

School-based mindfulness program associated with teacher reports of decreased emotional, peer, and conduct problems

Raegan Cupp, B.A., Wesley A. Bullock, Ph.D., Leah Kehler, Department of Psychology, University of Toledo

University of Toledo | raegan.cupp@rockets.utoledo.edu

Introduction

Overview

- Mindfulness-based stress reduction (MBSR) programs have a strong research base to promote physical, psychological, and behavioral benefits (Salmoirago-Blotcher et al., 2018; Beauchemin et al., 2008).
- In the past, much of the research done on MBSR programs have focused on adult populations, however, more recently there has been growing literature supporting the implementation of these programs for youth populations.
- The objective of the current study was to evaluate a public school-based mindfulness program using a multi-modal, multi-informant outcome design to evaluate the effectiveness. The current study focuses on teacher reported outcomes for the students.

The Toledo School Mindfulness Program

- The School Mindfulness Program is a 13-week curriculum grounded in mindfulness practices designed for children and educators in public school settings that was developed and implemented by the *Toledo Mindfulness Institute*.
- The School Mindfulness Program curriculum was offered during the 2017-2018 academic year, with mindfulness classes meeting twice weekly for 30 minutes for each of the K-8 classes. Half of the classes participated in the fall (Experimental N=92); the other half completed the program in spring (Wait-list group; N=51).
- The School Mindfulness program also offered professional development training for teachers (nine, one-hour sessions across the academic year) to augment the learning for the teachers and facilitate transfer of training for the mindfulness curriculum.

METHODS

Research Design and Participants

- The 13-week School Mindfulness Program curriculum was facilitated in a K-8 school in Toledo, Ohio. To evaluate the effectiveness of the program across the 2017-18 academic year, half of classrooms were assigned to either experimental (intervention) or wait-list control groups.
- N=143 students total (92 in experimental group in the fall; 51 in the waitlist control group who subsequently participated in the mindfulness program in the spring).
- The total sample included children ages 5 to 14 and was approximately equal with regard to student gender. The student population was predominately African-American (84.6%), although other ethnicities such as White (7.0%) and Mixed (8.4%) were also represented. The majority of students (n = 102) were enrolled in mainstream classes (78.5%); the remaining 21.5% of students were receiving specialized education in classes for Emotional Disturbances, Multiple Disability or Cross-Categorical Special Education.
- The focus of the current analysis compared the experimental and waitlist control students on the *Strengths & Difficulties Questionnaire* (Goodman, 1997) completed by Teachers for the students in the initial Experimental group (completed program in the fall) and the Waitlist Control group.

Participants:

- Participants were students (grades K-8) at an Elementary school in the Toledo, Ohio public school district (TPS).
- 80% of TPS children qualify for a reduced or free lunch, and at this K-8 school 86% of the students are classified as economically disadvantaged.
- 21.1% of the students were receiving some form of special education or IEP service.
- 51.7 % male; 48.3% female
- average age of 9.17 years old, ($SD = 2.78$).
- Ethnicity: African- American (84.6 %); White (7.0%); Mixed (8.4%)

Measures:

- Pre- and Post-program measures were administered to Teachers, Parents and Children
- *Strengths and Difficulties Questionnaire* (Parents, Teachers, Children 11+)
- *Parental Acceptance and Action Questionnaire*
- *Mindfulness Attention Awareness Scale* (Parents, Teachers, Children)
- *Teacher Burnout Scale*
- *Child and Adolescent Mindfulness Measure* (modified for younger children)

RESULTS

Figure 1. Teacher Report of SDQ Child Emotion Problems: Pre- and Post Intervention

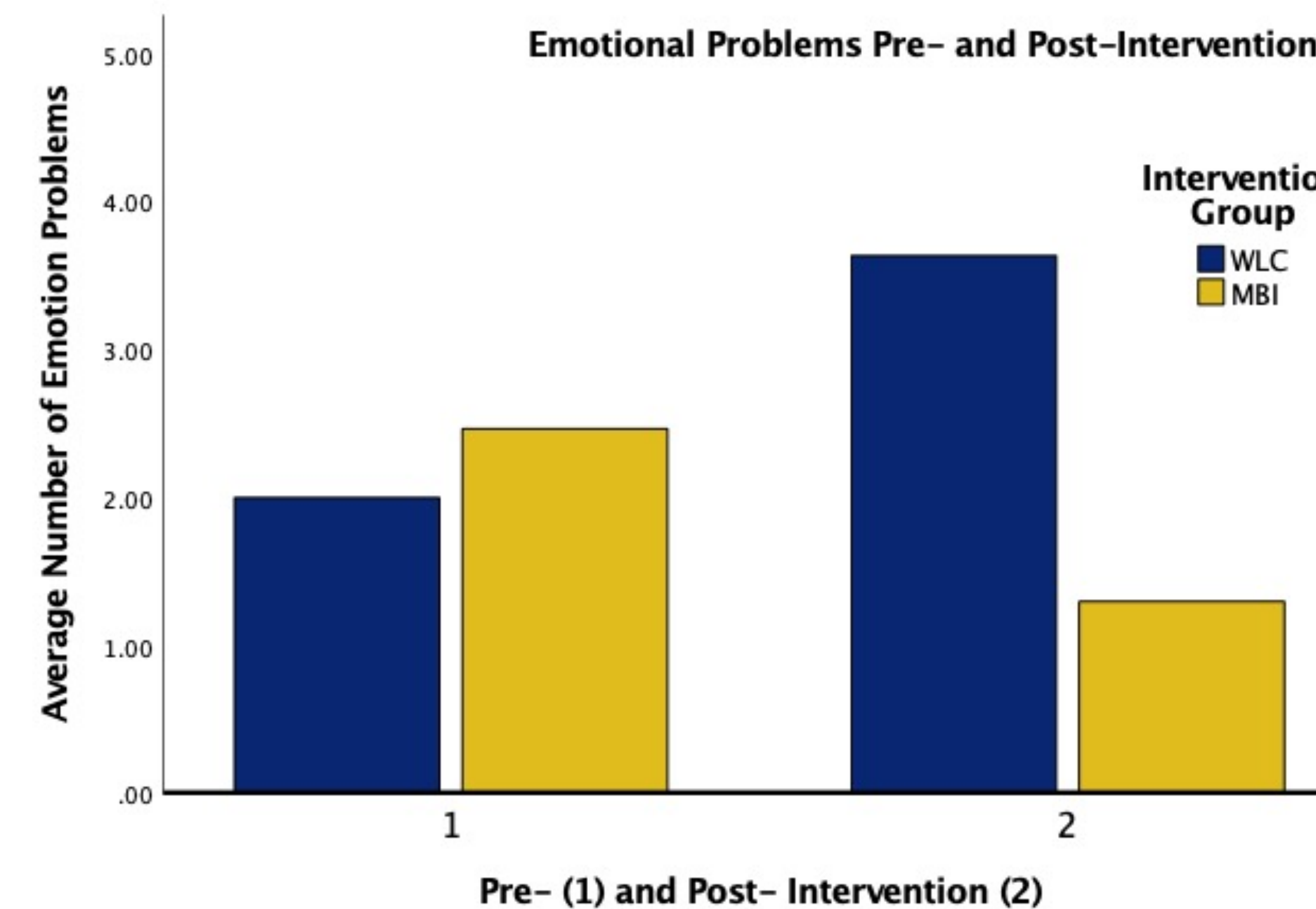


Figure 2. Teacher Report of SDQ Child Conduct Problems: Pre- and Post Intervention

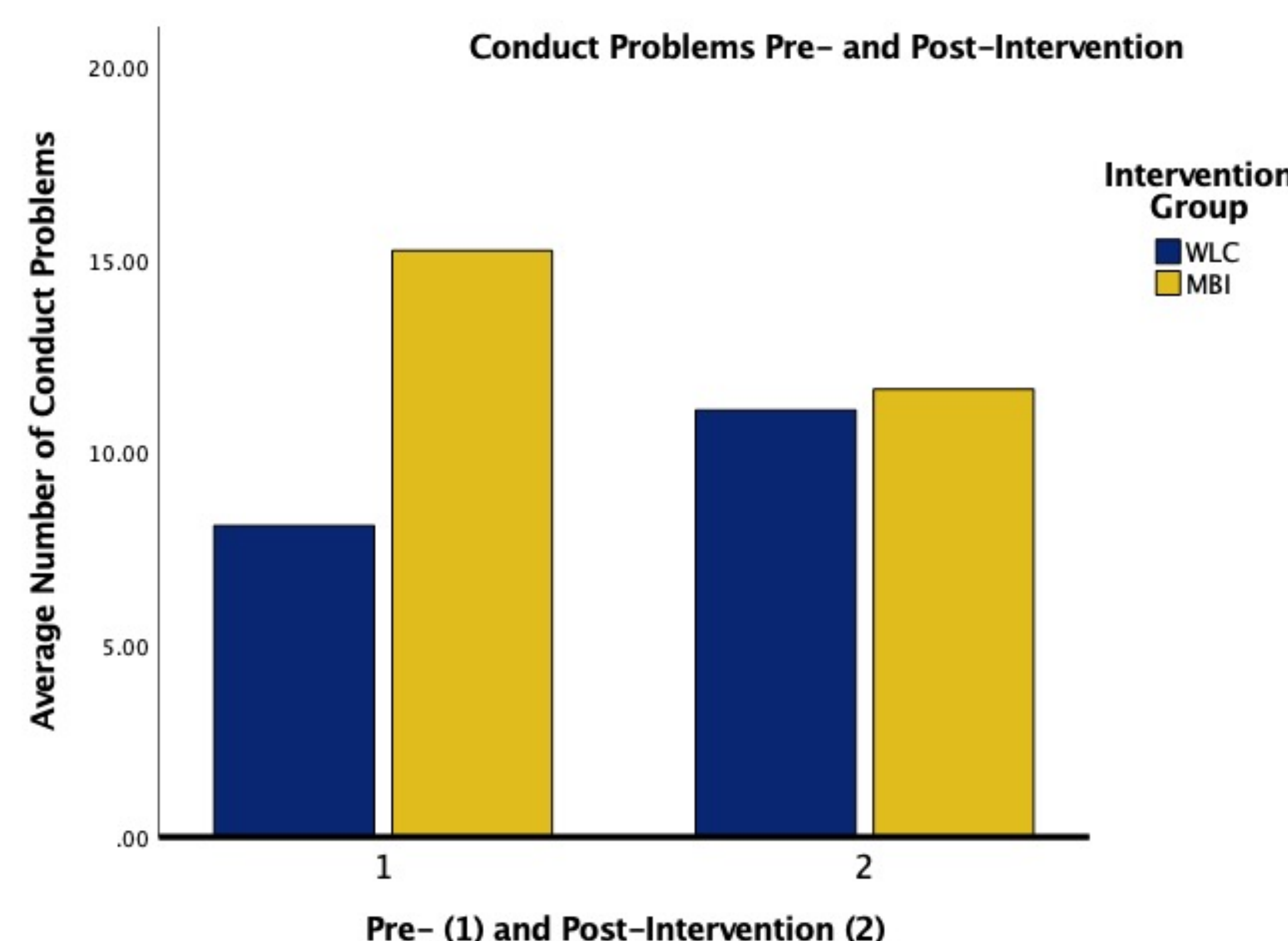
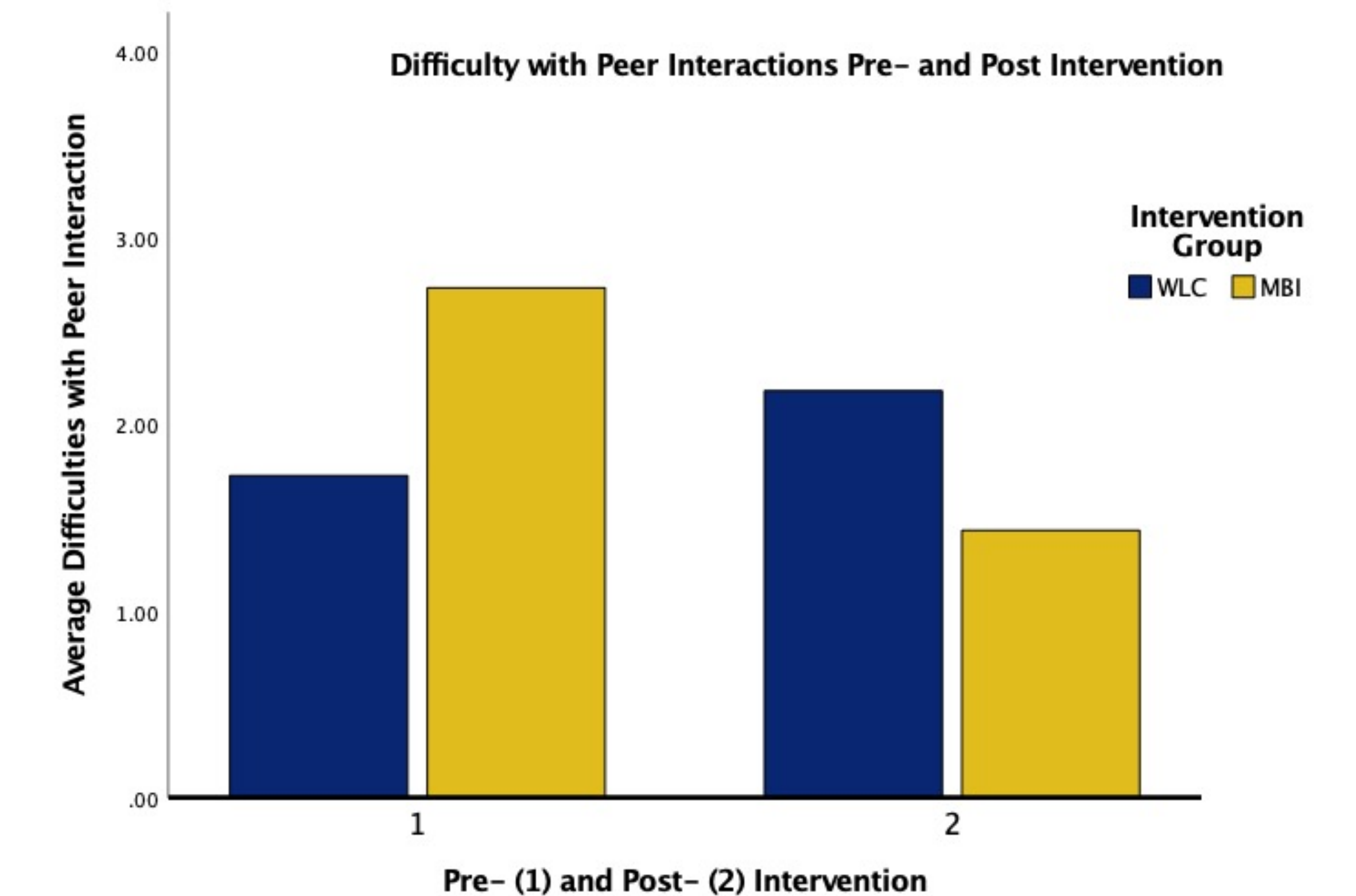


Figure 3. Teacher Report of SDQ Peer Interaction Problems: Pre- and Post Intervention



- Following the completion of the program in the fall semester, the experimental group showed a significant decrease in mean teacher report of child emotional problems (See Figure 1), problematic peer interactions (See Figure 3), and conduct troubles (See Figure 2) when compared to the waitlist control group.
- Teachers reported a significant decrease in students' difficulties with emotional symptoms $F(1,39) = 10.08, p < .01$, problematic peer interactions $F(1,39) = 4.15, p < .05$, and conduct troubles $F(1,39) = 5.14, p < .05$, leading to an overall decrease in problems for those students who participated in the school mindfulness program.
- A repeated measures ANOVA indicated a significant group by time interaction for Total Problems $F(1,39) = 5.14, p < .05$.
- At the same time, teachers reported an increase in these same categories for those students who were in the waitlist control group.
- Overall, research outcomes showed support for the effectiveness of the Toledo School Mindfulness Program for reducing both behavioral and emotion difficulties in the children.

DISCUSSION

Implications and Limitations

- Qualitative data indicated that the MBI program was well-liked, and students learned and incorporated the mindfulness skills and MBI program content.
- Significant improvements in teachers' report of Emotional Problems, Difficulties with Peer Interactions and Conduct troubles among students were found for Intervention students after they completed the program.
- No differences in Hyperactivity or Pro-Social difficulties were observed at the conclusion of the program.
- Only minimal differences were seen comparing the Intervention and Wait-list control groups on the other, non-teacher reported, outcome measures.
- Overall, there were numerous challenges with implementing the mindfulness program within this public-school setting with an at-risk population.
- Little information regarding the long-term effects of the program is available, therefore, investigations of potential extended benefits of school-based mindfulness interventions on reducing behavioral and emotional difficulties within children are necessary.