

WILD 5 Wellness: Impact of a Five-Pronged (Exercise, Mindfulness, Sleep, Social Connectedness & Nutrition) 30-Day Wellness Program on Mood, Mindfulness, Sleep Behavior, Social Connectedness, Emotional Eating and Mental Wellness



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Introduction

Abstract:

Mental illness in the United States is a significant cause of disability. Healthcare practitioners have appropriately focused on treating the symptoms of mental illnesses and while some progress has been made in improving the quality of an individual's mental health outcomes, much more needs to be done (Powell, Mabry et al. 2015). In the last decade, it has become apparent that focusing exclusively on reducing symptoms of mental illness is insufficient. As clinicians, we should also focus on improving elements of a patient's overall mental wellness. Even the past president of APA (American Psychiatric Association), Dr. Dilip Jeste, often highlights this significant shortcoming in our treatment approach (Jeste and Oswald 2014).

We created a unique mental wellness program called WILD 5 Wellness (WILD = Wellness Interventions for Life's Demands). It is a five-element wellness program that is 30 days in duration. These five elements are physical exercise, mindfulness, optimized sleep, improving social connectedness and optimized nutrition. This program was developed in order to meet the needs to develop a trackable, accountable, self-directed wellness program that includes all five elements practiced on a daily basis. These five elements were selected as each one of them independently has previously demonstrated to improve mental wellness scores that show sustainable benefits (Culver, Whetten et al. 2015, El-Radhi 2015, Matsumoto, Yamaoka et al. 2015). We collected objective data to track these five elements and utilized scales well accepted by the mental health field, such as PHQ-9, GAD-7, WHO-5, PSQI, etc. (Shochat, Tzischinsky et al. 2007, Kessler 2014, Bhana, Rathod et al. 2015, Schueller, Kwasny et al. 2015, Topp, Ostergaard et al. 2015).

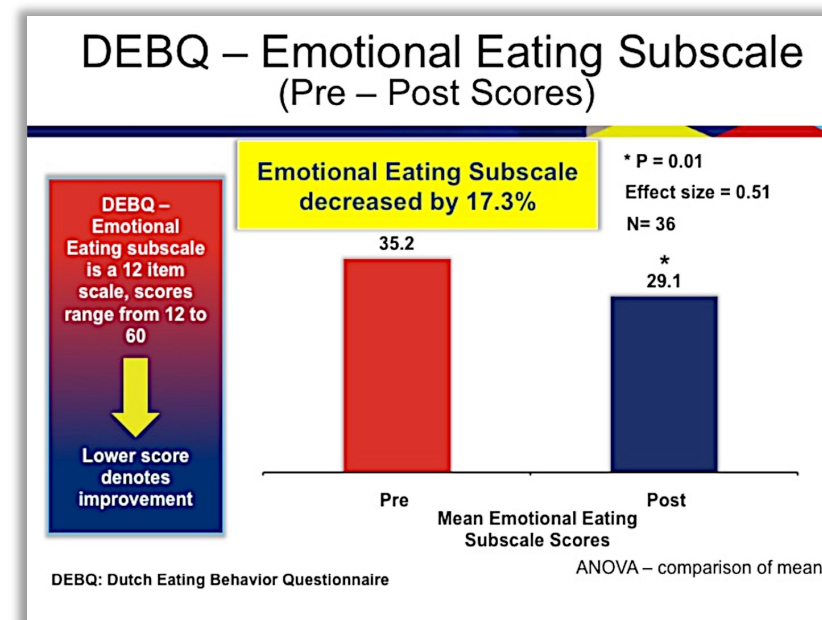
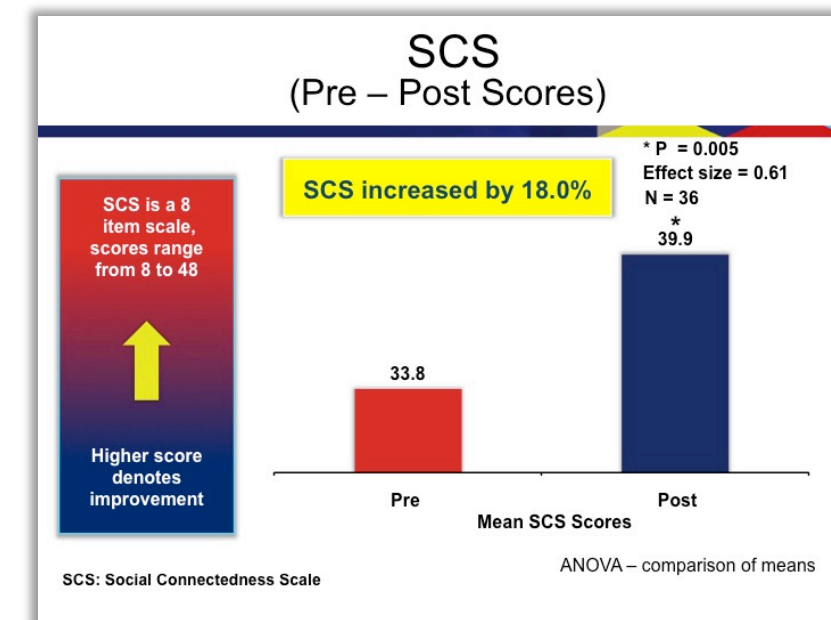
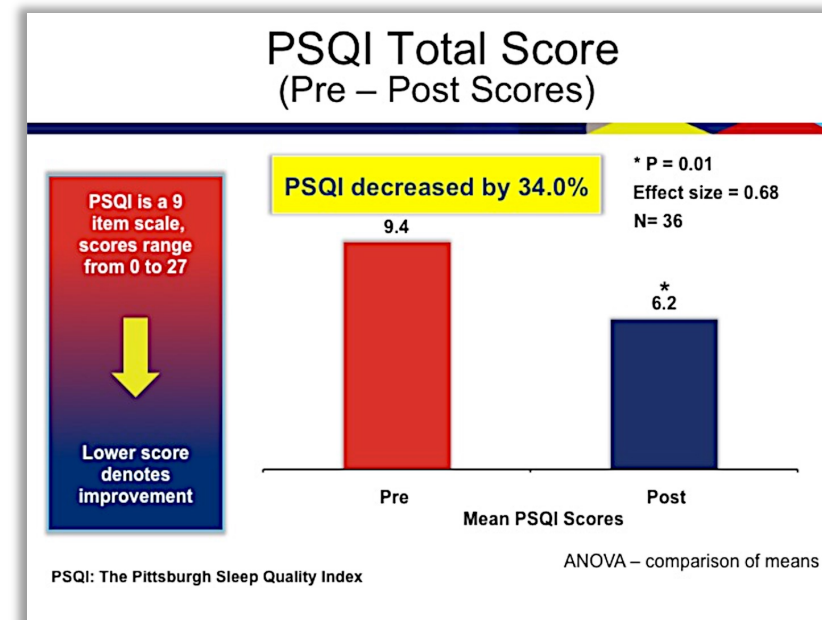
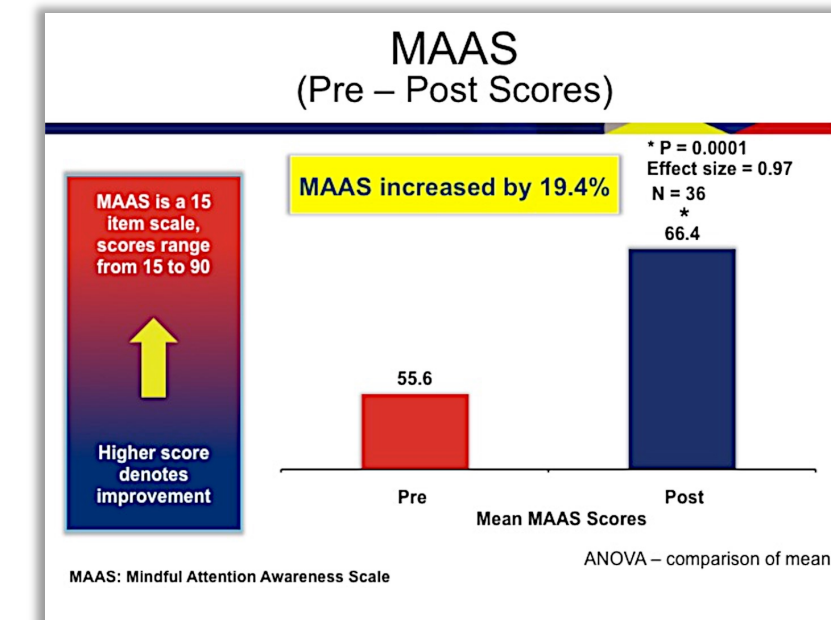
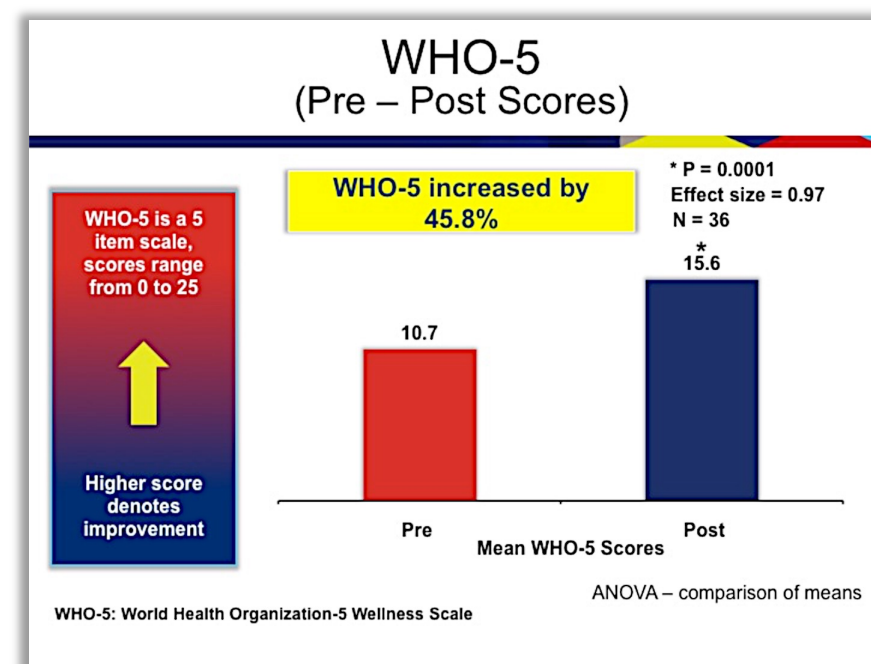
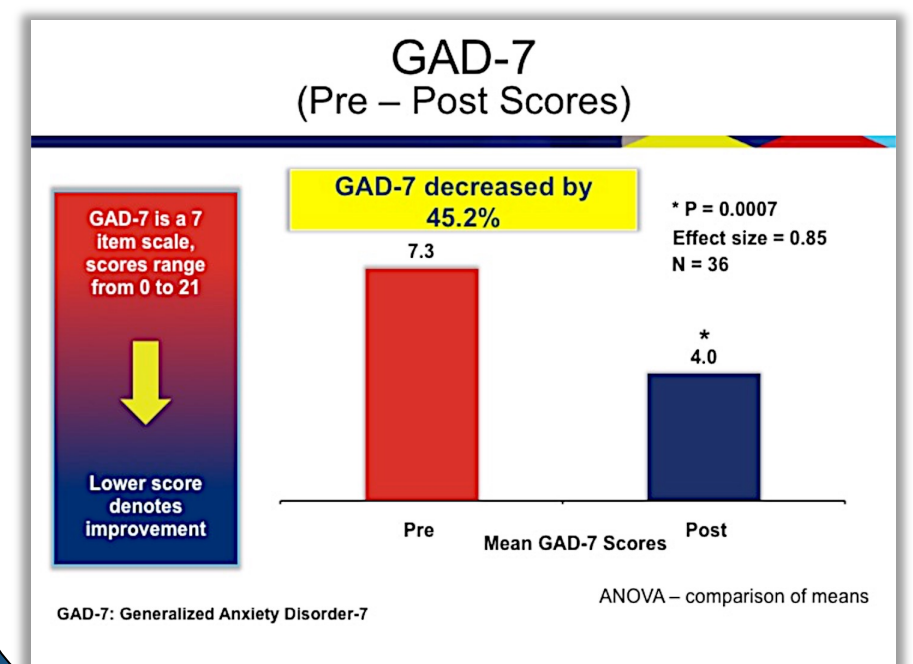
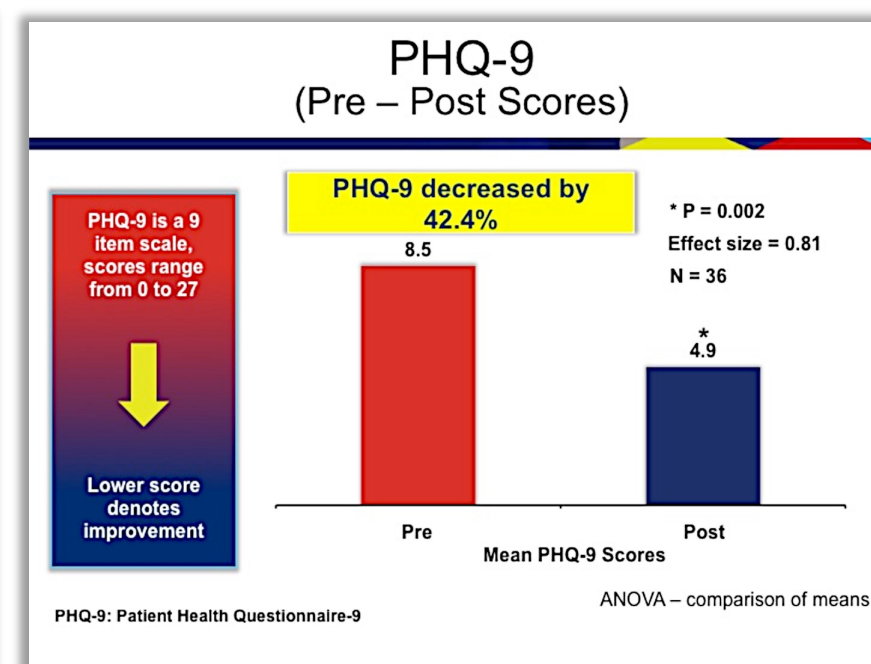
This study reports pre-post changes in global wellbeing, as well as improvements in each of these five elements. Each of the eight trackable components (mood, anxiety, exercise, mindfulness, sleep, social connectedness, emotional eating, and mental wellness) showed numeric improvements and all met statistical significance in pre-post scores ($p < .05$). We also showed a strong co-relationship between adherence to the program (as measured by the number of days an individual actually completed the assigned wellness exercises) with positive outcomes on positive mental wellbeing. Specifically, there were 36 participants in the study (8 males and 24 females, mean age 42.1 years, range 25 - 61 years). Compliance with individual interventions was highest with social connectedness with mean compliance of 28.5 days out of the 30-day intervention, followed by sleep (25.5 days), nutrition (23.5 days), exercise (20.0 days) and mindfulness (18.8 days) per month compliance. Participants ranked the following in terms of most to least helpful: exercise, nutrition, mindfulness, sleep and social connectedness wellness interventions. The WILD 5 Wellness interventions produced the following changes in some of the objective measures: PHQ-9 decreased from a mean score of 8.5 to 4.9 ($p = 0.002$); GAD-7 decreased from a mean score of 7.3 to 4.0 ($p = 0.0007$); WHO-5 increased from a mean score of 10.7 to 15.5 ($p = 0.0001$), MAAS, a measure of mindfulness, increased from a mean score of 55.6 to 66.4 ($p = 0.0001$); PSQI, a measure of sleep health and insomnia, improved from a mean score of 9.4 to 6.2 ($p = 0.01$). The study was positive on all measures and no subjective harm or objective harm to participants was detected.

30-Day Interventions

1. The Exercise module consists of taking a 30-minute *brisk* walk 6 out of 7 days per week for the duration of the 30-day program.
2. The Mindfulness module consists of meditating 10 minutes each day, 7 days a week for the duration of the 30-day program using this free smartphone app: <http://stopbreathethink.org/>
3. The Sleep module consists of consistently implementing at least one of the six pro sleep hygiene practices each night for the duration of the 30-day program.
4. The Social Connectedness module consists of texting or calling a friend or family member each day of the week for the duration of the 30-day program.
5. The Nutrition module consists of logging all meals and snacks each day for the duration of the 30-day program using this free smartphone app: <http://www.myfitnesspal.com/>

Results

Subjects	36 completers, 8 early drops
Age	Mean 42.1 years. Range 25-61
Gender	Females = 28 Males = 8
Clinic / Community Ratio	12 Clinic 24 Community
Psychotropic status	18 on psychotropics 18 not on psychotropics



Adherence Out of possible 30 days

Intervention	Mean Score (Higher is better)
Social Connectedness	28.5 (SD = 3.5)
Sleep	24.5 (SD = 5.1)
Nutrition	23.5 (SD = 7.3)
Exercise	20.0 (SD = 7.3)
Mindfulness	18.8 (SD = 7.6)

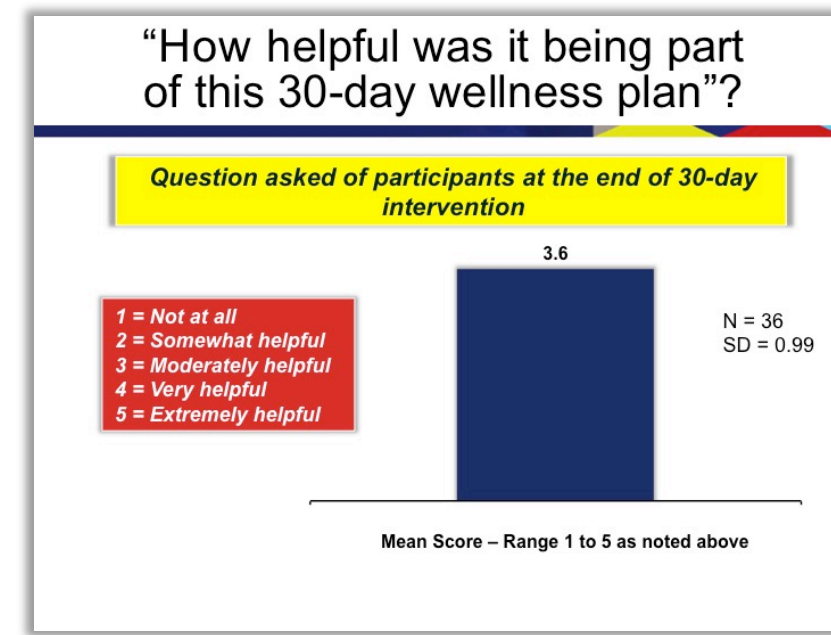
Average Composite Adherence (Max score is 30 X 5 = 150) = 115.4 (SD = 19.7)

N = 36

Effect Size

ITEM	COHEN'S d EFFECT SIZE
PHQ-9	0.81
GAD-7	0.85
WHO-5	0.97
MAAS	0.97
PSQI	0.68
SCS	0.61
Emotional Eating	0.51

N = 36



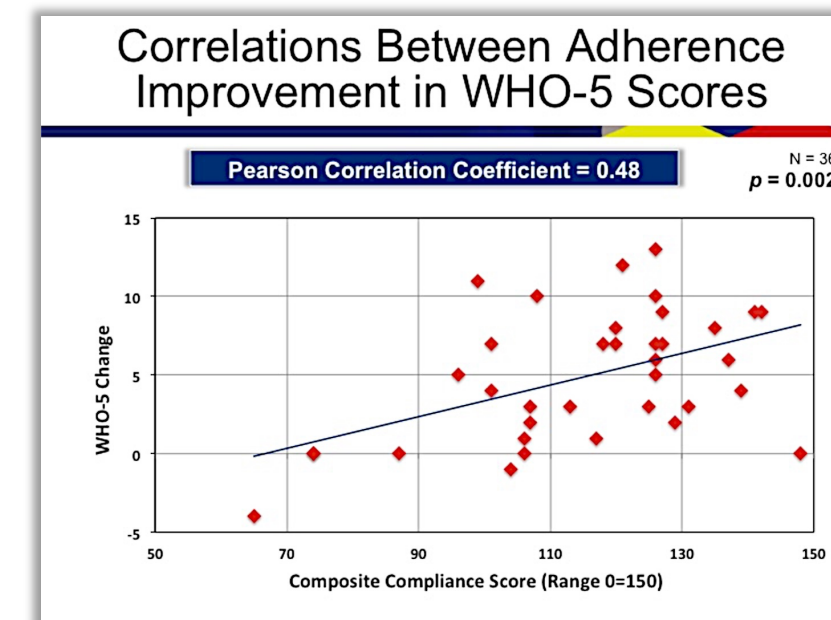
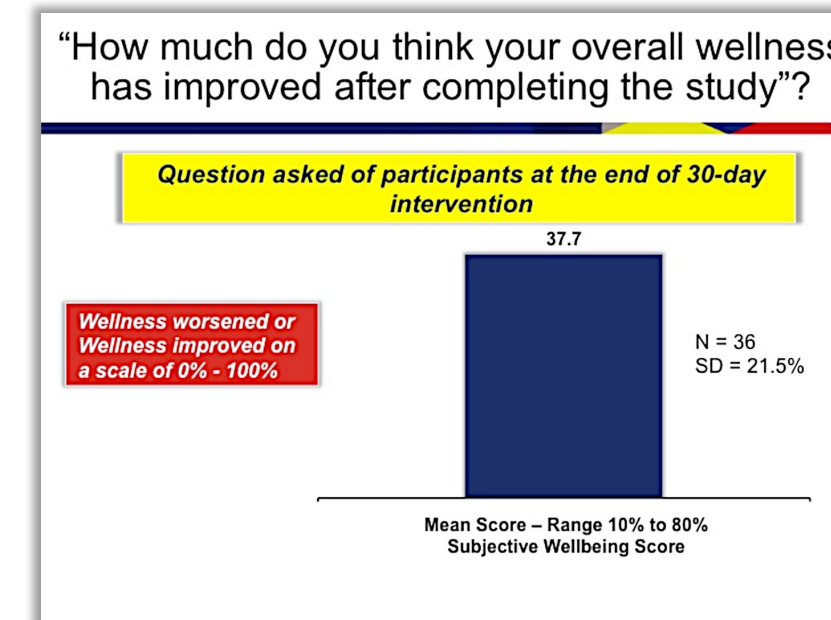
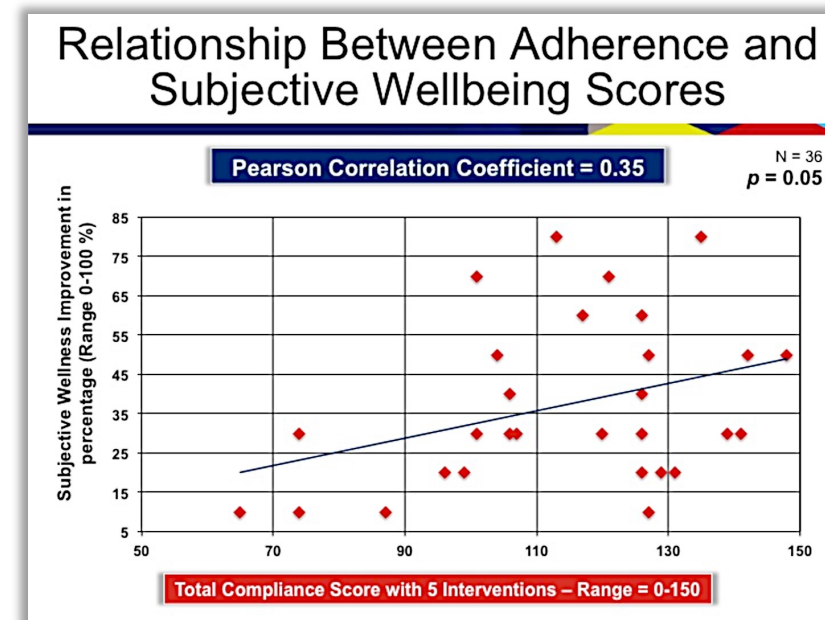
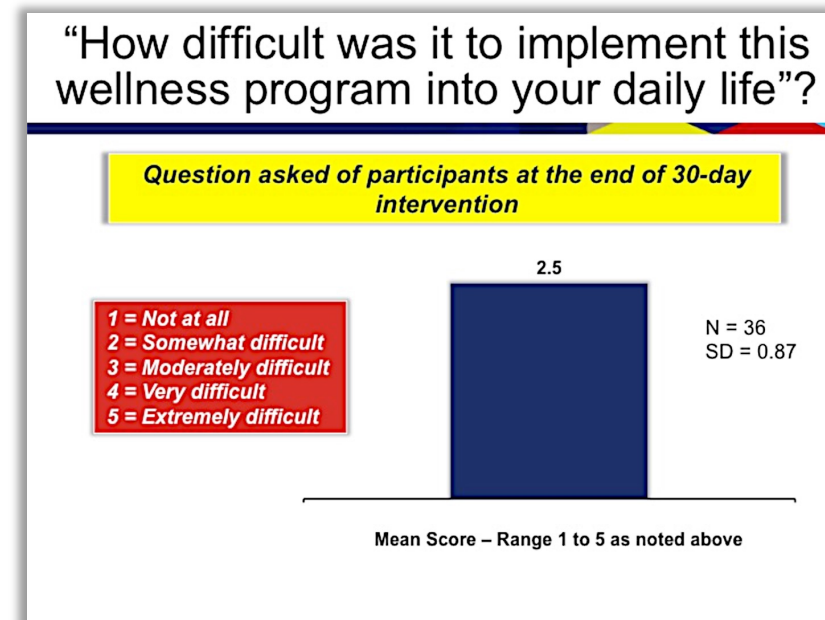
“Please tell us the order in which you thought the individual modules helped your overall wellness”.

Question asked of participants at the end of 30-day intervention

1 = Most Helpful, 2 = Second Most Helpful, 3 = Third Most Helpful, 4 = Fourth Most Helpful, 5 = Fifth Most Helpful

Intervention	Mean Score (Lower is better)
Exercise	2.3
Nutrition	2.9
Mindfulness	3.1
Sleep	3.2
Social Connectedness	3.5

N = 36



Conclusions

This unique intervention offers compelling proof that even a non-medication, self-directed, very low cost 30-day intervention, focusing on mental wellness offers clinically significant help with mood, anxiety, mindfulness, sleep, social connectivity, and emotional eating. These are predicted to not only help improve psychiatric symptomatology but to also improve the quality of life for these individuals. We plan to offer the WILD 5 Wellness Program for no-cost utilization by mental health professionals across the country.

Affiliations

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