



Research Article

# Feasibility of Mindfulness Program in Permanent Supportive Housing

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## Abstract

**Objective:** The study assessed the feasibility of developing a mindfulness program for residents of permanent supportive housing to be offered among an array of social services.

**Methods:** The study was a pre-post design. A mindfulness program was developed to meet specific needs and offered to previously homeless individuals who had moved into permanent supportive housing. The training was designed in four separate modules in order to allow residents to take one or all of the modules. The content and format of the modules were developed with input from discussions with residents interested in taking the program. The four modules were as follows: Mindfulness to Work with Anxiety and Frustration; Mindfulness and Physical Wellness; Mindfulness for Depression and Grief and Mindfulness and Creativity.

**Results:** Nine people participated in at least one module of the training. Seven of the nine participants completed the baseline and post-training questionnaires at the end of the fourth module. A statistically significant improvement in self-reported physical health was seen among those who completed both the baseline and post-training questionnaires. No significant differences were seen in pain, sleep, anxiety, depression, general stress, self-compassion, self-esteem, emotion regulations or in the five facets of mindfulness (observing, acting with awareness, non-judging of inner experiences, non-reactivity, or describing). There were modest decreases in pain and anxiety reported. A modest increase in adequate sleep in the previous two weeks was also reported.

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**Conclusion:** The findings from this feasibility study among a small number of formerly homeless suggest that mindfulness training could gain and maintain interest of residents in permanent supportive housing.

**Keywords:** Feasibility; Mindfulness; Permanent supportive housing

## Abbreviations

PSH: Permanent Support Housing

## Introduction

Programs and policies targeting adverse health consequences of homelessness have included provision of secure, safe and permanent housing while addressing the health needs of formerly homeless individuals [1]. Permanent Supportive Housing (PSH) is an evidence-based practice which provides community-based affordable housing and support services designed to assist with individuals' health and mental health needs [2]. Since 2007 there has been a 60% increase in PSH units to just over 300,000 [3]. Between 2013-2014, Colorado experienced a 19.5% increase in the homeless population, one of the largest increases in the nation [3]. This highlights the need to provide PSH in Colorado communities and ensure access to support services needed to ensure that those who are placed in PSH make a successful transition. The transition to PSH can be very stressful as routines are altered, more self-management is required, and individuals feel isolated from their former "community" so that mental health needs may be exacerbated rather than reduced [4,5]. Providing tools to individuals in this transition period may enhance the success of programs which include PSH as a major intervention for homeless individuals.

One possible technique to assist with this stressful transition may be mindfulness training. Mindfulness has been associated with psychological well-being [6]. There are multiple facets of mindfulness including awareness and nonjudgmental acceptance of one's moment-to-moment experience which may be effective in reducing common forms of psychological distress such as rumination, anxiety, worry, fear, anger and more [6]. A growing body of evidence supports mindfulness and meditation training as efficacious in reducing stress, improving well-being, and in providing specific health benefits [7,8]. Mindfulness has not been used in studies among formerly homeless individuals.

## Study purpose

The purpose of feasibility study was to determine if provision of mindfulness training within the array of the supportive services provided for residents in PSH would be acceptable and potentially provide benefits reported in other mindfulness programs.

## Methods

### Study design and procedures

The study used a pre-post design. The training was designed in four separate modules in order to allow residents to take one or all of the modules. The content and format of the modules were developed with input from discussions with residents interested in taking the program. The four modules were as follows: Mindfulness to Work with Anxiety and Frustration; Mindfulness and Physical Wellness; Mindfulness for Depression and Grief; and Mindfulness and Creativity. Each module took two weeks to complete and included six sessions. The training began in February, 2016 and was completed in April, 2016. The first three modules met three times for two weeks (Monday, Wednesday and Friday) for one-hour sessions. The format included a check-in, formal mindfulness meditation, a presentation by one of the trainers, and group discussion. Sessions often included one of two activities: walking meditation, a body scan, and a contemplative exercise focused on loving kindness. The fourth module was also two weeks in length with meetings three times a week on Mondays, Wednesdays, and Fridays but each week 2 sessions were two hours in length and participants were introduced to a traditional Japanese activity: the first week was a Japanese Tea ceremony and time in a studio to make tea cups from clay and the second week was traditional Japanese flower arranging (Ikebana) with participants making individual flower arrangements. The final week was meditation and discussion.

Training was provided by a project director who had over 40 years of experience with practice and teaching mindfulness meditation, by a private practice psychotherapist who had practiced mindfulness meditation for 15 years and worked with meditation students for 9 years, and a private practice counseling psychologist who had worked on trauma and additions for six year and had a mindfulness practice for ten years.

A questionnaire was developed to assess general feelings about self, physical health and pain, sleep, anxiety, depression and stress in the past 4-weeks, self-compassion, emotional regulation, facets of mindfulness and general intentions with regard to the program. Baseline surveys were conducted prior to the first training session and post-training surveys were conducted immediately following the final training module.

The participants were also given the opportunity to provide feedback about the course and describe their experiences in the course in a series of open-ended questions that half way through the course and again after completing the course.

### Results

Nine people participated in at least one module of the training. Seven of the nine participants completed the baseline and post-training questionnaires at the end of the fourth module. The following results are based on the responses of those seven participants.

Characteristics of the respondents are shown in table 1. At baseline, 71.4% of those enrolled in the training at baseline had meditated within the past year. There were more females than males among the participants and a majority of the participants were aged 45-55 years.

	Baseline (Mindfulness Group)
<b>Number of Participants with Complete Data</b>	7
<b>Gender</b>	
Male	2
Female	5
<b>Age</b>	
45-54 years	5
55+ years	2
<b>Meditated in the Last Year (Baseline)</b>	
Yes	5
No	2
<b>Meditated Outside of Class (at post)</b>	
None	0
1-3 times per week	3
4 or more times per week	4

**Table 1:** Characteristics of the Permanent Supportive Housing Mindfulness Participants May 2016.

Table 2 contains the results of the outcomes of interest comparing baseline and post-training questionnaire responses among the seven participants who completed both questionnaires. A statistically significant improvement in self-reported physical health was seen among those who completed both the baseline and post-training questionnaires. No significant differences were seen in pain, sleep, anxiety, depression, general stress, self-compassion, self-esteem, emotion regulations or in the five facets of mindfulness (observing, acting with awareness, non-judging of inner experiences, non-reactivity, or describing). There were modest decreases in pain and anxiety reported. A modest increase in adequate sleep in the previous two weeks was also reported.

Table 3 contains the aspirations of the trainees for the program at baseline and after mindfulness training. Both before and after training, residents were interested in reducing stress, improving health and sleep, having better focus and improving energy levels.

### Conclusion

The findings from this feasibility study among a small number of formerly homeless individuals suggest that mindfulness training could gain and maintain interest of residents of PSH programs.

Overall, participant’s experienced modest changes from baseline to post-training. Changes were in the direction expected, and only those related to physical health were statistically significant. At baseline, five of the seven trainees reported that they had meditated within the past year, which may have resulted in a lower ability to assess the positive benefits of this training program. All of the trainees were meditating at least once a week after the training.

In terms of the qualitative feedback from the program, respondents appreciated the help the program gave them and some requested that the program be maintained at the housing facility. Respondents specifically requested that the trainer continue to work with them.

A growing number of PSH programs across the country offer supportive services while providing affordable housing, mindfulness training could further add to the positive health outcomes and reduction in service costs seen in the PSH model.

Variable	Baseline <sup>2</sup> Completed Post Intervention Group n=7	Post <sup>2</sup> Completed Baseline Intervention Group n=7
Physical Health*	2.0	2.7
Pain	4.3	3.7
Sleep (Enough over last two weeks)	2.7	3.4
Anxiety	3.3	2.9
Depression	3.3	3.2
General Stress	2.7	2.8
Self-Compassion	2.9	3.2
Self-Esteem	3.7	3.7
Emotion Regulation		
Reappraisal	3.6	3.6
Suppression	2.3	2.6
Mindfulness		
Observing	4.1	4.2
Acting with Awareness	3.1	2.9
Non-Judging	3.2	3.0
Non-reactivity	2.7	3.4
Describing	3.6	3.9

**Table 2:** Baseline and Post-Training Mean Values for Outcomes of Interest, Permanent Supportive Housing, May, 2016.

\*Significant at the p<.05 level.

**Note 1:** 1 = Low, 5 = High for all mean values except pain, which was measured on a 6-point scale with higher values representing more pain.

**Note 2:** Physical health was the only variable for which there was a significant change in the mean values between baseline and post surveys. Statistical significance was based on paired t-tests comparing the means between the baseline and post-means among the 7 participants who completed both the baseline and post surveys.

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	BASELINE (n=7)	POST (n=7)
Stop from thinking too much.	6	4
Reduce stress.	6	7
Relax in general.	6	7
Have better focus.	5	7
Be more aware of others.	4	6
Be less judgmental of myself and others.	5	6
Improve my energy levels.	4	7
Improve my health, which can include better sleep.	5	7

**Table 3:** Aspirations\* for the Mindfulness Training Program: Baseline and Post-Training, Permanent Supportive Housing, May 2016.

\*Respondents could mark as many as they wanted among the choices provided.



- Journal of Anesthesia & Clinical Care  
Journal of Addiction & Addictive Disorders  
Advances in Microbiology Research  
Advances in Industrial Biotechnology  
Journal of Agronomy & Agricultural Science  
Journal of AIDS Clinical Research & STDs  
Journal of Alcoholism, Drug Abuse & Substance Dependence  
Journal of Allergy Disorders & Therapy  
Journal of Alternative, Complementary & Integrative Medicine  
Journal of Alzheimer's & Neurodegenerative Diseases  
Journal of Angiology & Vascular Surgery  
Journal of Animal Research & Veterinary Science  
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Journal of Biotech Research & Biochemistry  
Journal of Brain & Neuroscience Research  
Journal of Cancer Biology & Treatment  
Journal of Cardiology & Neurocardiovascular Diseases  
Journal of Cell Biology & Cell Metabolism  
Journal of Clinical Dermatology & Therapy  
Journal of Clinical Immunology & Immunotherapy  
Journal of Clinical Studies & Medical Case Reports  
Journal of Community Medicine & Public Health Care  
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Journal of Cytology & Tissue Biology  
Journal of Dentistry: Oral Health & Cosmesis  
Journal of Diabetes & Metabolic Disorders  
Journal of Dairy Research & Technology  
Journal of Emergency Medicine Trauma & Surgical Care  
Journal of Environmental Science: Current Research  
Journal of Food Science & Nutrition  
Journal of Forensic, Legal & Investigative Sciences  
Journal of Gastroenterology & Hepatology Research  
Journal of Gerontology & Geriatric Medicine  
Journal of Genetics & Genomic Sciences  
Journal of Hematology, Blood Transfusion & Disorders  
Journal of Human Endocrinology  
Journal of Hospice & Palliative Medical Care  
Journal of Internal Medicine & Primary Healthcare  
Journal of Infectious & Non Infectious Diseases  
Journal of Light & Laser: Current Trends  
Journal of Modern Chemical Sciences  
Journal of Medicine: Study & Research  
Journal of Nanotechnology: Nanomedicine & Nanobiotechnology  
Journal of Neonatology & Clinical Pediatrics  
Journal of Nephrology & Renal Therapy  
Journal of Non Invasive Vascular Investigation  
Journal of Nuclear Medicine, Radiology & Radiation Therapy  
Journal of Obesity & Weight Loss  
Journal of Orthopedic Research & Physiotherapy  
Journal of Otolaryngology, Head & Neck Surgery  
Journal of Protein Research & Bioinformatics  
Journal of Pathology Clinical & Medical Research  
Journal of Pharmacology, Pharmaceutics & Pharmacovigilance  
Journal of Physical Medicine, Rehabilitation & Disabilities  
Journal of Plant Science: Current Research  
Journal of Psychiatry, Depression & Anxiety  
Journal of Pulmonary Medicine & Respiratory Research  
Journal of Practical & Professional Nursing  
Journal of Reproductive Medicine, Gynaecology & Obstetrics  
Journal of Stem Cells Research, Development & Therapy  
Journal of Surgery: Current Trends & Innovations  
Journal of Toxicology: Current Research  
Journal of Translational Science and Research  
Trends in Anatomy & Physiology  
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