

ABSTRACT

Limited research exists about factors that influence the sustainability of universal mental health promotion programs after the controlled and supported environment of a research study ends. This sustainability study explores the factors associated with sustained implementation of MindUP™, a mindfulness-informed social and emotional learning (SEL) curriculum in schools following a quasi-experimental longitudinal evaluation. The purpose of this study is to evaluate the sustainability of MindUP™ in LDCSB using discontinuation analysis and identifying factors associated with discontinued and sustained implementation.

Between 2016-2021, 279 educators of LDCSB in Southwestern Ontario were trained in MindUP™. Educators were support staff/ administrators trained for district-wide capacity building and educators trained to implement the program as part of the quasi-experimental study. The research team provided many resources intended to support and sustain the implementation of MindUP™. In January 2022, every LDCSB educator trained in MindUP™ was invited to participate in an online survey (n=142). Data were analyzed using SPSS descriptives.

Of the 142 survey respondents trained, 60 educators indicated they sustained their implementation of the program in the 2021-2022 school year. Barriers to sustainability included low self-efficacy among educators trained in the online modules, pandemic-related challenges, conflicting curriculum priorities and limited time to implement. Facilitators attributed to sustained implementation are the resource package, observing benefits in the students, educator benefits, and educators observing a need for self-regulation skills among students.

This discontinuation analysis identified points that respondents discontinued or sustained implementation and the factors that they attribute as barriers or facilitators for using the mental health promotion program. The findings contribute to the identification critical stages and the associated strategies that could promote sustainability of program implementation.

INTRODUCTION

- MindUP™ is a mindfulness-informed SEL program shown to promote cognitive and SEL skills such as self-awareness, self-management, and perspective taking for children who receive the program (Schonert-Reichl, 2015).
- In an evaluation of MindUP™ in LDCSB, a school district in Southwestern Ontario, we found evidence of positive effects including improved child behavioural problems (Crooks et al., 2020) and reducing educator burnout and stress (Kim et al., 2020).
- The implementation of evidence-based prevention programs, such as MindUP™, needs to be sustained over time to produce the intended benefits for children (Han & Weiss, 2005). There is limited literature on the factors that promote sustained implementation of evidence-based programs in schools (Arnold et al., 2021).
- Sustainability of evidence-based mental health programs by teachers is defined as the continued use of the curriculum components at a level that is sufficient to sustain the outcomes (Han & Weiss, 2005).

RESEARCH OBJECTIVE

Through a quasi-experimental multi-year implementation research study of MindUP™ in Kindergarten to Grade 3 classrooms, we found significant impacts on students' social, emotional, and adaptive behaviour skills and positive affects on educators, as compared to educators and students who did not receive the training/ program (Crooks et al., 2020; Kim et al., 2021)

Throughout the 6-years of our university-school district partnership, we planned for sustained program implementation in LDCSB schools through multiple support strategies. This study assessed barriers and facilitators to sustaining MindUP™, a universal mental health promotion program in low-resource schools of a Catholic School District in Southwestern Ontario following outcomes evaluation research.

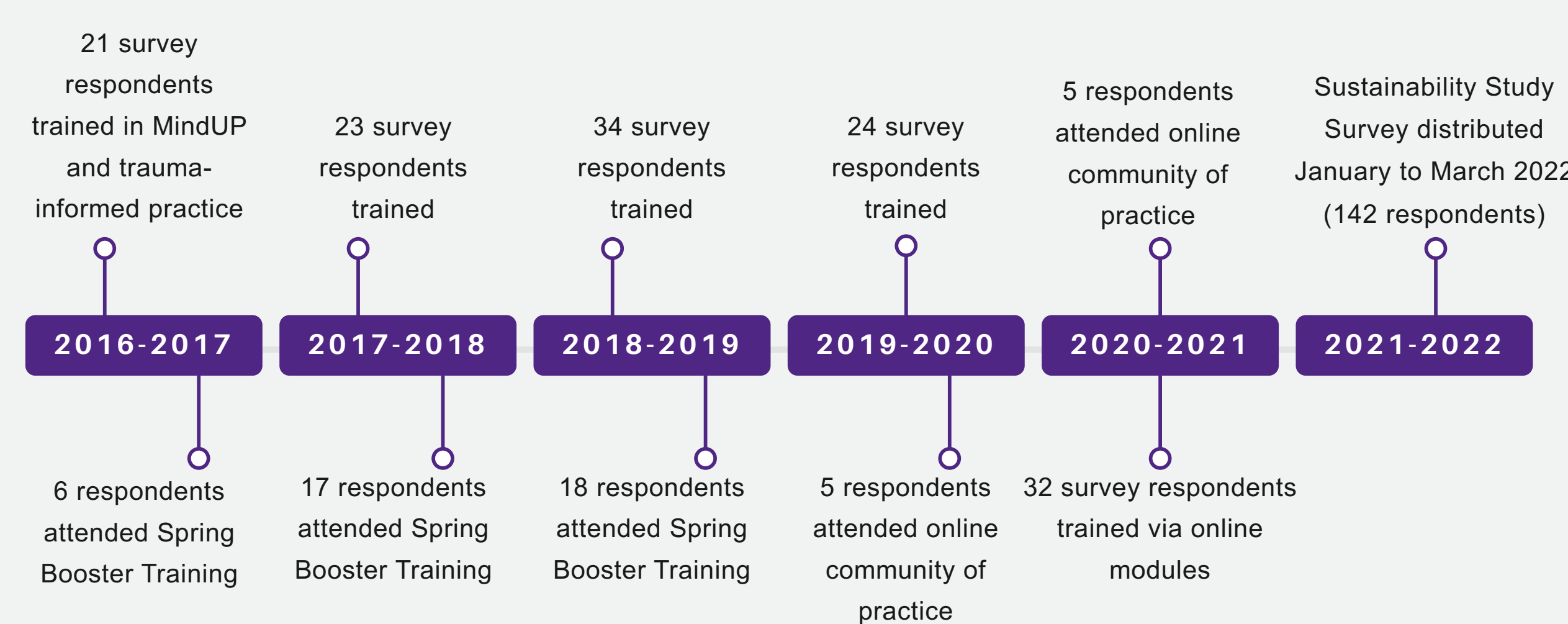
Research questions:

To what extent is the MindUP™ program curriculum sustained by educators after the evaluation?
What are the factors associated with each discontinuation point and with sustained implementation of the program?

METHODS

PROTOCOL

Timeline of the MindUP™ implementation and sustainability study



Sustainability Strategies: Trained implementors received a resource package of curriculum-aligned storybooks, chime, Hoberman Sphere breathing ball, and mindfulness activities cards. MindUP™ lesson extensions of District-specific and Catholic-relevant activities, parent handouts, and curriculum alignment documents showing the provincial expectations that are met by teaching MindUP.

Survey: Respondents indicated their implementation or discontinuation of the program. Respondents self-identified factors that they attribute to their sustained implementation or barriers to implementation. Educators were asked to describe their suggestions for supports and strategies to promote the sustained implementation of MindUP™ and other mental health promotion programs in the school district.

Data Analysis: Survey data were analyzed in SPSS using descriptive statistics.

Participants

Primary educators (Kindergarten to Grade 3) and school district staff from schools in a Catholic School District in Southwestern Ontario, Canada.

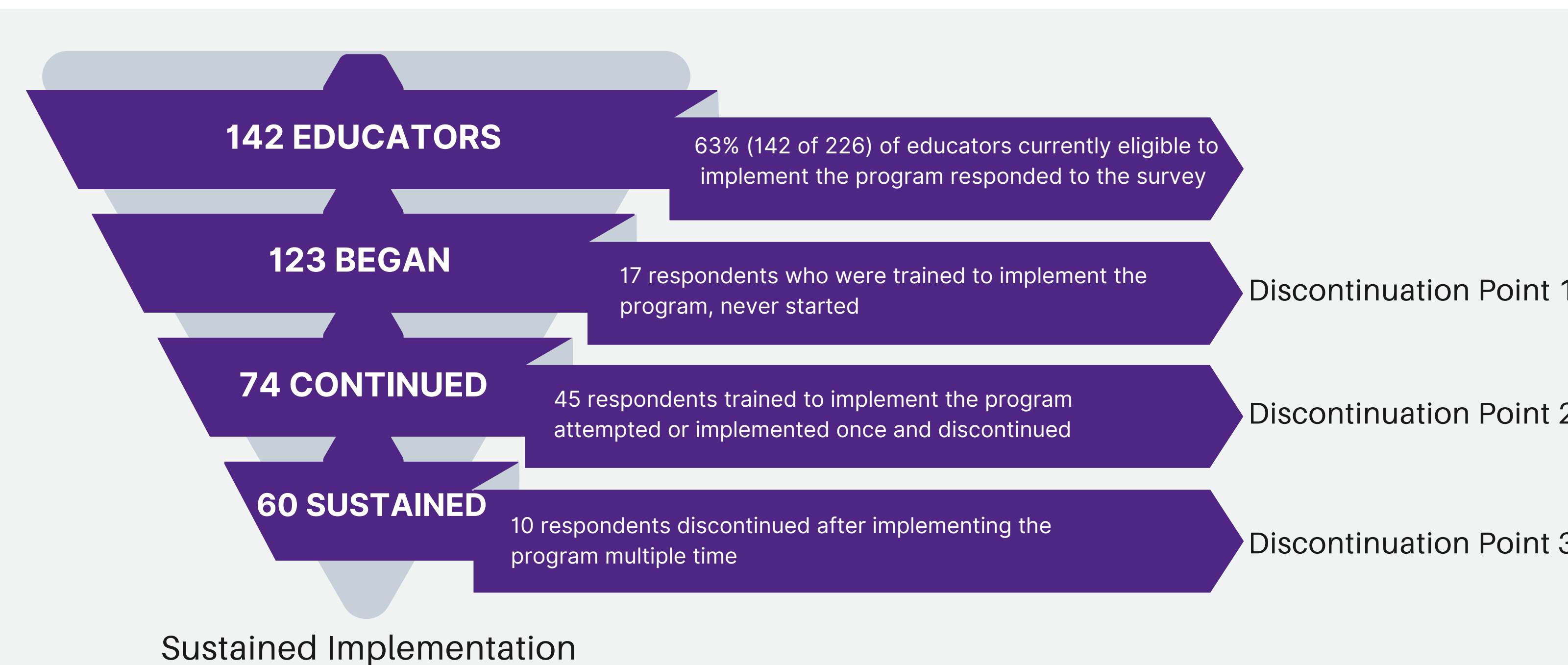
Table 1: Descriptive Statistics Summary of Survey Participant Characteristics

Variable	Mean or Percentage	Std. Dev.	Min	Max
Years teaching/ in education	17.1 years	8.7	1.5	46
Age				
25-34 years	14.1%			
35-44 years	39.4%			
45-54 years	28.9%			
55 years +	14.8%			
Gender				
Male	6.3%			
Female	92.3%			
Current Role				
ECE	16.2%			
Teacher	72.5%			
Other	9.9%			
Training				
In person	77.5%			
Online	22.5%			
Education				
Diploma	12.7%			
Bachelor	63.4%			
Graduate	14.8%			
MindUP professional development				
Yes	37.3%	e.g. Booster sessions, Master trainer, Online community of practice, etc.		
No	62.7%			
Number of participants	142			

FINDINGS

Figure 1: Discontinuation Analysis

Discontinuation of the MindUP™ program implementation based on self-reported survey respondents during the data collection time period of January to March 2022 (10 respondents did not answer this question). Eligibility to implement was based on school district level data of educators currently teaching in classrooms (i.e. not retired, on maternity leave, left the district, etc.) Three discontinuation points are identified.



FINDINGS

Factors Associated with Discontinuation Points and Sustained Implementation.

Discontinuation Point 1	Discontinuation Point 2	Discontinuation Point 3	Sustained Implementation
17 Respondents never implemented MindUP after receiving the training. 10 were trained in 2019-20 and 2020-21(59%), which were the school years disrupted by the COVID-19 pandemic. Educators trained in 2020-21 (n=9) received 1.5 hours of online training vs. full day in-person training of previous years. Barrier: Factor most frequently attributed to preventing them from starting to implement MindUP™ • Pandemic conditions (e.g. shifting back and forth between in person and online learning) (n=10) "MindUP got lost in the shuffle."	45 Respondents discontinued MindUP™ before completing or stopped after the first implementation. 23 were trained in person (51%) and 19 trained online (42%) Barriers: Factors they most frequently attribute to preventing them from completing or continuing with MindUP™ • competing priorities for instructional time (n=20) "I found that more of my time had to be dedicated to other curriculum areas." • pandemic conditions (n=19)	10 Respondents discontinued MindUP™ after multiple implementations. Barriers: • competing priorities for instructional time (n=6) • pandemic conditions (n=7). Facilitators: • Resource package (n=9) • MindUP lesson extensions (n=6) Clear alignment between the program with the provincial curriculum expectations (n=8) • personal or professional benefits for the educators (n=8). "We have the supports. Just need the consistency of fill in class learning and the time."	60 Respondents are currently implementing MindUP™ and intend to continue. 43 were trained in-person (72%) and 15 were trained online (25%). Facilitators: • Resource package (n=54) • Benefits observed in the students (n=53) • Personal benefits or professional practices benefits (n=52) • A clear need for self-regulation skill development in students (n=52) • Having seen the benefits for their students (n=52) "Students need a SEL program, I feel like they benefit from MindUP activities throughout the day."

SUMMARY AND CONCLUSIONS

- Major barriers to implementation include the challenges associated with the COVID-19 pandemic and limited time for meeting curriculum expectations. Facilitators of sustained implementation include support resources, program strengths (benefits for children and teachers).
- Recommendations are to provide high quality training, enhance supports for educators experiencing transitions (e.g. pandemic-related online learning or role changes), and provide implementation resources.
- This study contributes to the current literature by demonstrating the fundamental challenges and facilitators of sustained implementation of the MindUP™ program in a southern Ontario school district.
- Factors identified as influencing sustained implementation of evidence-based mental health promotion programs can impact multi-sector partnership plans for implementation in schools. Identification of the critical points of discontinuation phases and processes can promote more successful implementation, program effectiveness and ultimately sustainability of such initiatives.

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