

# Impact of a Mindfulness Program on a Physician Assistant Surgical Residency

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## INTRODUCTION

Many healthcare Professionals including Physicians and Advanced Practice Providers experience burnout during their resident years. Despite the growing focus on trainee burnout, there is a lack of effective wellness programs that can easily be combined into a trainee's curriculum.



Figure 1. Group restorative postures



Figure 2. Legs-On-The-Chair Pose

## OBJECTIVES

- Objectively measure the effects of a mindfulness program on Physician Assistant Surgical Residents through pretest and posttest comparison.
- Understand the association between mindfulness strategies and burnout.
- Understand the correlation between mindfulness strategies and resiliency.
- Practice breath work, open awareness, restorative postures and Loving-Kindness-Meditation to bolster resiliency and work with second-hand trauma, empathy, fatigue, and chronic stress by engaging the parasympathetic nervous system.

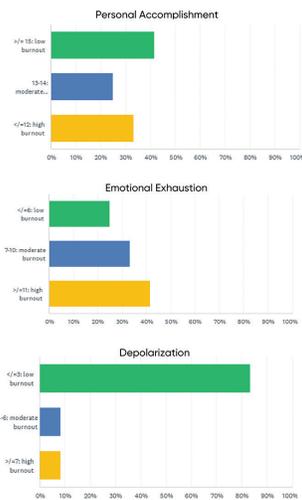
## METHODS

Twelve surgical Physician Assistant (PA) Residents voluntarily participated in a structured mindfulness program initiated by their Program Director. An informal needs assessment was conducted by the Program Director and data were shared with a meditation instructor specialized in working with individuals affected by trauma and suffering from Post-traumatic Stress Disorder (PTSD). Participants completed two pre-course surveys prior to the first mindfulness session; first, the Maslach Burnout Inventory (abbreviated) which measured burnout as defined by symptoms of emotional exhaustion, depersonalization, and personal accomplishment. The second survey, the Response to Stressful Experiences Scale, measured individual differences in cognitive, emotional, and behavior responses to stressful life events. Data from these surveys and regular conversations and interviews with the Program Director also informed the meditation instructor's overall program design. The program consisted of four, forty-minute sessions, held in-person over eight weeks in March and April 2022. Each session consisted of a brief introduction, science behind the meditation techniques, and time to practice the techniques. Both surveys will be readministered as posttests two weeks following the final session.

## OUTCOMES

The first survey provided pretest baseline measurements for future comparison. Over 33% of initial responses to the Maslach Burnout Inventory demonstrated a high burnout rate regarding personal accomplishments. Over 41% of PA resident responses reflected a high burnout rate of emotional exhaustion. Fortunately, over 83% of respondents acknowledged a low burnout rate regarding the depolarization of patient care. The baseline Response to Stressful Experiences Scale demonstrated higher scores representing greater resiliency. Two additional post-course surveys will be distributed to present longitudinal results. They are expected to demonstrate improvement in the resiliency of PA residents and burnout from emotional exhaustion and personal accomplishments.

### Maslach Burnout Inventory



### Response to Stressful Experiences Scale

During and after life's most stressful events, I tend to...	Minimum	Maximum	Median	Mean	Standard Deviation
...take action to fix things.	3	5	4	3.83	0.69
...not give up trying to solve problems I think I can solve.	3	5	4	4.37	0.69
...find a way to do what's necessary to carry on.	1	5	2	2.58	1.5
...face my fears.	1	5	3	3.17	1.07
...find opportunity for growth.	3	5	4	4.06	0.69
...calm and comfort myself.	2	5	3.5	3.58	1.04
...try to "recharge" myself before I have to face the next challenge.	2	5	4	3.83	0.99
...see it as a challenge that will make me better.	1	5	4	3.42	1.19
...look at the problem in a number of ways.	2	5	4	4.08	0.95
...look for creative solutions to the problem.	1	5	3	3.08	1.32
...put things in perspective and realize I will have times of joy and times of sadness.	3	5	5	4.5	0.65
...be good at determining which situations are changeable and which are not.	3	5	4	4.37	0.8
...find meaning from the experience.	2	5	4	3.83	1.21
...find strength in the meaning, purpose, or mission of my life.	2	5	4	3.75	1.23
...know I will bounce back.	3	5	4	4.08	0.76
...accept that I can handle it.	2	5	4.5	4.25	0.92
...learn important and useful life lessons.	3	5	4	4.17	0.8
...understand that bad things can happen to anyone, not just me.	4	5	5	4.67	0.67
...lean on my faith in God or a higher power.	1	5	1.5	2.25	1.63
...draw upon lessons learned from failures and past mistakes.	3	5	4	4.17	0.69
...practice ways to handle it better next time.	2	5	4	4	0.91

## DISCUSSION

Data from previous research of mindfulness programs show decreased rates of burnout and increased resiliency and happiness. The author's hypothesis is that participation in a structured mindfulness program will allow PA residents to understand their individual responses to stress and this knowledge / self-awareness may lead to lower burnout rates and improved employee satisfaction. A future mindfulness course will be conducted earlier in the PA residency year and survey responses will be collected at various points throughout the academic year. Further research is needed to explore the impact of a mindfulness program on rates of exhaustion, resiliency, happiness, and to determine any correlation with improved patient care and reduced employee turnover.

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