

Evaluation of the Monique Burr Foundation for Children's

MBF Child Safety Matters® Curriculum

Submitted 6/20/18

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Abstract

This study evaluated the knowledge acquisition of children who were exposed to the *MBF Child Safety Matters®* curriculum. Participants included 12 Florida schools across 8 counties, 72 classrooms, and 1,176 students (at pre-test) in total. Classrooms were matched in pairs and randomly assigned to receive the program or be in a wait-list control. Knowledge was assessed with a questionnaire administered prior to the curriculum and then approximately 8 weeks later. Children who received the curriculum increased their knowledge for the kind of information included in the program, and this knowledge increased significantly compared to the control group of children who did not receive the program.

Background

School-based child safety programs have been a popular concept, a response to accumulating evidence about the widespread exposure of children to sexual and physical forms of abuse. Such programs are often referred to as “assault prevention,” “personal safety,” and “sexual abuse prevention,” and focus on elementary and secondary-aged children. These programs typically teach information describing unacceptable behaviors, skills for avoiding victimization, encourage children to seek help from trusted adults, and emphasize to children not to blame themselves. Some of the better-known programs include “Red Flag, Green Flag” (Rape and Abuse Crisis Center, 2008), “Good Touches, Bad Touches” (Crowley, 1989), “Feeling Yes, Feeling No” (Hazzard, 1991), “Child Assault Prevention Program” (Cooper, 1991) and “Who Do You Tell” (Tutty, 1997).

The logic model behind these programs is grounded in a considerable amount of good social science. The school-based prevention model has proven to be effective in a number of other child and youth problem areas, including drug and alcohol abuse (Faggiano, Vigna-Taglianti, Versino, Zambon, Borraccino & Lemma, 2008), pregnancy prevention (Fonner, Armstrong, Kennedy, O'Reilly, & Sweat, 2014), bullying (Evans, Fraser, & Cotter, 2014; Tfofi & Farrington, 2011) and mental health promotion (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Sexual abuse is thought to occur even to young children and increases in frequency starting around age 9 or 10; so elementary school programs are clearly warranted. Universal education reaches potential offenders as well as victims and establishes norms in a domain where norms are not always clear. It is a topic that parents may find hard to talk about, so many children may not get any other source of instruction or any instruction at all. Typically, these programs include training and education for parents, school officials, and students. There is a big emphasis on disclosure and the programs provide information to schools on how to handle them.

A recent review of the literature through 2015 found 24 school-based programs that submitted themselves to systematic evaluation (Walsh et al., 2015; 2018). All contained sexual abuse content (in addition to other types of victimization). Most were in elementary school and about half included kindergarten and first grade students. The duration of the programs ranged from a single 45-minute session to eight 20-minute sessions over a number of days. Half of them had less than 90 minutes of total content.

According to the review and “meta-analysis” (a synthesis of the findings), the programs were generally successful on a number of dimensions. Children exposed to these programs had greater factual knowledge than non-exposed children, with the knowledge gain somewhat stronger for children grade 4 and above than younger children. They also retained that knowledge over time. Children with programs were better able to apply knowledge in vignette assignments. Children exposed to the programs also disclosed more events than untrained children; however, this outcome was assessed by rather few studies.

Recognizing the potential of classrooms as a context for identifying and addressing child victimization, several states mandate the inclusion of child abuse prevention in school curricula. There are, however, not enough evidence-based and developmentally-appropriate curricula designed for elementary (K-5) schools. The purpose of this study was to conduct a formal evaluation of the knowledge and skills acquired by children who received the Monique Burr Foundation for Children's *MBF Child Safety Matters* curriculum (CSM). We examined the impact of the curriculum on child knowledge acquisition using a randomized control design. Randomized control design is the gold standard for a scientific assessment of the effectiveness of an intervention.

Method

Design and Sample

We implemented the *MBF Child Safety Matters* curriculum (CSM) in Florida elementary (K-5) schools and evaluated its effectiveness with a number of outcomes. We initially identified 10 counties (5 rural, 5 urban) around the state that would represent the geographical and demographic diversity in the state of Florida. We then chose 2 schools within each county that were similar in student population and student demographics (e.g., percent free/reduced lunch, percent of students from underrepresented racial backgrounds, percent English as Second Language [ESL]) to serve as matched, randomized treatment and control schools. If only one school within a county was interested or eligible, then we contacted schools in adjacent counties that were also comparable to use as a partner school. When no schools were eligible or interested within a county, we then identified another county that was either rural or urban to replace the lost county.

Inclusion criteria included: schools which have never implemented the curriculum before and were not currently using another maltreatment/bullying prevention curriculum and elementary schools serving grades K – 5 and in the state of Florida. Exclusion criteria included: charter and magnet schools and classrooms with primarily special education students. Schools were randomly assigned to conditions (treatment or delayed treatment) from matched pairs or within strata. The matching or strata variables included: (a) school location within a county (rural v. urban), (b) school size, and (c) student demographics (e.g., percent free/reduced lunch, percent underrepresented racial backgrounds, percent ESL). The control group actually served as a delayed treatment group that received the treatment after being a post-test control group.

Within each school, we randomly selected one classroom per grade for participation. Within each grade, we selected the teacher whose last name appeared first in the alphabet. Our final sample included 12 schools across 8 counties, 72 classrooms and teachers, and 1,176 students (at pre-test). The matched schools were randomly assigned to the curriculum condition and the control condition.

Procedure

We received approval from the county, school administrator, and school counselor. Once they agreed to participate, school counselors were sent opt-out forms for both the curriculum and the research study to send home with children in the selected classrooms. The study was approved by the University of Florida's Institutional Review Board (IRB). No less than one week after opt-out forms were sent home, a research assistant collected pre-assessment data from children. Children whose parents submitted opt-out forms were excused from the classroom during survey and implementation of the curriculum. This opt-out and excusing from classroom procedure is consistent with the current procedure used with the curriculum.

Curriculum. The CSM curriculum is a classroom-based curriculum designed for K-5 classrooms and typically delivered by school counselors (termed facilitators hereafter). The curriculum creators provided free online training/orientation to facilitators prior to sending a free copy of the CSM curriculum.

Facilitators were also provided with a Facilitator Manual, printed scripts, accompanying interactive PowerPoint presentations for each lesson, a classroom poster for each participating classroom and a school banner to be hung around their school, both of which include the curriculum's 5 Safety Rules and state "We Follow the Safety Rules," and student reinforcement materials to be distributed after lessons are completed, including a temporary tattoo, student coloring bookmark with the 5 Safety Rules, and two Safe Adult Bookmarks. The CSM curriculum is designed to be presented in two sessions (times ranging from 35-55 minutes each) or in 4 shorter sessions if needed by the teacher (which is consistent with how the current delivery options for the curriculum) within a 4-week period. For the current study, facilitators were given the option to implement the lessons in any number of sessions within four to eight weeks based on their scheduling needs (school events, mandatory standardized testing, holiday breaks, etc.). The curriculum includes take-home activities (Parent Information and Activity Sheets) for parents to complete with their child after each lesson.

During implementation, a research assistant observed the implementation of one lesson in each school. Following implementation, a research assistant collected post-implementation data from children in the treatment condition. Post-implementation data was collected from children in delayed treatment at the same time as children in the treatment condition. We then sent home hard-copy surveys for parents to complete. Finally, teachers and facilitators were sent online surveys to complete. Parents were sent a waiver of consent which outlined their rights and contact information for the researchers.

Participating schools received a \$1,500 USD incentive, regardless of the number of students and parents who participated. Facilitators were provided an additional \$500 USD incentive, regardless of the number of students and parents who participated. Additionally, participating treatment schools which received at least 75% of parent surveys returned (regardless if they were blank or completed) received an additional \$100. Control schools were not eligible for the additional \$100 but they were also not asked to engage in the work needed to send, receive, and organize parent surveys.

Measures

Students. Student knowledge of potentially risky situations was assessed using a 14-item researcher-created survey. The survey was designed based on previous curriculum evaluation studies (Tutty, 1995) and the specific foci of this curriculum. The survey was pilot tested with 25 students in grades K – 5 prior to use. The knowledge survey was given both before and after implementation. In the classroom, the researcher provided hard copies of the survey to each child, read the questions aloud, and had students circle their responses.

The child knowledge assessment was developed to measure the effectiveness of the *MBF Child Safety Matters* curriculum with the content focusing on being representative of the curriculum. The assessment included the following items:

1. It is safe if someone asks you to keep a secret about a surprise party.
2. It is safe if an adult says mean things to you over and over.
3. It is safe if another child says mean things to you over and over.
4. It is safe if someone asks you to keep a secret about something they've done.
5. It is safe if a teacher gives every student in your class a book as a gift.
6. You should tell someone if an adult hits you on purpose and leaves a mark.
7. If you feel unsafe then you should try to get away.
8. It is safe if someone looks at your private body parts but doesn't touch them.

9. If you feel unsafe, then you can try to wait and hope it gets better.
10. If you feel unsafe then you should talk to a safe adult.
11. If you feel unsafe, then you should try to stay away.
12. If you are being hurt or abused, you don't always need to report it because it might stop anyway.
13. It is safe to give your full name on a website for kids without asking a parent/guardian or safe adult.
14. It could be your fault if someone is hurting or bullying you if you did something to make them mad.

Two additional items were used at post-test with the curriculum group only:

1. I have given bookmarks to my Safe Adults so they will know how to help me stay safe.
2. I have talked to my Safe Adults about unsafe situations.

For the 14-item assessment, reliability and item analyses were conducted with the administration across the 12 schools. The reliability for the 14-item scale was .56. The item analyses below (Table 1) suggest that several of the items were problematic. When the two items with the lowest item-total correlation (1 and 14) were dropped the reliability increased to .67. The full scale (14 items) was used for main analyses.

Table 1

Item Analyses*

Item	Mean	Item-Total Correlation
1	.86	.08
2	.93	.26
3	.93	.27
4	.67	.27
5	.95	.13
6	.75	.22
7	.84	.21
8	.89	.25
9	.56	.36
10	.95	.18
11	.88	.23
12	.74	.38
13	.89	.33
14	.41	-.05

*N = 2,105

Results

Implementation

The average number of days from pre-test to implementation of the first lesson for the treatment group was 10.7 days ($SD = 9.3$ days). The average number of days from implementation of first lesson to the last lesson was 17.3 days ($SD = 13.4$ days). The average number of days from implementation of the final lesson to post-testing for the treatment group was 26.2 days ($SD = 19.8$ days). There were approximately eight weeks ($M = 54.2$ days for both condition groups) between pre-test and post-testing for both treatment and control schools with no statistically significant difference between them. In 20 (55.6%) classrooms, facilitators implemented the curriculum in two sessions. In 2 (5.6%) classrooms, facilitators implemented the curriculum in three sessions. In 14 (38.9%) classrooms, facilitators implemented in four sessions. The sample size of the study at the pretest was $N = 1,176$ (592 Control and 584 Treatment). Attrition during the study was 4.7% so that $N = 1,121$ at the posttest (562 Control and 559 Treatment). The number of participants was approximately equal across K – 5 with the pretest (posttest) sample sizes ranging from 188 to 213 (165 to 213). Attrition rates were approximately equal in grades 1 to 5 with higher attrition in kindergarten (12.7%).

Child knowledge

Overall Program Effectiveness

A general linear model with three fixed factors was conducted on the 14-item scale: treatment (treatment, control), occasion (pre, post) and grade (K,1-5). The three-way analyses had non-significant effects for the three-way interaction and the two-way interactions of treatment by grade, and occasion by grade. The interaction of treatment and occasion was significant $F(1, 2081) = 33.495, p = .000$. This interaction shows that the pre-post difference was significantly different in the treatment and control groups (means described below). The three main effects were all significant. The effect of treatment $F(1, 2081) = 39.224, p = .000$ showed that the treatment means were significantly higher than the control means. The effect of occasion $F(1, 2081) = 78.163, p = .000$ showed that the post scores were higher than the pre-scores. The effect of grade $F(5, 2081) = 167.776, p = .000$ showed that children in upper grades scored higher.

The means for the pre- and post-assessment are shown in Table 2. The means show that the randomization led to the treatment and control group having roughly the same means for the pre-assessment. However, the growth for the treatment group was significantly higher than for the control group. Figure 1 shows the difference graphically.

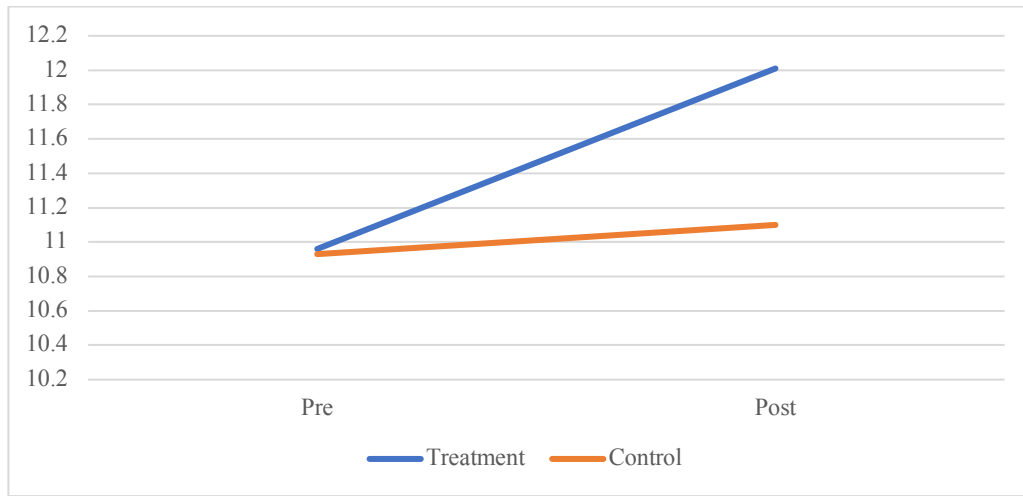
Table 2

Pre- and Post- means

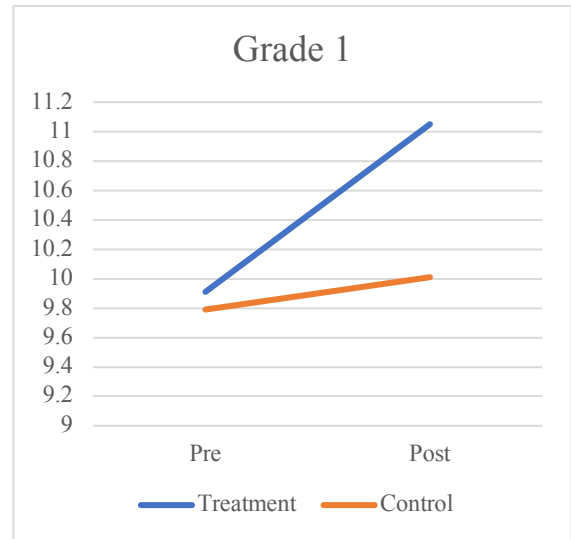
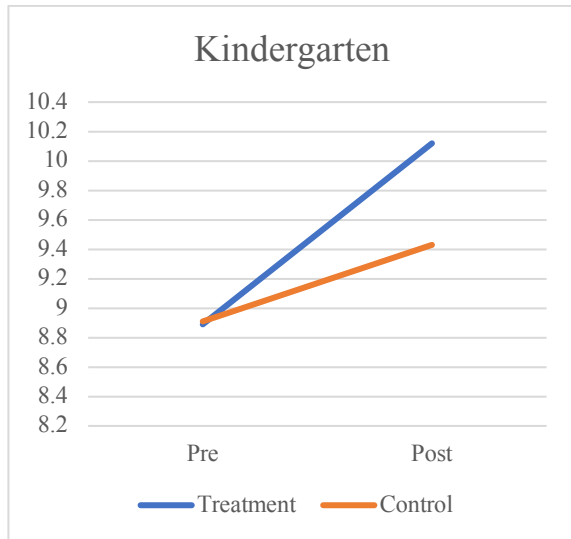
Group	Pre-assessment	Post-assessment
Treatment	10.96 (N = 522)	12.01 (N = 527)
Control	10.93 (N = 524)	11.10 (N = 532)

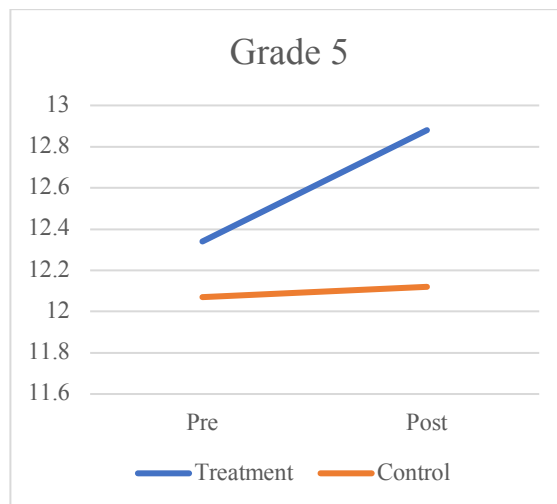
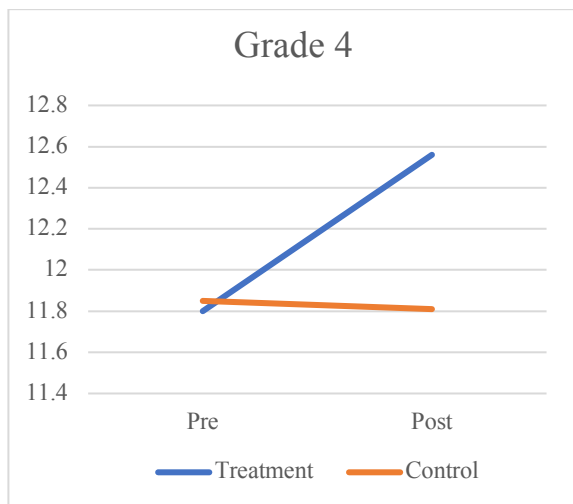
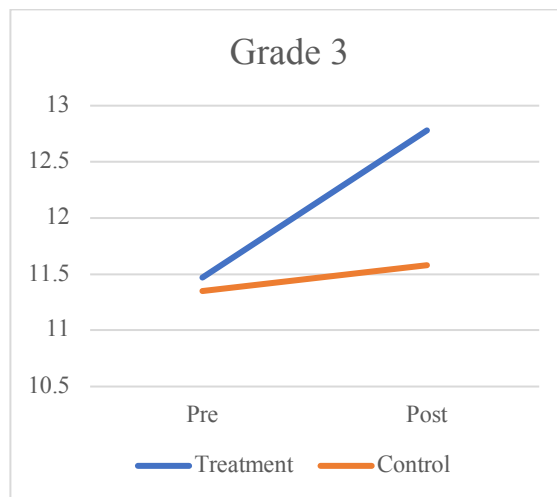
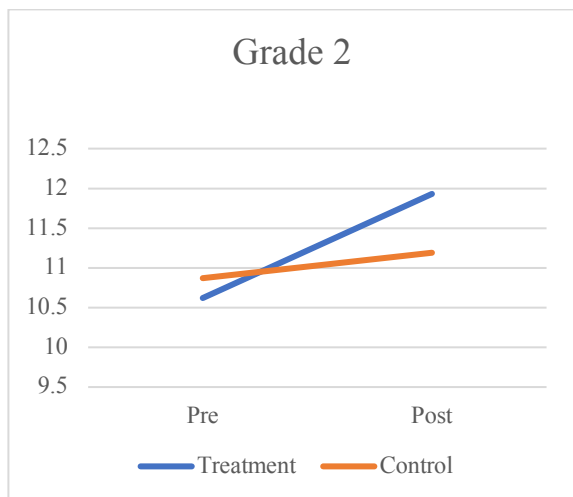
Figure 1

Pre to Post growth



Although the significance tests showed no significant difference in the growth rates by grade level, the descriptive data shows slightly higher learning in grades K – 3 and slightly less learning in grades 4 and 5. The graphs for these results are presented below.





Item Growth

To understand which content had the most learning, the growth in the treatment group items are presented in Table 4. The four items with the largest learning were also significantly higher than the control group (items 4, 7, 9 and 14). However, all items had positive growth for the treatment group (only item 14 had negative growth for the control group). All items seemed to be taught, but growth of .05 or less seemed to be a function of the item being easy (post mean above .90).

Table 4

Item Means for Treatment Students

Item	Pre (N = 522)	Post (N = 527)	Growth
1	.84	.88	.04
2	.91	.95	.04
3	.93	.96	.03
4	.57	.83	.36*
5	.95	.96	.01
6	.69	.77	.08
7	.80	.89	.09*
8	.88	.91	.03
9	.50	.67	.17*
10	.94	.96	.02
11	.87	.92	.05
12	.70	.77	.07
13	.86	.93	.07
14	.40	.50	.10*

*significantly higher growth than control group

Finally, two items were given only to the treatment group at the post. The results showed that 77.0% of the students in the treatment group gave their bookmarks to their Safe Adults. Additionally, 89.0% of the students in the treatment group talked to their Safe Adults about unsafe situations.

Discussion/Summary

The results from this evaluation show that the children in the treatment group, who received the *MBF Child Safety Matters*® curriculum, increased their knowledge for the information included in the program, and that this knowledge increased significantly compared to the control (delayed treatment) group of children, who did not receive the program. This demonstrates that the increase in knowledge was not due to just getting older or some other generalized developmental changes.

The findings seem to show more growth in knowledge for children in grades K – 3. However, these differences were not statistically significant, and any differences in growth across grade levels should be considered chance variations. The similarity in the growth pattern across grade levels suggests an increase of knowledge for children in all grades K – 5. Thus, it can be said that the *MBF Child Safety Matters* curriculum increased general knowledge of potentially risky and unsafe situation for children of all grades, K – 5.

The growth in knowledge was stronger for some knowledge items than others, for example, content about secrets, getting away, and blaming yourself. This may demonstrate that some information is more effectively conveyed than other content. However, these results could also be due to the nature of the knowledge itself or failures of the measurement process. Some of the knowledge tested with the questionnaire seems to be so self-evident that there was not much room for growth. Or the questions themselves may not be tapping more subtle aspects of learning that the children did acquire from the curriculum.

The evaluation does suggest that more work needs to be done on the evaluation instrument. It is strongly recommended that additional evaluations be conducted to demonstrate that learning is maintained over time, and to try to assess some additional areas of knowledge acquisition with a revised questionnaire.

One additional positive finding is that large proportions of students exposed to the program appeared to have had some additional conversation with a safe adult about the program content. However, this level of out-of-classroom discussion needs to be confirmed by more complete information from the parents.

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