An Outcomes-based Evaluation of the Mindfulness for Safe Schools Program

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ABSTRACT

Objectives. The objective of this evaluation was to assess the effectiveness of Mindfulness for Safe Schools, a mindfulness-based intervention adapted for sexual abuse prevention during peer-to-peer dating among Filipino public school children in Grades 7 and 8. It was hoped that through the intervention, children would be able to regulate their emotions so that they do not react impulsively to emotionally stimulating events, especially during peer dating. The study consists of four levels of evaluation: reaction, learnings, and behaviors of teachers toward the program, as well as effect of the intervention on emotion regulation and peer conformity among students.

Methods. This study utilized a mixed methods design using a concurrent embedded method. For teachers, quantitative surveys and focused group discussions were conducted to determine their reactions to the training, their learnings, and behaviors after the program, as well as their observations of students’ responses to the intervention. Focused group discussions were analyzed through thematic analysis. Effect of the program on emotion regulation and peer conformity among students were determined mainly through a pre and post-test survey and analyzed through paired samples t-test. Video content analysis of the classroom delivery was also conducted to determine student engagement during the program.

Results. Teachers reacted favorably to the training workshops and were able to use what they learned from the workshops to increase their patience and understanding towards themselves, their job, and their students. Students also reacted favorably to the Mindfulness for Safe Schools modules and were observed to use the skills taught in the modules to regulate their emotions. Emotion regulation improved (t=3.47, significant with p=0.00) and susceptibility to peer pressure decreased (t=8.94, significant with p=0.00) for Grade 8 students (n=950) after the modules were delivered. However, teachers reported implementation issues, such as conflicting requirements of the program with their official workload, which may have affected program effects.

Conclusion. Our findings indicate that Mindfulness for Safe Schools was associated with improvements in emotional awareness, management of negative emotions, and showing care and respect for student peers. It also suggests that integrating mindfulness interventions in schools requires close coordination with all stakeholders: teachers, schools, and appropriate government divisions to ensure fidelity and reaching desired effects.

Keywords: mindfulness based intervention, Filipino, mindfulness, school-based, preadolescent, sexual abuse prevention

INTRODUCTION

The Safe Schools for Teens project was launched to address pre-adolescent high-risk behaviors that lead to sexual abuse and its consequences.1 Pre-adolescents are known to have several emotional risk factors: heightened reactivity to emotions, immature emotional regulatory capacity, and susceptibility to peer influence.2,3 Better emotional regulation leads to better behaviors – thus the Mindfulness advocacy was born.
Emotion regulation can be understood as having two steps: emotion processing and emotion response. Emotion processing, which is the first step, includes the following factors: emotional awareness, emotional clarity, and emotional acceptance. Emotion response, which is the step after emotion processing, includes engaging in goal direction and controlling impulsive reactions.

Mindfulness is “the awareness that emerges through paying attention on purpose, in the present moment and nonjudgmentally to the unfolding of experiences moment by moment.” It involves regulating attention towards all inner and external experiences, as it occurs in the present moment, with an attitude of curiosity, openness, and acceptance. When one is mindful, one can perceive thoughts and feelings as objective mental activities of the mind. This state helps alleviate depression and anxiety, improve attention, and promote self-awareness.

Mindfulness for Safe Schools was developed for pre-adolescents in two Filipino public schools in Visayas, at two grade levels:

1) for Grade 7 students - to improve emotional awareness, emotion regulation, and body awareness through mindfulness exercises, and
2) for Grade 8 students - to practice hypothetical peer-to-peer dating situations and emotionally stimulating situations, such as when they are forced by a peer to engage in sexual activities.

School teachers are the key educators because of their closer relationship with the students; teaching mindfulness skills to teachers may have a spillover effect, as their students tend to have better well-being, peer relationship, and self-management. We hoped that in the Visayas pilot run: 1) the teachers would react favorably to the training program, 2) display basic mindfulness skills after the training, 3) display basic skills in facilitating mindfulness modules with Grade 7 and/or Grade 8 students, and ultimately 4) find that their students learned and practiced mindfulness to manage their emotions and respond appropriately to difficult situations during dating.

OBJECTIVES

This present study sought to evaluate the effectiveness of the Mindfulness for Safe Schools using Kirkpatrick’s 2016 New World Evaluation Model through four levels:

Reaction (Level 1)

This level is an evaluation of teachers’ immediate reaction to the training program, such as what they liked, and what they did not like.

Learning (Level 2)

This level evaluates the degree to which teachers learned key concepts of mindfulness after the training program.

Behavior (Level 3)

Level 3 focuses on the degree to which the teachers applied what they learned during training and their experience in teaching Mindfulness for Safe Schools.

Results (Level 4)

This level of evaluation focuses on the impact of the teacher-training and module delivery on the students’ reaction, learning, and behavior.

This study also hoped to identify ways in which Mindfulness for Safe Schools can be improved to further upscale the dissemination to the Philippine public school system.

MATERIALS AND METHODS

This study employed a mixed-methods approach, using a concurrent embedded strategy. Qualitative data was gathered from focused group discussions with teachers and analyzed through thematic analysis, while quantitative data was gathered through video content analysis of the classroom delivery of Mindfulness for Safe Schools modules, and surveys administered to teachers and students and analyzed through descriptive statistics or paired samples t-test.

Participants

The workshops had nineteen teachers who were Grade 7 and/or Grade 8 teachers from two partner schools in the Visayas region where the Mindfulness for Safe Schools intervention was to be conducted (Table 1).

Geographically, the two schools are about 183 kilometers away from each other, and travel time between the two areas can take up to five hours by car. To visit the schools, the Safe Schools Project team were required to travel by air and then by land. Thus, all training was conducted in a private venue in the city where School B was located.

Grade 8 students were also included in the study to determine the impact of the teacher-training and teacher’s delivery of the modules; that is if students did improve in
emotion regulation at the end of the Mindfulness for Safe Schools intervention. For School A, there were 752 Grade 8 students whose ages ranged from 12 to 18 with mean age of 13.6 years. There were 58% female students and the rest were males. For School B, there were 950 students. Ages ranged from 12 to 18, with mean age of 13.5 years old. Majority of students were female (60.7%).

Workshops and Module Delivery
Teachers underwent three workshops. The first workshop module covered the basics of mindfulness; the second workshop the Grade 7 teachers practice delivering the Grade 7 module to the Grade 8 teachers as subjects; the third workshop had the Grade 8 teachers delivering the Grade 8 module to the Grade 7 teachers as subjects. After these were completed, teaching aids were given to all participants (teaching manuals, calming jars, guided meditation audio recordings, and large tarpaulin flip charts).

After the workshops, teachers were then instructed to deliver the Mindfulness for Safe Schools modules to their students in the next 2 schoolyears. For the first school year, Grade 7 teachers delivered the Grade 7 modules to their students. After which, when these students reached Grade 8 the following schoolyear, Grade 8 teachers continued to deliver the Grade 8 modules. This was to ensure that the same set of students underwent both the Grade 7 and Grade 8 modules.

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**Ethical Considerations**

Mindfulness for Safe Schools is part of the study entitled Safe Schools for Teens (SST), A Comparative Study of Onsite and Online Instructional Modules for Preventing Sexual Abuse of Teens: Improving Students’ Knowledge, Skills, and Attitudes for Increased Reporting and Prevention of Sexual Abuse and Physical Violence (Phase 2). The study was approved by the University of the Philippines Manila Research Ethics Board (UPMREB), with registration number 2017-357-01. Since Mindfulness for Safe Schools was an enhancement of regular Department of Education (DepEd) activities for the Valued Education subject, informed consent was not sought for the teachers’ and students’ participation during modules and corresponding pre and post-tests.

During pre- and post-module tests for the students however, an introduction was read by the teachers, encouraging them to answer the questions as honestly as they can, to not talk or compare answers with their seat mates, also assuring the students of the confidentiality of their answers. The teacher also read out the directions for the measures, which specified that the items will be read aloud by the teacher one at a time, that students could ask questions if they did not understand, and that there were no right or wrong answers. The students answered each item in the measures while their teacher read each question.

Immediately after the teachers’ and students’ completion of the questionnaires, the forms were kept in individually sealed envelopes before being transported to the Child Protection Network Foundation’s (CPNF) office. The questionnaires were then placed in a locked storage pending data analysis. The answered questionnaires were later given to Ateneo Bulatao Center for Psychological Services for matching pre and post responses, data encoding, and data analysis.

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**Measures Used, Data Gathering, and Data Analysis Procedures**

The measures, methods for gathering data, and approach to data analysis are described for each level of Kirkpatrick’s model. Both quantitative and qualitative data were gathered and analyzed using a mixed methods approach.

**Teachers’ Reaction to the Training Program (Level 1)**

Teachers’ reaction to the workshops was measured using an 8-item workshop evaluation form that was distributed at the end of each training event. The questionnaire had items such as “Did you find the content useful?” and “Were the facilitators knowledgeable?” Participants rated each item based on their agreement to the different statements regarding their reaction to the workshop on a scale of 1 “no, no, no” to 6 “yes, yes, yes”. At the end of the questionnaire, participants were also asked what they liked most, liked least, what was most useful, least useful, and suggestion for improvement.
The evaluation was supplemented by a semi structured focus group discussion (FGD) conducted at the end of the teacher training to encompass teachers' reactions to the workshop (“What did you like about [...] the facilitators [...] the materials [...] the manual?”). Qualitative data from the FGDs and process observer notes was analyzed through thematic analysis and used to supplement the quantitative data.

**Teachers’ Learning after the Training Program (Level 2)**

This level evaluates the degree to which participants acquired the intended knowledge and skills to practice mindfulness after their participation in the training. It was measured using the Five Facet Mindfulness Questionnaire (FFMQ). The FFMQ is a tool to measure the five facets that are theorized to comprise mindfulness. For this study, the FFMQ was translated into Filipino to aid the participant's understanding of the statements. Participants were asked to rate agreement with statements in relation to themselves using a 5-point scale to measure each participant’s mindfulness disposition according to five facets: observing (8 items, Cronbach's alpha is 0.87), describing (8 items, Cronbach's alpha is 0.64), acting with awareness (8 items, Cronbach's alpha is 0.65), non-reactivity (7 items, Cronbach's alpha is 0.54), and nonjudgement (8 items, Cronbach's alpha is 0.78).

The FFMQ pre-test was gathered through paper-based methods at the beginning of the teacher-training workshops while the post-test was administered before the second training. Seventeen participants submitted matching pre-tests and post-tests. Quantitative data from the FFMQ pre- and post-tests were analyzed using a paired samples t-test.

The post project FGD among teachers also included questions that helped determine what the participants learned from the mindfulness workshop. Qualitative data from the post-module delivery FGD was analyzed through thematic analysis and was used as supplementary data for this level of evaluation.

**Teachers’ Behavior: Application of Learnings from the Training to the Job (Level 3)**

Teachers’ behavior was evaluated using the teachers’ responses to the FGD conducted at the end of the module delivery period. Participants were asked open-ended questions that asked about the extent to which they have applied their learning from Mindfulness for Safe Schools Teacher-Training Program to their personal life (“Have you had an opportunity to share what you learned to others in your life (both personal and professional)?”). Participants were also asked about impediments and contributors to delivering the modules as intended (“What challenges did you experience in delivering what you learned to the students?”; “What are your suggestions for improving the program so that it would be easier to deliver Mindfulness for Safe Schools?”). Qualitative data from the FGD was analyzed using thematic analysis.

**Results: Impact on Students’ Reactions, Learnings, and Behavior (Level 4)**

Students’ reactions were evaluated based on the teachers’ responses to the FGD. The participants were asked about their observations regarding the reactions of the students to the sessions they conducted. Questions included what teachers thought was the best or most meaningful exercises for the students (“What do you think are the most meaningful exercises or sessions for your students?”) and were then asked about the reactions (“How did the students react to this? Could you give an example of what they said, did, asked or what their insights were?”).

Student engagement was evaluated through a quantitative analysis of student responses per session. Independent observers watched videos of the sessions and counted the number of times students participated during a session. The average number of times students participated per session was then obtained by dividing the frequency of student participation observed over the number of sessions watched by the independent observers.

Students’ learnings were evaluated through two tests, both in the Filipino language. The first test measured Emotion Regulation and was adapted from the Difficulty in Emotion Regulation Scale or DERS. The second test was the Peers Pressure Scale which was developed for the Safe Schools for Teens project by two of the authors of this study. The DERS is comprised of 6 factors and originally comprised of 36 items. After translation to Filipino language and validation of the instrument among a sample of public school pre-adolescents however, only 22 items for the 6 factors were retained. The six factors are: Non-acceptance of emotion responses (3 items, Cronbach’s alpha is 0.63). The second factor is Difficulties in goal-directed behavior (4 items, Cronbach’s alpha is 0.67). A third factor is Impulse control difficulties (4 items, Cronbach’s alpha is 0.74). Fourth factor is Lack of emotion awareness (3 items, Cronbach’s alpha is 0.73). Fifth factor is Limited access to emotion regulation strategies (4 items, Cronbach’s alpha is 0.75). The last factor is Lack of emotion clarity (4 items, Cronbach’s alpha is 0.69).

Appendix B shows sample items from the scale.

The Peer Pressure Scale had 10 items measuring two factors. The first factor is Peer Conformity (5 items, Cronbach’s alpha is 0.85). The second factor is Forcing Peers (5 items, Cronbach’s alpha is 0.79). Sample items from the scale can be found in Appendix C.

Students were asked to take the tests at the start of the Grade 8 intervention and then again at the end, after delivery of the Grade 8 modules. A paired samples t-test was employed to determine if there was a favorable change in emotion regulation and peer conformity.

For students’ behavior, teachers were asked about what changes they noticed after the sessions were conducted, if any such changes did occur (“After the exercises or sessions, what changes did you notice in the students, if there are any?”). Conversely, the teachers were asked about what they thought
the least meaningful exercise was for the kids (“What do you think is not meaningful?”), and which sessions were difficult to teach (“Which exercises or sessions were hard to teach to the kids?”). They were then asked for suggestions on how to improve the workshops (“How do you think we can share the “Mindfulness for Safe Schools” to other public schools? How do you think we can reach a wider audience?”). The qualitative data was then analyzed using thematic analysis.

RESULTS

Results are presented according to Kirkpatrick’s four levels of evaluation.

Evaluation of Teachers’ Reaction to the Training Program (Level 1)

Quantitative data for workshop part 1 and workshop part 2 were misplaced. However, for workshop part 3, mean scores of the evaluation items are shown in Table 2.

The table shows that teachers generally had favorable reactions to the training programs. Themes from the FGDs and evaluation forms also suggest the following areas of success for all the three workshops: helpful activities and exercises, relevant and useful content, and competent and approachable facilitators. Of the activities conducted during the teacher training program, breathing exercises were the most frequently cited as most helpful or useful, followed by meditations and the exercise on practicing the STOP protocol which translates to “Sandali, Tignan ang saloobin, Okey lang yan, Pampakalmang paghinga” (Stop, Take a look at your inner experiences, It’s okay, Take calming breaths).

Participants also frequently cited that they liked learning about “how to deal with emotions”.

Conversely, the following areas of improvement were gathered: lack of time for learning all the skills and not having enough time to be oriented with the manual.

Evaluation of Teachers’ Learnings After the Training Program (Level 2)

To determine the degree to which participants learned key concepts of mindfulness after the teacher-training program, their pre-test and post-test scores for the FFMQ were compared using a paired samples t-test (Table 3).

Results show that the observing facet significantly increased, with a medium effect size. All other facets and overall FFMQ had no significant difference between pre- and post-test.

Evaluation of Teachers’ Application of Learnings from The Program to the Job (Level 3)

This section presents themes from the FGDs which give some insight as to how the teachers applied what they learned to their job and their personal lives, and what influenced the performance of delivering the modules with fidelity or lack thereof. This level of evaluation is divided into the three sections: Teachers’ application of mindfulness on the job, what helped to successful module delivery, and barriers to delivering the modules.

Teachers’ Application of Mindfulness to the Job

The themes here focus on the degree to which participants applied what they learned during training to the job. Teachers reported that after the workshop, they have been using the techniques such as calming breaths and STOP in how they deal with their students. They reported that the concepts they learned from the workshop helped increase their patience and understanding towards their job, their students, and themselves.

“Mas pasensyosa ako ngayon. Another one, mas lalo akong nag-depress kasi diba, kaya naman na maghahanap ka ng mali sa estudyante o kahit mali na hindi mo na binahana na pa. Sabihin mo nalang na ‘baba.. baka pwedeng gawin gani to ganyan...’” (I’m more patient now. Another one, I’ve destressed more now because, you know, rather than finding

Table 2. Mean scores of Teacher Training Workshop Part 3 (N=19)

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean score from a 6-point Likert scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Were the workshop objectives achieved?</td>
<td>5.88</td>
</tr>
<tr>
<td>2. Were your personal expectations met</td>
<td>5.77</td>
</tr>
<tr>
<td>3. Did you find the content relevant?</td>
<td>5.84</td>
</tr>
<tr>
<td>4. Did you find the content useful?</td>
<td>5.83</td>
</tr>
<tr>
<td>5. Was the Facilitator knowledgeable?</td>
<td>5.72</td>
</tr>
<tr>
<td>6. Was the Facilitator effective?</td>
<td>5.88</td>
</tr>
<tr>
<td>7. Was the presentation clear?</td>
<td>5.88</td>
</tr>
<tr>
<td>8. Was the teaching style helpful to learning?</td>
<td>5.61</td>
</tr>
</tbody>
</table>

Table 3. Paired samples t-test results (N=17)

<table>
<thead>
<tr>
<th>Facet of Mindfulness</th>
<th>Pre-test Mean (SD)</th>
<th>Post-test Mean (SD)</th>
<th>Difference Mean (SD)</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observing</td>
<td>3.38 (0.69)</td>
<td>3.68 (0.67)</td>
<td>-0.29</td>
<td>0.04*</td>
<td>0.54</td>
</tr>
<tr>
<td>Describing</td>
<td>3.44 (0.42)</td>
<td>3.47 (0.26)</td>
<td>-0.03</td>
<td>0.69</td>
<td>-0.10</td>
</tr>
<tr>
<td>Acting with Awareness</td>
<td>3.89 (0.64)</td>
<td>3.78 (0.48)</td>
<td>0.11</td>
<td>0.37</td>
<td>0.02</td>
</tr>
<tr>
<td>Non-judgement</td>
<td>3.19 (0.52)</td>
<td>3.20 (0.52)</td>
<td>-0.01</td>
<td>0.96</td>
<td>-0.01</td>
</tr>
<tr>
<td>Non-reactivity</td>
<td>3.23 (0.73)</td>
<td>3.22 (0.45)</td>
<td>0.01</td>
<td>0.96</td>
<td>0.01</td>
</tr>
<tr>
<td>Total FFMQ</td>
<td>3.43 (0.23)</td>
<td>3.47 (0.21)</td>
<td>-0.04</td>
<td>0.38</td>
<td>0.22</td>
</tr>
</tbody>
</table>

Note: Effect size uses Cohen’s D; *Significant with p<0.05
fault in students or even if they’re already wrong, you don't look for more [mistakes]. Instead, just sigh and say, 'maybe we can do this or that…”) – Teacher, School A

“Pag-nag-ingay yung mga bata, at saka pag na-iirita ka rin, susahihin mo na 'okay lang ito, nangyayari ito. Nararamdaman ko ito.” Personal naman…. Lilipas din yun…” (“When the kids are being noisy, and when you're getting irritated too, you just say ‘this is okay, this happens. I’m feeling this.’ [For other] personal things…. ‘This shall pass’”) – Teacher, School B

What Helped with Successful Module Delivery

Evaluation at this level also analyzes what helped the teachers perform the delivery of the modules as intended. The process of making job aids (manual, visual aids, and the audio recordings) available was considered as helpful to delivering the modules as intended. Teachers felt that they were well-provided and found the manual easy to follow.

“Parang i-e-execute na lang ng teacher kasi labat well provided na.” (“It’s like the teacher just only needs to execute [the program] because everything is already well provided”) – Teacher, School B

“Madali naman sa teachers kasi we're used na rin sa lesson plan, may steps steps yun eh. So pag babasahin mo yun, nakapaloob namang labat.” (“It’s easy for teachers because we're used to lesson plans too. Those have steps. So, when you read [the manual], everything is already included.”) – Teacher, School B

Barriers to Delivering the Modules

There appeared to be three main barriers that hindered teachers from delivering the modules as intended, namely: 1) poor distribution of resources and lack of accessibility to technological aids, 2) unfavorable learning environments for module activities, and 3) conflict of project deliverables with official workload, schedules, and requirements under DepEd. Each of these are discussed in turn in the next paragraphs.

Poor Distribution of Resources and Lack of Accessibility to Technological Aids. Teachers from School A reported that the audio recordings of meditations were not distributed properly as some did not receive a copy. Having audio recordings would have helped in following the recommended module duration and ease module delivery.

However, teachers also reported that even with digital resources, some teachers did not have access to the equipment necessary to use them. They reported not having LCD projectors or having to borrow speakers from personal contacts to use them.

“Yung audio siguro yung teachers talaga has to find a speaker.” (“Maybe the audio [was difficult], the teachers really had to find a speaker”) – Teacher, School B

“Wala kaming projector” (“We don't have a projector”) – Teacher, School B

Unfavorable learning environments for module activities

Teachers reported that their school grounds were not conducive to learning because of the noise levels in their school grounds. In particular, the noise was found to be detrimental to the meditation exercises.

“Yung environment based on my observation sa klase nila, magingay yung kabilang classroom. So attention talaga ng mga bata, hindi mo talaga makakuba ng 100%” (“Based on my observation of their classroom environment, the adjacent classrooms are noisy. So you really can't get 100% of the attention of the kids.”) – Teacher, School B

Apart from the noise of the school grounds, classrooms were reported to be cramped as some classrooms exceeded 50 students per room. Because of this, movement exercises were not suitable for the room.

“I think depende sa activity. Isang specific na activity, parang di talaga siya akna sa classroom yung may palandaglagundang, paikot-ikot. Normal na kasi na classroom size kasi maliliit. So di yun pwede gawin na parang mag-adjust kaya. Di naman ganon ka-lapad yung classroom para magawa nila yun.” (“I think it depends on the activity. There's one specific activity that doesn't seem fit for the classroom. The one that has jumps and twirling around. Normally classroom sizes are small. So we can't do that and ask them to adjust. Our classrooms are not that wide for them to do those.”) – Teacher, School B

Moreover, due to the size of the room, the visual aid provided, tarpaulin flipcharts, could not be seen by students at the back of the room.

Conflict of Project Deliverables with Official Workload, Schedules, and Requirements under DepEd

Teachers had a difficulty with including the modules within their school year's schedule because the modules were incongruent with the official curriculum of DepEd which they prioritized.

“(…) kung ikaw yung teacher, di mo talaga siya pwedeng gamitin sa anytime na pwede mong gamitin kasi may finalisyon kaming topic” (“If you're the teacher, you can't just use [the modules] anytime you can because we have topics to follow.”) – Teacher, School A

“Considering yung length ng module. Tapos iba-iba yung module. So kailangan kabisado mo talaga. So…. Yung mayreason ka pang lessons na dapat maging tutukan tapos on the other side, kung kailangan mo
School B on the other hand was only able to deliver one module for Grade 7 due to time and scheduling constraints but completed all the modules for Grade 8 according to the implementation plan.

“Parang yung sa Grade 7, (...) parang hindi related sa Grade 7 [modules] yung nabigay.” (“It seems like for Grade 7, the [modules] given don’t seem to be related to Grade 7.”) – Teacher, School B

“Kasi parang late yung training at the same time, late din namin (...) maconduct. Kasi pag ganitong mga months, yung focus namin is more on sa evaluation of schools. So that time, parang ininsert nalang namin yung lesson for the sake na makita ng [project team] na nagawa namin. Pero for the Grade 8, maganda sa kanila, kasi early pa yung training.” (“The training [for Grade 7 teachers] was late, at the same time, we would conduct it late. Because in these months, our focus is more on the evaluation of schools. So during that time, we just inserted the lesson for the sake of having something to show the [project team]. But for Grade 8, it was nice because the training was done early”) – Teacher, School B

Teachers also found that the modules ran longer than the intended module length written in the manual, which further impacted their official schedules. Modules that were intended for one 50-minute session required two sessions during actual implementation. Several factors were found to contribute to this: the time it takes to elicit responses from students, board work, writing activities, and number of topics discussed per module, class composition and class size. When asked which modules were long, teachers reported that it was mostly the Grade 8 modules, especially module 8C and 8D.

“Kasi with the exercises doon, it takes time, at tsaka kailangan mo pa kuning yung mga attention ng mga estudyante.” (“Because the exercises take time, and then you need to get the attention of the students.”) – Teacher, School B

“Kailangan mong pakigmanila sila hago mo ituloy.” (“You need to listen to their answers before you continue.”) – Teacher, School B

Often, to complete the one module in one session, teachers would resort to cutting activities or inquiries short, which leave no time for processing key points.

“Cinu-cut namin yung activities. Minsan may answers, pero…. Kung itatanong, Anong nasip? yung mga bata madami sanang isasagot kaso kumukulangin na sa time.” (“We cut the activities. Sometimes there are answers but if you ask ‘What are your thoughts?’ the kids have many things to answer but we will run out of time.”) – Teacher, School A

“Kung after ka magfit yung mga lessons intended for one hour, pwede mo siyang tapusin kasi skilled naman yung teachers. Yun ang ginawa, CUT. Pero kung quality output ang binahanan mo. Kasi pagsusulat palang ng sagot kailangan ng oras. Kaya minsan para matapos na yung implementation namin, prinipresume na namin na nakulang na kaagad ng mga bata. So cut.” (“If you’re after fitting the lessons intended for one hour, you can finish [the lesson] because the teachers are skilled. That’s what is done – CUT. But if you’re looking for quality output… Because writing answers [on the board] already takes time. That’s why sometimes to end the implementation of the module, we presume that the kids get [the lesson] already. So cut.”) – Teacher, School A

Based on what was shared during the FGDs as well as the reports of the teachers and observations from the fidelity monitoring videos, School A had major deviations from the intended implementation of the modules. First, they significantly deviated from the intended class size of around 50 and instead brought together 150-180 students in one room. They also deviated from the recommended spacing of
the modules, which allowed for one module per week and instead went through all three or four modules in one sitting. This also meant that they would no longer be giving out the homework intended to be done in between modules. They cited conflict of the Mindfulness for Safe Schools modules with their official workload, schedules, and requirements under DepEd as a major reason why they deviated from the intended implementation.

Evaluation of Student Reactions, Learnings, and Behaviors (Level 4)

This level of evaluation focused on the impact of the teachers’ delivery of Mindfulness for Safe Schools on the students. The students’ learnings are divided into three sections, namely: 1) student’s reaction, 2) students’ learnings, and 3) student’s behavior.

Student Reactions: Satisfaction, Engagement, and Perceived Relevance

Overall, it appears that students experienced a degree of satisfaction from the modules. Teachers reported that students enjoyed the games, liked the visual aids, and found the stories relatable. Teachers interpreted students’ outbursts of excitement in reaction to the development of the stories as students relating to the story. Moreover, some teachers reported that students wanted to know more about the characters of the story and were hoping for a definite ending. Apart from the stories, teachers reported that the students liked the calming jars and had an interest in purchasing or making one for themselves. Some elements of the modules elicited untoward reactions such as crying, sleeping, non-compliant behavior, or gasping for breath.

Table 4 shows the average student participation per session per location. Results suggest that students from School B were twice more likely to participate during sessions than those from School A. Teachers also reported that high performing sections tended to engage and participate more in class than low performing sections who tended to make jokes or laugh during exercises.

When the topic of the lesson moved towards topics of sexuality, teachers observed that students no longer wanted to voice out their answers or write their answers on the board. Instead, they wished to write down their answers on their own notebooks or not say their answers out loud entirely.

Student Learnings: Outcomes of Measures on Emotion Regulation and Peer Conformity

For School B, there was a significant improvement in overall emotion regulation among the students, with the total DERS score going down from 2.56 pretest to 2.51 post-test (p = 0.00) (Table 5). In particular, there was a significant improvement in Lack of Awareness, from 2.38 pretest to 2.24 post-test scores (p = 0.00). This meant that after the intervention, the students noticed their emotions more after the intervention. Difficulties in goal-directed behavior also improved with mean pretest score of 2.48 going down to 2.36 at post-test (p = 0.00), which suggested that students were better able to fulfill tasks and obligations even when they were experiencing negative emotions.

There was also a significant change in the overall scores on the Peer Pressure Scale, from 1.85 to 1.71 (p = 0.00). This suggests that students were less susceptible to peer pressure after the intervention. In particular, there was a significant change in Forcing Peers meaning that students reduced habits of forcing peers to give in to their own wants and demands, from pretest mean score of 2.05 to post-test of 1.94 (p = 0.00).

Because School A teachers were observed to deviate substantially from the manner by which student modules were supposed to be delivered – for example holding class

Table 4. Average student participation count per session and location

<table>
<thead>
<tr>
<th>Location</th>
<th>A # of sessions observed</th>
<th>B # of student participation observed</th>
<th>C Average student participation per session (C = B/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>7</td>
<td>110</td>
<td>15.71</td>
</tr>
<tr>
<td>School B</td>
<td>3</td>
<td>91</td>
<td>30.33</td>
</tr>
</tbody>
</table>

Table 5. Paired samples t-test for Difficulties in Emotion Regulation (DERS) and Peer Pressure Scale (PPS), School B (n=950)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Pre-test Mean (SD)</th>
<th>Post-test Mean (SD)</th>
<th>Difference Mean (SD)</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>DERS Difficulty with impulse control</td>
<td>2.41 (0.97)</td>
<td>2.37 (0.95)</td>
<td>0.04 (0.89)</td>
<td>0.19</td>
<td>0.04</td>
</tr>
<tr>
<td>DERS Lack of emotional clarity</td>
<td>2.63 (0.77)</td>
<td>2.66 (0.78)</td>
<td>-0.03 (0.75)</td>
<td>0.23</td>
<td>0.04</td>
</tr>
<tr>
<td>DERS Limited regulation strategies</td>
<td>2.90 (0.84)</td>
<td>2.89 (0.85)</td>
<td>0.01 (0.82)</td>
<td>0.71</td>
<td>0.01</td>
</tr>
<tr>
<td>DERS Inability to engage in goal direction</td>
<td>2.48 (0.74)</td>
<td>2.36 (0.74)</td>
<td>0.12 (0.78)</td>
<td>0.00**</td>
<td>0.15</td>
</tr>
<tr>
<td>DERS Lack of emotional awareness</td>
<td>2.38 (0.78)</td>
<td>2.24 (0.76)</td>
<td>0.14 (0.81)</td>
<td>0.00**</td>
<td>0.17</td>
</tr>
<tr>
<td>DERS Non-acceptance of emotion response</td>
<td>2.60 (0.88)</td>
<td>2.56 (0.87)</td>
<td>0.04 (0.83)</td>
<td>0.10</td>
<td>0.04</td>
</tr>
<tr>
<td>Overall DERS</td>
<td>2.56 (0.53)</td>
<td>2.51 (0.55)</td>
<td>0.05 (0.46)</td>
<td>0.00**</td>
<td></td>
</tr>
<tr>
<td>PPS Peer conformity (R)</td>
<td>2.15 (0.64)</td>
<td>2.16 (0.61)</td>
<td>-0.01 (0.69)</td>
<td>0.70</td>
<td>-0.01</td>
</tr>
<tr>
<td>PPS Forcing peers</td>
<td>2.05 (0.68)</td>
<td>1.94 (0.72)</td>
<td>0.11 (0.65)</td>
<td>0.00**</td>
<td>0.17</td>
</tr>
<tr>
<td>Overall PPS</td>
<td>1.85 (0.48)</td>
<td>1.71 (0.49)</td>
<td>0.14 (0.48)</td>
<td>0.00**</td>
<td></td>
</tr>
</tbody>
</table>

** Significant with p=0.00
sizes of 150 students at a time, conducting 4 sessions in one go, and foregoing some activities that were important to student learning – it was deemed that the lack of fidelity to the Mindfulness for Safe Schools modules would have an impact on the integrity of the results for DERS and the Peer Pressure Scale. Thus, only results for School B were analyzed.

Students’ Behavior: How Students Applied their Learning to their Day-to-day.

Teachers reported that students were able to apply what they learned in the modules in the following ways: coping by allowing difficult experiences to pass, and using the STOP exercise for self-management and peer management. Knowledge that experiences is impermanent as captured by the students’ use of the phrase “lilibas din yan (this too shall pass),” was used as a mantra to cope with uncomfortable experiences, perhaps even adverse experiences. Teachers also frequently reported that students applied the STOP exercise to manage noise levels or handle arguments between peers.

DISCUSSION

On the first level (reaction), results showed that teachers had an overall good reception of the teacher-training workshops. Breathing exercises, meditations, and the STOP protocol as well as how to deal with emotions were commonly liked by the teachers. Teachers were mainly concerned with the limited time to learn everything in the module. Despite this, the teacher-training workshop component met our expectations.

On the second level (learning), teachers were able to practice the observing facet but did not show any changes in others. This may be due to the 1) small sample size, which lacks statistical power to expose small differences, 2) decreased time spent with other facets, and 3) the observing facet’s close association with meditation; increased meditation time almost always leads to increased observing. Teachers still need to practice other forms of mindfulness exercises, to improve other facets.

On the third level (behavior), teachers from School B showed that they applied what they learned to their job to extend their patience and understanding and were able to deliver the modules. However, School A deviated greatly from the intended mode of delivery, caused by inaccessible technological aids, unfavorable learning environments (noisy classrooms), and conflicts between the program requirements and the teachers’ official workload. Like the findings of Alampay, Galvez Tan, Tuliao et al., this investigation demonstrates the difficulty of following a set program given a lack of resources and less-than-optimal conditions. Students learn most optimally in a non-disruptive classroom environment where teachers have administrative support and do not feel overwhelmed and stressed. Mindfulness-based programs, when given ample administrative support and woven into a standard socio-emotional learning curricula and teacher-training may possibly benefit the broader learning environment who are exposed to the program.

Lastly, on the fourth level (student reactions, learnings, and behavior), students showed positive reactions towards the program, and were shown to be engaged. Students from school B showed higher engagement than School A. This may be explained by the differences in module delivery by teachers from both schools. Teachers from School B delivered the modules with a one teacher to one section ratio, whereas teachers from School A delivered the modules with a one teacher to four sections ratio. This suggests that deviating from the intended class size has a notable effect on the degree of student engagement.

It was notable that students in School B showed evidence of learning key lessons of mindfulness. Results show that students generally improved in regulating their emotions. There was a significant improvement in the emotional awareness factor, which is the first step before they can regulate their emotions. The other factors under emotion processing, emotional clarity and acceptance, did not reach significant improvement in this study, but it could be because of Filipino upbringing where children are taught to suppress negative emotions such as fear, anger, and sadness, and to put up a public mask to conceal inner feelings that might prove disadvantageous to interpersonal relationships if expressed openly. Thus, among the students, there could still be confusion in naming their emotions which they have been used to suppressing, and lack of acceptance of these emotions.

There was also a significant improvement in engaging in goal direction despite negative emotions. This suggests that students are learning to respond better to negative emotions. Instead of being swept away by their emotions, the significant change suggests that they are now able to put these aside, and focus at their tasks at hand. A helpful exercise in this regard was the P in STOP, Pampakalmang Pagbinga (calming breath), allowing the glitters to settle in a shaken bottle of glitters, before responding. Impulse control in this study did not reach significance, although there was slight improvement at post-test. Perhaps the students will need more practice, and given more exercises to think out responses, not just to dating, but to other difficult situations. In this program, they were only given opportunities to practice response to emotionally stimulating situations during peer-to-peer dating, for example to think out smart lines and smart moves. But there are many other emotionally stimulating situations that students are faced with, and perhaps they also need to be helped to think out response to such other situations, for example, bullying, substance abuse, and other situations involving peer interaction.

The students had better peer interaction. There was significant reduction in forcing peers to giving into what they want. The quantitative findings seemed to be supported by teacher observations of student behaviors. Students were observed by teachers to use what they learned to manage
themselves and arguments with their peers, for example using the STOP exercise as needed.

CONCLUSION

Overall, the program has shown to have benefits for the teacher and the students. However, the study also highlights that there are areas of improvement should this program be run in public schools.

One area of improvement with the highest impact may arguably be the alignment of the modules to Department of Education (DepEd) requirements for Values Education subject. Conflicts with official workloads was the most cited reason for large deviations to the delivery of the modules. This might mean the need to align the modules with DepEd requirements, and officially endorsed and supported by school administrators.

Secondly, an exploration of how to gain buy-in from teachers may lead to project measures that could greatly increase fidelity to the program protocols, and in turn, could lead to better project success and learning of students.

A third recommendation is ensuring teaching aids that are compatible with available technology in the school are available. It might also be necessary to adapt the modules in accordance with varying school environments - such as classroom size vis-à-vis number of students and noise levels - to ensure that all modules, such as meditations and mindful movement, are doable or adaptable to the school environment.

In terms of future mindfulness interventions in low-income school settings, it would be essential to adapt programs that are sensitive to student, teacher, and environmental circumstances. Coordination and cooperation with appropriate government divisions in terms of integrating mindfulness programs into the curriculum is also necessary. Addressing these concerns would go a long way in helping Filipino students manage their emotions and apply mindfulness skills in the context of dating and sexuality, as well as other emotionally stimulating and difficult situations.

These are important skills to build healthy relationships when students start to explore and enter romantic relationships. We present possibilities in terms of the impact of mindfulness interventions on pre-adolescent sexual behavior and in non-Western, developing country contexts. Taken together, the finding of the study makes an important contribution to the field. Information gathered and knowledge obtained from this study may be used for the benefit of program design, development, delivery, and evaluation of Mindfulness for Safe Schools and other similar projects.

Acknowledgments

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Statement of Authorship

All authors contributed in the conceptualization of work, acquisition and analysis of data, drafting and revising, and approved the final version submitted.

Author Disclosure

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REFERENCES

Mindfulness for safe schools


APPENDICES

Appendix A. Student Modules

Grade 7 Modules

<table>
<thead>
<tr>
<th>Module Title</th>
<th>Learning Objectives</th>
</tr>
</thead>
</table>
| **Part A: Emotions (43 mins)** | • Practice noticing inner experiences through breath awareness  
• Practice noticing, accepting, and labeling emotions  
• Practice using calming breaths and S.T.O.P. during heightened emotions to make more purposeful actions |
| **Part B: Emotions and the body (46 mins)** | • Become aware of the connection between emotions and the body using calming jars  
• Practice noticing body sensations  
• Learn that emotions are also felt in the body  
• Learn that noticing body sensations is one way to understand inner experiences to care for the self  
• Practice using S.T.O.P. to notice inner experiences and to calm the self to avoid impulsive actions |
| **Part C: Emotions, body, and the mind (46 mins)** | • Practice noticing inner experiences: thoughts, emotions, body sensations, and urges  
• Learn that there’s no right or wrong emotions and that emotions come and go |

Grade 8 Modules

<table>
<thead>
<tr>
<th>Module Title</th>
<th>Learning Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Review</strong></td>
<td>• Review and practice the concepts learned in the Grade 7 modules</td>
</tr>
</tbody>
</table>
| **Mindfulness of Conflicting Emotions, Thoughts, Body Sensations, and Urges (58 mins)** | • Practice noticing conflicting inner experiences  
• Have an open discussion about dating beliefs and practices  
• Become aware that others may want different things and to respect what others like and don’t like  
• Become aware of times when conflicting emotions arise with peer pressure and to remember that you can say no to peer pressure. |
| **Decision-making** | • Understand the connection of emotions, thoughts, body sensations to the reactions and behaviors  
• Practice taking a pause when dating or when having strong conflicting emotions  
• Give an opportunity for students to practice thinking of what could happen, weighing possible outcomes when following their first urges before making decisions |
| **Smart Lines** | • To develop personal scripts to deal with and resist peer pressure while maintaining healthy friendships and relationships  
• Practice using mindfulness exercises to help with decision making  
• Strategize on how to avoid situations of peer pressure  
• Give opportunity to think of how to address abuse or sexual abuse. Think of what to say or do to avoid abuse or pressures to have sex |
Appendix B. Sample Questionnaire of the Difficulty in Emotion Regulation Scale

**Difficulty with Impulse Control**
1. Nawawalan ako ng kontrol sa mga kilos ko kapag hindi okay ang damdamin ko. (I lose control of my actions when I'm not feeling okay.)
2. Pag hindi okay ang damdamin ko, nawiwili ako ng kontrol sa sarili ko. (When I'm not feeling okay, I lose control of myself.)
3. Dito ako makapag-aral kapag hindi okay ang mga damdamin ko. (I can’t study when my feelings aren’t okay.)
4. Nahihiya ako ngatong mga damdamin o emosyon ko. (I feel ashamed that I’m not feeling okay.)
5. Pag hindi okay ang damdamin ko, nahihiya ako sa sarili ko. (When my feelings aren’t okay, I feel ashamed of myself.)
6. Pag hindi okay ang damdamin ko, nahihiya ako sa sarili ko. (When my feelings aren’t okay, I feel ashamed of myself.)

**Lack of Emotional Clarity**
1. Nahihiya ako ngatong mga damdamin o emosyon ko. (I feel ashamed that I’m not feeling okay.)
2. Pag hindi okay ang damdamin ko, nahihiya ako sa sarili ko. (When my feelings aren’t okay, I feel ashamed of myself.)
3. Pag hindi okay ang damdamin ko, nahihiya ako sa sarili ko. (When my feelings aren’t okay, I feel ashamed of myself.)
4. Pag hindi okay ang damdamin ko, nahihiya ako sa sarili ko. (When my feelings aren’t okay, I feel ashamed of myself.)
5. Pag hindi okay ang damdamin ko, nahihiya ako sa sarili ko. (When my feelings aren’t okay, I feel ashamed of myself.)

**Limited access to emotion regulation strategies**
1. Mahirap mag-focus sa ibang bagay pag hindi okay ang damdamin ko. (It’s hard to focus on other things when my feelings aren’t okay.)
2. Dito ako makapag-aral kapag hindi okay ang mga damdamin ko. (I can’t study when my feelings aren’t okay.)
3. Nahihiya ako ngatong mga damdamin o emosyon ko. (I feel ashamed that I’m not feeling okay.)
4. Pag hindi okay ang damdamin ko, nahihiya ako sa sarili ko. (When my feelings aren’t okay, I feel ashamed of myself.)
5. Pag hindi okay ang damdamin ko, nahihiya ako sa sarili ko. (When my feelings aren’t okay, I feel ashamed of myself.)

**Unable to engage in goal direction (Reversely worded)**
1. Kahit hindi okay ang damdamin ko, natatapos ko pa rin ang mga gawain ko. (Even if I’m not feeling okay, I can still finish my tasks.)
2. Kahit hindi okay ang damdamin ko, alam ko na kaya ko naman pabutiin ang aking nararamdaman. (Even if I’m not feeling okay, I know that I can make myself feel better.)
3. Kahit hindi okay ang damdamin ko, kaya ko namang i-kontrol ang sarili ko. (Even if I’m not feeling okay, I can control myself.)
4. Kahit hindi okay ang damdamin ko, kaya ko pa rin mag-aral. (Even if I’m not feeling okay, I can still study.)

**Lack of emotional awareness (Reversely worded)**
1. Napapansin ko kung ano ang aking damdamin o emosyon. (I notice my feelings or emotions.)
2. Alam ko kung ano ang aking damdamin o emosyon ko. (I know what I’m feeling or what my emotion is.)
3. Binibigyan ko ng atensyon ang aking damdamin o emosyon. (I pay attention to my feelings or emotions.)

**Non-acceptance off emotional response**
1. Nagbibigay ko ng atensyon ang aking damdamin o emosyon ko. (I pay attention to my feelings or emotions.)
2. Nakakalat ko ang aking damdamin o emosyon ko. (I notice my feelings or emotions.)
3. Pag hindi okay ang damdamin ko, nakakalat ko ang aking nararamdaman. (When my feelings aren’t okay, I let my feelings show.)
4. Pag hindi okay ang damdamin ko, nakakalat ko ang aking nararamdaman. (When my feelings aren’t okay, I let my feelings show.)

Appendix C. Sample Items from the Peer Pressure Scale

**Peer Conformity**
1. Sumusunod ako sa gusto ng kaibigan ko para makapag kaibigan. (I follow what my friends like so that I can make friends.)
2. Sumusunod ako sa gusto ng kaibigan ko para magustuhan nila ako. (I follow what my friends like so that they will like me.)
3. Sumusunod ako sa gusto ng kaibigan ko para magustuhan nila ako. (I follow what my friends like so that they will like me.)
4. Sumusunod ako sa gusto ng kaibigan ko para magustuhan nila ako. (I follow what my friends like so that they will like me.)

**Forcing Peers**
1. Kapag humindi ang kaibigan, okay lang ipilit ang kagustuhan ko. (When my friend says no, it’s okay to push for what I want.)
2. Kapag hindi ginagawa ng kaibigan kung ano ang gusto ko, nagtatampo ako. (When my friend doesn’t do what I want, I get upset.)
3. Para sa akin, kapag tumangkong ang isang kaibigan, hindi ito maatuturing na tunay na kaibigan. (For me, when a friend says no, they can’t be considered as true friends.)
4. Kapag tumangkong ang isang kaibigan sa gusto ko, okay lang kahit hanggang sa pumayag. (When a friend says no to what I want, it’s okay to be persistent until they say yes.)
5. Kapag tumangkong ang kaibigan sa gusto kong gawin, nagpapakipot lang kasi siya. (When a friend says no to what I want to do, they are just being coy.)