sentara nurse

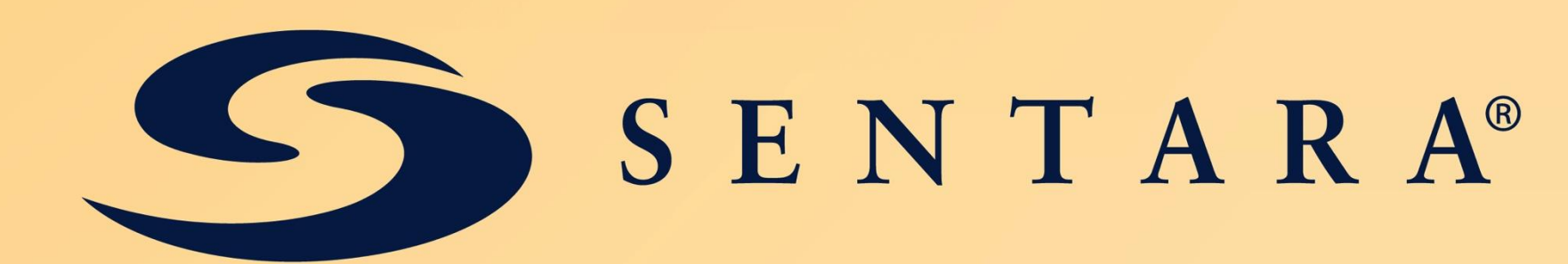# Perceived Value of Mindfulness Intervention to Reduce Stress in Clinical Nurses

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S E N T A R A®

BACKGROUND

- Stress in nursing is an important issue as it can affect nurse's health, the quality of the care they provide, and their desire to remain employed in nursing.[1]
- Nurses across the nation are reporting increased stress and dissatisfaction with nursing, citing job-related stress as one of the principal reasons that nurses change jobs.[2]
- Nurses identified acute and chronic effects of stress and overwork as one of their two top reasons for leaving the workplace.[3]
- Ongoing dissatisfaction among hospital nurses is due in large part to increased job stress, greater administrative demands, and the continuing erosion of the nurse-patient relationship.[4]

WHAT IS MINDFULNESS

Jon Kabat-Zinn indicates "mindfulness is awareness that arises through paying attention, on purpose, in the present moment, non-judgmental. It's about knowing what is on your mind."[5]

LITERATURE REVIEW

An 8-week study on mindfulness (n=36) found participants showed improvement in:

- General health, $t(37) = 2.8$, $p < .01$; decreased stress, $t(37) = 6.8$, $p < .001$; and decreased work burnout, $t(37) = 4.0$, $p < .001$.[6]
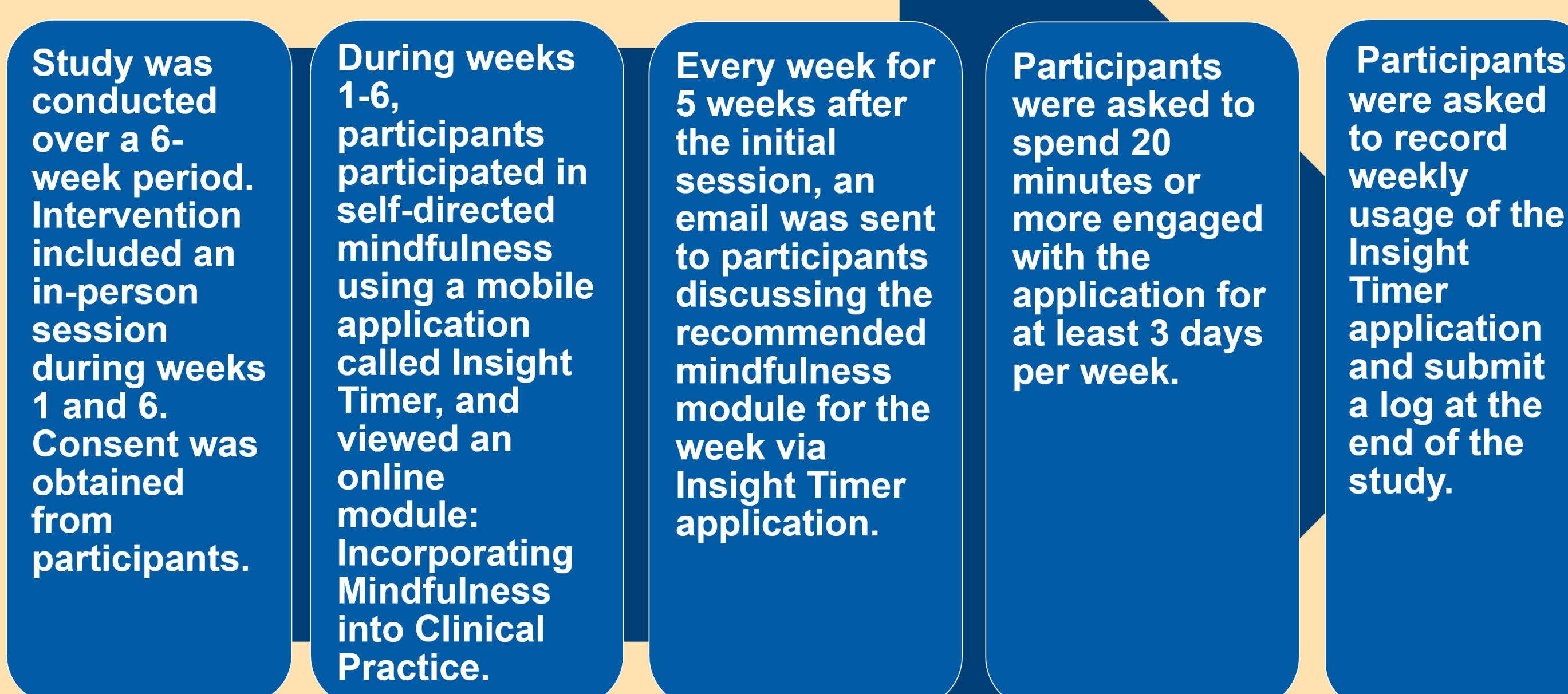
PURPOSE

The purpose of this study was to determine if there are differences in the perceived stress scores before and after participation in a mindfulness intervention. In addition, the study evaluated whether or not nurses found the intervention worthwhile.

RESEARCH QUESTIONS

1. Is there a difference in the perceived stress scores of clinical nurses before and after participating in a mindfulness intervention?
2. Do clinical nurses find the intervention worthwhile?

METHODOLOGY

Figure 1. Research Activities Timeline

Study was conducted over a 6-week period. Intervention included an in-person session during weeks 1 and 6. Consent was obtained from participants.

During weeks 1-6, participants participated in self-directed mindfulness using a mobile application called Insight Timer, and viewed an online module: Incorporating Mindfulness into Clinical Practice.

Every week for 5 weeks after the initial session, an email was sent to participants discussing the recommended mindfulness module for the week via Insight Timer application.

Participants were asked to spend 20 minutes or more engaged with the application for at least 3 days per week.

Participants were asked to record weekly usage of the Insight Timer application and submit a log at the end of the study.

- Participants were recruited using flyers and information sessions provided at staff meetings.
- Insight Timer self-directed mobile application on mindfulness and the IHI module was used to minimize stress.
- Total time for intervention was six weeks.
- The Nursing Stress Scale[7] was used to collect data prospectively.

Table 1. Differences in Nurse Stress Scores Following Program Participation

Nurse Stress Scale	Pre-Education (n = 32)		Post-Education (n = 20)		Z score	p value
	Mean	SD	Mean	SD		
Death & Dying	16.1	3.8	14.4	3.9	-1.433	.152
Conflict with Physicians	12.0	3.0	10.1	1.8	-2.761	.006
Inadequate Preparation	7.0	2.0	5.4	1.4	-3.104	.002
Lack of Support	6.0	1.7	4.6	1.5	-3.001	.003
Conflict with Nurses	10.2	2.3	8.9	2.4	-2.109	.035
Workload	13.0	3.5	10.0	2.6	-3.111	.002
Treatment Uncertainty	9.0	2.3	8.0	2.1	-2.120	.034
Total Scale	74.2	13.7	61.3	12.4	-3.596	<.001

RESULTS

- Most participants worked at least 40 hours per week (61.9%) and did not have previous exposure to meditation activities (57.1%). Approximately 38.1% of participants had a bachelor's degree.
- Overall, most participants (47.6%) had 6-20 years of nursing experience.
- The mean total scale score pre-study was 74.20, the post-study scale score was 59.30. The data from the Nursing Stress Scale indicates decreased perceived stress levels pre and post intervention(Table 1).
- Most (95%) participants found the program worthwhile, would participate again, and would recommend the study to other colleagues.
- Most participants reported improvement in quality of life (80%) and found the overall experience better than expected (90%).

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