medications pre- or post- intervention. As a result, no change in the use of psychotropic medications were reported.

Key Facilitators of Project Success

There were several individuals that need to be credited for the success of this DNP student project. To begin, Shirley Gordon, PhD, RN, who served as faculty leader, provided many hours of

advice, guidance, and support. Thank you, Dr. Shirley Gordon, for the time, dedication, and patience that resulted towards the creation and completion of this project.

In addition, credit must be given to the community leader of this project, Janet V. Wards, President/CEO of PIRC, Inc., for believing in this project, providing leadership, and a willingness to open your organization and resource. I would not have been able to complete this project without your trust, support, and passion for this community. Also, Mrs. Cynthia Sheppard, Owner/Director of Precious Kidz, Inc., who listened to the proposal, provided support, and encouraged parents to sign up and participate in the project. I will always be thankful and forever inspired for your dedication to your parents and children. Additionally, Michelle Byrd, PMHNP, needs to be credited as a collaborator for the project with assisting in recruitment and supervising the ARNP role in the project. Special thanks for the staff at PIRC and Precious Kidz for helping with recruitment. Lastly, Beth King, PhD, PMHNP, needs to be credited for guiding the PMHNP focus and providing emotional support throughout the program.

Key Barriers/ Challenges

Several barriers were encountered and addressed throughout project. The first barrier was participant recruitment. Due to financial restraints, only twenty books for the training program could be purchased, allowing a total of ten potential participants. However, only three participants were ultimately recruited and completed intervention. The limited number of participants impaired the evaluation of the intervention. The second barrier was length of the training video. Participants reported the length of the video to be a challenge during intervention. As reported, parent participation was a challenge and waiting for parents to complete video resulted in longer than expected completion time.

Unintended Consequences

Positive Consequences

This DNP project brought awareness to the important role of the parents to actively participate in early intervention for children experiencing behaviors associated with ODD, CD, or ADHD. The two

days of props and books display during recruitment provided an opportunity to educate multiple parents on the importance of early intervention. Although only three parents participated in the project, the hope is the knowledge provided during recruitment created enough curiosity to inquire about alternative options for behavioral disorder problem behaviors in young children.

This project offered healthcare providers an adjunctive or alternative intervention option for their patients. Specifically, healthcare providers were able to direct intervention to parents who did not wish to start psychotropic medications on their child, patients who were not eligible for psychotropic medications, or patients that would benefit from an adjunctive option in conjunction with the recommended behavioral therapy. Feedback received from Michele Byrd, PMHNP-BC included that in her practice additional options were readily available to be offered to her patients and appreciation from parents to offer intervention. Overall, the client and provider's experience were improved in certain circumstances.

Project Evaluation

Formative

During Design/Planning. Project was modified to be a mostly online program due to possible delays due to COVID- 19 interfering with project (i.e. inability to participate due to disease contraction or lockdown regulations). As a result, online training video and online surveys were created. Additionally, to evaluate changes in the children's psychotropic medication regimen, additional questions to *Pre- Parent Training Survey* (Appendix F) and *Post- Parent Training Survey* (Appendix G) were added.

During Piloting the Practice Change/Implementation. As previously discussed, lower than expected number of participants yielded to additional in person recruiting days with display of books and props. Additional cost was acquired due to the purchase of props.

Summative

An online survey method and a retrospective pre-then-post design were used for evaluation of measurable outcomes (Perrin, 2022; Klatt & Taylor-Powell, 2005). Overall, objectives were met for this quality improvement project. However, pre- and post- intervention results revealed objective one was not met due to only 66% of participants reporting reading to child at least 4 times per week during project (see Table 2). Objectives 2 through 4 were met with results indicating 100% of participants reported an increased improvement in perception of child's behavior (see Table 3 and Table 4), 33% of participants reported an increased improvement in perceived parent- child relationship (see Table 3 and 4), 100% of participants reported at least one improved child behavior (see Table 5), and no changes in child's psychotropic medication regimen was reported. Although results indicate most objectives were met, the result of the analysis only partially answers the proposed clinical question by only evaluating children of 4- 5 years of age. Participants with children of 3 years of age were not evaluated, therefore, the result of the analysis supports the use of the *Mindful Reading Strategy for Parents* training program to improve perception of child's behavior and parent-child relationships in parents with children ages 4- 5 years of age with parental reported behavioral disorder problem behaviors.

Recommendations

Site Specific

The results of this quality improvement project will be shared with key stakeholders like the Chief Executive Officer and behavioral healthcare providers of the project site. Additionally, a poster presentation or PowerPoint presentation of the DNP project will be provided at Florida Atlantic University for staff members, invited healthcare professionals, and colleagues.

Dissemination of results of this project to outside behavioral healthcare providers (i.e., psychologists, therapists, psychiatrists, psychiatric nurse practitioners, or psychiatric physician assistants) is significant as they are assessing and creating treatment plans for multiple patients per day in the community. Many parents of 3- 5-year-old patients in need of an alternative or adjunctive intervention for

behavioral disorder problem behaviors can be educated on the benefits of the *Mindful Reading Strategy for Parents* (Lederer, 2018) and its importance on early intervention to prevent dysfunction later in life. By attending the organizations meetings (i.e., telecommunication meetings, in-person meetings, or grand rounds) with the behavior healthcare providers and provide a brief presentation of indication for intervention and the findings can be a cost-effective method to disseminate the project.

Disseminating the results to parents by providing an educational opportunity at an organization will be beneficial. A live online class or in-person class educating parents on the importance of early intervention of mindfulness embedded reading for behavioral disorder problem behaviors in children 3- 5 years of age. Increasing parent participation of intervention is essential and including enhancement of parent engagement techniques is recommended (Gonzalez, et al., 2018).

Project Appraisal

The results of this DNP project reveal that the *Mindful Reading Strategy for Parents* (Lederer, 2018) training program is recommended to be modified due to the lower-than-expected number of participants and reports of difficulties with length of video training. According to Gonzalez et al., (2018), the addition of monetary incentives, promotion- focused advertisement, and engagement package (i.e package that includes teacher endorsement, leader engagement call, family testimonial flyer, and brochure) has resulted to in significant findings towards recruitment, enrollment, and first attendance stages of interventions. Consideration of the addition of enhancement of parent engagement techniques is recommended. Additionally, decreasing the length of video is also recommended to retain participant attention and prevent project delays.

Conclusion

The aim of this project was to evaluate the effect of the *Mindful Reading Strategy for Parents* training program on parental perception of behavioral disorder problem behaviors and the parent-child relationship. The literature supports that parents who are involved in early intervention for children

3- 5 years of age exhibiting behaviors associated with ODD, CD, or ADHD, have helped prevent dysfunctional outcomes in their child that could progress into adulthood. In addition, the literature supports traditional shared book reading, a relationship enhancing strategy that could improve the parent-child relationship, and mindfulness-based interventions as beneficial in improving behavioral disorder problem behaviors in young children. The results of this project support the improvement in behavioral disorder problem behaviors and parent-child relationship; therefore, dissemination to other behavioral healthcare providers through educational organization meetings or academic settings and dissemination to parents at community classes in organizations will be encouraged. This project has highlighted an opportunity for providers to encourage parents to participate in their child's treatment actively and ignite their child's senses. Together, they learn techniques that could improve their child's life moving forward by preventing dysfunctions caused by behavioral disorder problem behaviors while strengthening the parent-child relationship.

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Table 1*Sociodemographic Characteristics of Participants at Baseline*

Baseline characteristic	<i>n</i>	%
Gender of Child		
Female	1	33%
Male	2	66%
Age of Child		
3 years	0	0
4 years	1	33%
5 years	2	66%
Demographic of Parent		
American Indian or Alaskan Native	0	0
Asian	0	0
Black or African American	2	66%
White	1	33%
Other	0	0
Relationship to Child		
Mother	2	66%
Father	1	33%
Grandparent	0	0
Other (aunt, uncle, etc.)	0	0

Note. N = 3.

Table 2*Frequency of Reading and Child Psychotropic Medication Analysis*

Variable	Pre-		Post-	
	n	%	n	%
Frequency per week of parent reading to child				
0 times per week	1	33%	0	0
1-3 times per week	2	66%	1	33%
4 or more times per week	0	0	2	66%
Child's psychotropic medications prescribed and taken pre-intervention ^a	0	0	0	0
Child's psychotropic medication changes within 8 weeks after initiating intervention ^a	0	0	0	0

Note. N = 3.

^a Reflects the number and percentage of participants answering "yes" to this question.

Table 3*Parent Perception Survey Results*

Group	P1	P2	P3
Pre- intervention			
Q1	3	3	2
Q2	4	4	3
Post- intervention			
Q1	4	4	3
Q2	4	4	4
Difference between pre-and post- intervention			
Q1	-1	-1	-1
Q2	0	0	-1

Note. P = Participant; Q = Question

Table 4*Mean of Differences of the Parent Perception Survey Results*

Question	<i>M</i>	%
Q1	-1.0	100
Q2	-0.33	33

Note. Mean and percentages are shown above of the differences of the *Parent Perception Survey* results provided by participants ($n = 3$). Q = Question

Table 5*Participant Reported Child Behaviors*

Group	Emotional Reactivity	Attention	Impulsivity	Hyperactivity	Aggression
Pre-Intervention ^a					
P1	X	X	X	X	
P2		X		X	
P3	X				X
Post-Intervention ^b					
P1		X	X		
P2		X			
P3	X				

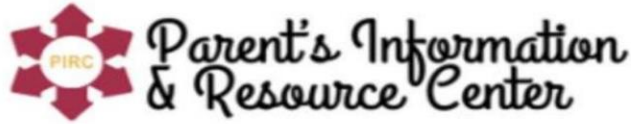
Note. P = Participant

^a Reflects the behaviors participants reported they "would like to see improve in their child."

^b Reflects the behaviors participants reported "have seen improve" during 8 weeks of intervention.

Appendix A

Permission Letter



4.8.2022

Dr. Debra Hain, DNP Program Director
Christine E. Lynn College of Nursing
777 Glades Road
Boca Raton, FL 33431

Dear Dr. Hain,

This letter is to confirm that we have granted Catalina Aragon, Doctor of Nursing Practice student, approval to complete her DNP Project at Parent's Information & Resource Center, (PIRC) Inc.

The project entitled Mindful Reading Strategy for Parents: Impact on Parental Perception of Behavioral Disorder Problem Behaviors and Parent-Child Relationship based on the clinical question in parents with children 3-5 years of age with reported behavioral disorder problem behaviors (P), how does implementing a mindful reading strategy with their children, (I) compared to traditional reading or no reading (C) affect parents' perception of problem behaviors and parent-child relationship (O) within 8 weeks (T)?

Since 1992, PIRC has been providing "Empowering Parent's for Student Success". Ms. Aragon program is a compatible program that would enhance our current parenting program.

Sincerely Your,

Janet V. Ward

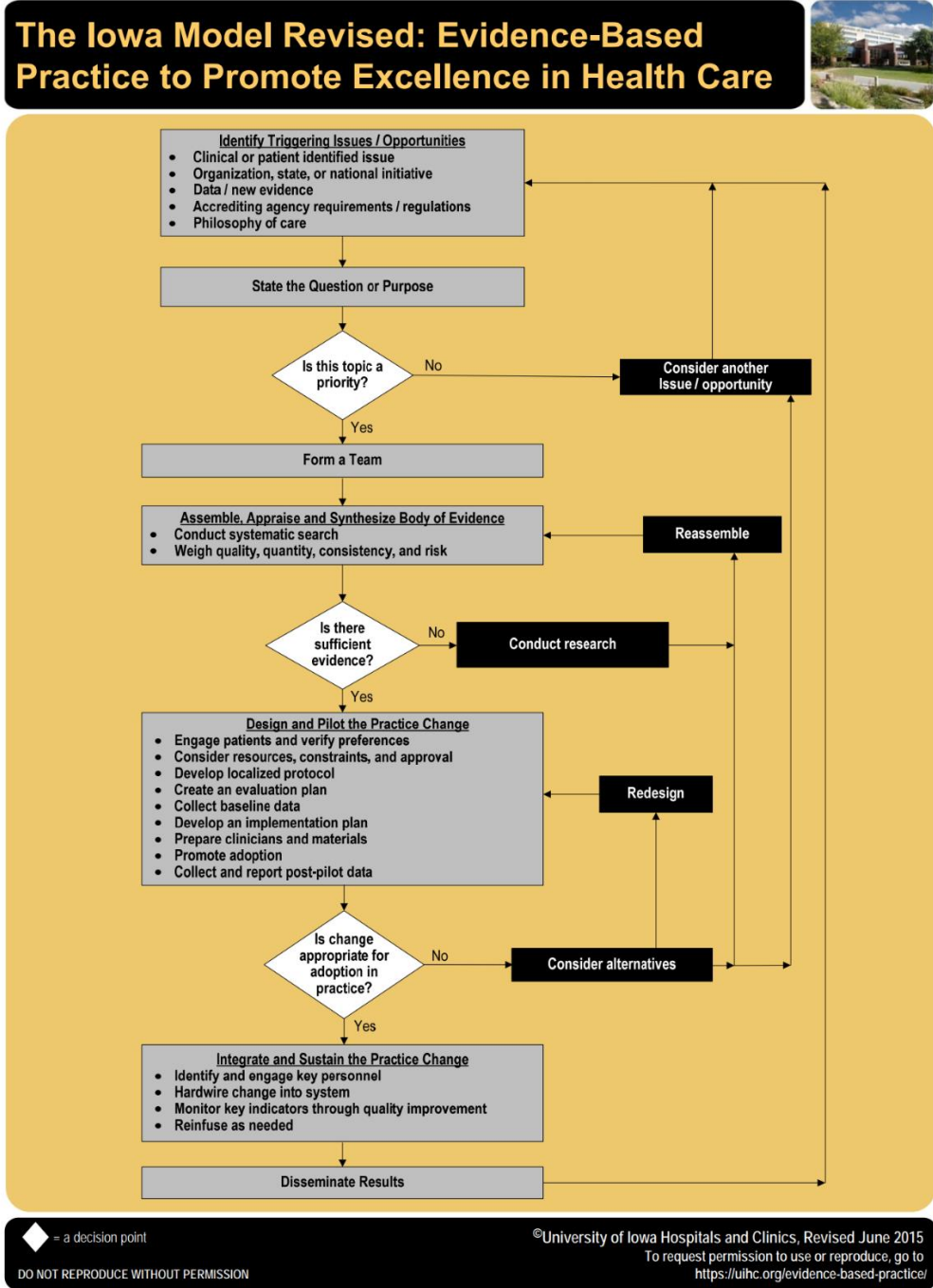
Janet V. Ward, President/CEO

1

Parent's Information & Resource Center, Inc.
817 N Dixie Highway * Pompano Beach, FL 33060

Appendix B

The Iowa Model Revised



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Appendix C

Information Flyer

Reading Strategy for Parents



READING STRATEGY FOR PARENTS PROJECT

What?

Learn a strategy to increase focus and have more fun reading with your child

Why?

This reading strategy is known to improve child behavior and strengthen parent-child relationships.

Who?

This project is for parents with children ages 3-5 years old with parental reported behavioral problems.



Participation in this DNP student project is VOLUNTARY and FREE

Interested?

call us at

(954) 993-0082

Project Leader

Catalina Aragon, RN,
Florida Atlantic University,
Christine E. Lynn College of
Nursing, DNP Student

This project is brought
to you by:



&
Florida Atlantic University

Appendix D

Parent Perception Survey

Participant/Parent Initials (first and last name initials only):

Example: XX

Child's Initials (first and last name initials only):

Example: XX

Question 1.

From a scale of 1 to 5, what would you rate your child's behavior?



Worst Behavior

Best Behavior

Question 2:

From a scale of 1 to 5, how much do you agree with the following statement: "I enjoy reading with my child"

1= Strongly Disagree

2= Disagree

3= Neither agree or disagree

4= Agree

5= Strongly agree



Strongly Disagree

Strongly Agree

Appendix E

Demographic Survey

Demographic (Parents):

- Option 1: American Indian or Alaskan Native
- Option 2: Asian
- Option 3: Black or African American
- Option 4: Native Hawaiian or Other Pacific Islander
- Option 5: White
- Option 6: Other

Age of Child:

- Option 1: 3 years-old
- Option 2: 4 years-old
- Option 3: 5 years-old

Gender of Child:

- Option 1: Male
- Option 2: Female

Relationship to Child:

- Option 1: Mother
- Option 2: Father
- Option 3: Grandparent
- Option 4: Other (aunt, uncle, etc.)

Appendix F

Pre-Training Parent Survey

1. How many times per week do you read with your child?

Option 1: I do not read with my child

Option 2: 1-3 times per week

Option 3: 4 or more times per week

2. Check the behaviors below that you would like to see improve in your child:

Emotional reactivity

Attention

Impulsivity

Hyperactivity

Aggression

3. Does your child currently take medications prescribed by a psychiatric provider?

No

Yes

4. If you answered “yes” to the previous question, what is the name of the psychiatric medication/s your child currently takes? (If you did not answer “yes” to the previous question, please leave blank)

Appendix G

Post-Training Parent Survey

1. How many times per week do you read with your child?
Option 1: I do not read with my child
Option 2: 1-3 times per week
Option 3: 4 or more times per week

2. Check the behaviors that you have seen improve in your child in the past 8 weeks:
 - Emotional reactivity
 - Attention
 - Impulsivity
 - Hyperactivity
 - Aggression
 - None of the above

3. Does your child currently take medications prescribed by a psychiatric provider?
 - No
 - Yes

4. If your child currently takes medications prescribed by a psychiatric provider, has there been any changes in your child's medication/s in the past 8 weeks? (*If you did not answer "yes" to the previous question, please select "Not Applicable"*)
 - No
 - Yes
 - Not Applicable

5. If your child's medications prescribed by a psychiatric provider have changed in the past 8 weeks, please describe below. (Changes include new medication added, previous medication removed, or

dosage change). If you did not answer “yes” to the previous question or the category is not applicable to your child, please leave blank.

Example: My child’s psychiatric nurse practitioner increased their dose of guanfacine within the past 8 weeks. I write next to Psychiatric Medication/s Increased Dose: “guanfacine”

Psychiatric Medication/s Added: _____

Psychiatric Medication/s Removed: _____

Psychiatric Medication/s Increased Dose: _____

Psychiatric Medication/s Decreased Dose: _____

Other Psychiatric Medication Change: _____

Appendix H

Permission Letter

PRECIOUS KIDZ INC.
4113 N. Dixie Hwy.
Deerfield Beach, Florida 33064

May 27, 2022

Precious Kidz Pre-School & Daycare
Cynthia Sheppard
Director
4113 North Dixie Highway
Pompano Beach, FL 33064

Dr. Debra Hain
DNP Program Director
Christine E. Lynn College of Nursing
777 Glades Road
Boca Raton, FL 33431

Dear Dr. Hain,

This letter is to confirm that we have granted Catalina Aragon, Doctor of Nursing Practice student, approval to complete her DNP Project recruitment of participants at Precious Kidz Pre-School & Daycare. The project entitled *Mindful Reading Strategy for Parents: Impact on Behavioral Disorder Problem Behaviors in Children and Parent-Child Relationship* based on the clinical question, *In parents with children 3-5 years of age with reported behavioral disorder problem behaviors (P), how does implementing a mindful reading strategy with their children, (I) compared to traditional reading or no reading (C) affect parents' perception of problem behaviors and parent-child relationship (O) within 8 weeks (T)?*

Cynthia Sheppard

Owner/Director