

ABSTRACT

Panic disorder has affected nearly 5% of the adult population in the United States; the majority of those affected are middle-aged adults. Panic disorder is a mental illness characterized by frequent panic attacks. One of the leading therapeutic interventions used to treat frequent panic attacks is mindfulness. Mindfulness is a practice that use self-awareness, acceptance, and psychosomatic exercises to promote psychosocial wellbeing. The following study is a secondary data analysis from the Midlife in the United States 3 [MIDUS 3] study, which observes the effectiveness of mindfulness for reducing the frequency of panic attacks in middle-aged adults. Results from the secondary data analysis concluded that there is a statistically significant relationship between mindfulness and panic attacks. The results indicate that the average number of panic attacks experienced was significantly higher in participants that practiced mindfulness a lot compared to participants who practiced often, sometimes, rarely, or never. Although there are limitations to consider in the study, the results support that mindfulness can be an effective intervention for reducing the frequency of panic attacks in middle-aged adults. Clinical social workers are encouraged to implement mindfulness as an effective therapeutic intervention for middle-aged adults struggling with panic attacks, and equip these individuals with mindfulness exercises that they can facilitate on their own to reduce the frequency of experienced panic attacks.

INTRODUCTION

Significance of Study

Middle-aged adults between the ages of 45 and 65 have one of the highest rates of diagnosable panic disorder of any age range in America, at approximately 3.9%. Nearly half of adults with panic disorder have identified that it has caused serious impairment in their healthy daily functioning. The popular interventions of psychiatric medications and cognitive behavioral therapy [CBT] pose serious limitations for the middle-aged adult population. Antianxiety medications can have long-term harmful effects on cognitive and motor functioning for this age range. Additionally, CBT is a long-term intervention and must be facilitated by a mental health professional in order to effectively reduce symptoms, and individuals in this population may not have the finances, resources or time to sustain a long-term therapy schedule. A growing body of research suggests mindfulness as an accessible and affordable intervention for treating panic disorder.

Purpose

To examine the effectiveness of mindfulness for panic attacks in middle-aged adults.

Research Question

Can engagement in mindfulness exercises reduce the frequency of panic attacks in middle-aged adults?

Hypothesis

Engagement in mindfulness exercises can reduce the frequency of panic attacks in middle-aged adults.

LITERATURE REVIEW

Panic disorder is a mental illness characterized by frequent panic attacks, which are a culmination of psychophysiological symptoms that trigger an alarm response in the mind and body. Of the 5% of middle-aged adults who struggle with panic disorder, nearly 50% of these individuals have reported that panic disorder has caused serious impairment in healthy daily functioning.

Through the lens of cognitive theory, studies have supported that the implementation of cognitive coping strategies can reduce the psychophysiological symptoms of panic disorder.

Mindfulness has been suggested as an effective therapeutic intervention alternative, as it can be learned and administered by the individual with panic disorder, without the need for facilitation by a mental health professional. Mindfulness exercises often include include awareness, relaxation techniques, mind exercises, acceptance, positive self-regard, meditation and emotion regulation. Studies have supported that practicing mindfulness exercises can reduce symptoms of panic disorder, increase self-efficacy, improve normative breathing patterns, improve emotional regulation and improve overall life satisfaction.

METHODS

Research Design

The following study is a secondary data analysis of data collected from the 2013-2014 Mid-Life in the United States [MIDUS] study. The MIDUS study is a longitudinal, multi-wave study that was conducted in three waves; the first wave began in 1995, the second in 2004, and the third in 2013. The intention of the study was to collect national data about the correlation between psychological, social and behavioral factors and the mental health status and overall wellbeing of individuals in the adulthood and late adulthood stages of life in the United States. The research design of this study was a mixed methods design, particularly using the instruments of two telephone interviews and one self-administered mail questionnaire. Each of the 2,802 variables observed in the MIDUS 3 study were collected from participants as self-reported data.

The secondary data analysis collected data from a sample population of adults ranging from age 45 years of age to 65 years of age, as this age range has been determined by the United States Census as "middle-aged." For the purpose of gathering most recent and relevant data for this particular topic of research, cross-sectional data was only collected and utilized from the third wave, MIDUS 3 study, conducted from 2013 to 2014.

Measures

Independent Variable: Mindfulness Exercises

The independent variable of mindfulness is operationalized through the variable of reported frequency of engaging in relaxation techniques and/ or in meditation over the past 12 months, as a ratio measure.

Dependent Variable: Frequency of Panic Attacks

The dependent variable of panic attacks is operationalized through the variable of reported frequency of panic attacks experienced over the past 12 months, as an interval measure.

Sample

In the original study, a total of 4,460 participants from the MIDUS 2 study were recruited to complete the MIDUS 3 study. The MIDUS 2 sample population was originally recruited through a process of random sampling. Of the 4,460 sample population, 2,423 participants were recruited through random digit dialing [RDD], 677 were recruited as siblings through RDD, and 1,360 were recruited as twins through RDD. Demographic data collected included the nominal measures of respondent's sex, marital status, employment situation, and educational history. Additionally, interval measures of demographic data observed included respondent's age and household income. The demographic inclusion criteria used required participants to be between the ages of 45 and 65 years of age. Additional inclusion criteria for this study required that participants between the ages of 45 and 65 to report quantifiable responses for both the independent variable of frequency of mindfulness exercises, as well as the dependent variable of frequency of panic attacks must be included in the study. After utilizing the above inclusion criteria, the sample size for this secondary data analysis was 253 participants.

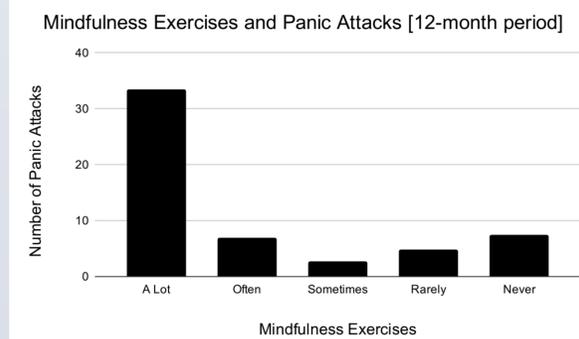
RESULTS

Self-Rated Mindfulness and Frequency of Panic Attacks

A one-way analysis of variance (ANOVA) test was conducted to evaluate the relationship between mindfulness and panic attacks. There was a statistically significant relationship between engaging in the mindfulness exercises of meditation and/ or relaxation techniques and frequency of panic attacks, [F (4,248) = 3.118, p = .016].

Panic Attacks and Mindfulness							
Variable	Mindfulness Exercises of Meditation and/or Relaxation Techniques					F-value	P
	A lot (N=12)	Often (N=20)	Sometimes (N=33)	Rarely (N=27)	Never (N=161)		
Frequency of Panic Attacks	33.42*	6.95	2.79	4.78	7.52	3.12	.02**

*Entries in columns are cell means; d.f. associated with F-value is (4).
**p < .05



A Scheffé post hoc criterion for significance was conducted in the ANOVA test, in order to evaluate the relationships within subgroups of the study. The results of the Scheffé post hoc test indicated that the average number of panic attacks experienced was significantly higher in participants that practiced mindfulness exercises a lot (M = 33.42, SD = 99.76) than those who participated in these mindfulness exercises often (M = 6.95, SD = 7.44) sometimes (M = 2.79, SD = 2.23), rarely (M = 4.78, SD = 6.05), or never (M = 7.52, SD = 20.45). Additionally, participants who practiced often often (M = 6.95, SD = 7.44), sometimes (M = 2.79, SD = 2.23) and rarely (M = 4.78, SD = 6.05) experienced less panic attacks than those who never practiced (M = 7.52, SD = 20.45).

CONCLUSIONS

Significance of Findings

The results did not strongly support the hypothesis that engaging in mindfulness exercises can reduce the frequency of panic attacks in middle-aged adults, as the results supported varying conclusions. While the results supported that middle-aged adults who practice the mindfulness exercises of meditation and relaxation techniques often, sometimes, or rarely will likely experience less panic attacks than if they never practice, the results also supported that middle-aged adults who practice a lot are likely to experience more panic attacks than if they engage often, sometimes, rarely or never. One possible explanation for this inconsistency may be that individuals with a higher frequency of panic attacks may have other comorbid mental illnesses or circumstances that may make effective, quality mindfulness exercises difficult to practice and achieve. One other possible explanation for the correlation between more frequent panic attacks and more frequent engagement in mindfulness exercises may be that those who naturally experience a higher frequency of panic attacks than others must engage in mindfulness exercises more often in order for it to be more effective in combatting panic attacks.

Strengths and Limitations

STRENGTHS

- The MIDUS 3 study was supported by reputable sponsoring and publishing institutions.
- The body of relevant research provided in the study support that the MIDUS 3 study has empirically-based data to pull from.
- The broad but intentional parameters of this study created a collection of data on the mental health status, circumstances and overall well-being for a demographically diverse sample population of middle-aged adults in the U.S.

LIMITATIONS

- The language used to describe panic attacks in the survey questions from the study was vague, confusing and misleading
- Not an adequate amount of questions that inquired about the participant's experiences with panic attacks
- No comprehensive data collected on comorbid mental illnesses/ circumstances among participants
- No data collected on any potential changes in frequency of panic attacks over 12 month period

Implications for Future Research and Social Work Practice

In order to produce future relevant studies on mindfulness and panic attacks, questions that assess for panic attacks and mindfulness must be clear, intentional and comprehensive in language and answer choices in order to accurately reflect these variables in the sample population. Additionally, participant responses must reflect all potential improvement, stagnation or regression over the course of time observed. Researchers must also assess each participant for all potential comorbid mental illnesses that may influence the relationship between panic attacks and mindfulness, in order to collect data that reflects a reliable relationship between variables.

Clinical social workers can uphold the National Association of Social Workers [NASW] values of service and dignity and worth of each person by providing clients with the most effective and applicable interventions that will work best for their individual challenges. Unlike many other therapeutic interventions, mindfulness can be considered an effective, person-centered intervention for individuals who suffer from frequent panic attacks, as these individuals can learn and conduct their own mindfulness exercises in nearly any place, time or situation without the need for professional facilitation.

ACKNOWLEDGEMENTS

I would like to thank Dr. Agahi for guiding me throughout my Capstone project. I would also like to thank God, my family (Mom, Dad and Austin), my relatives, my partner, Guy, and all my loved ones for supporting me through my graduate studies and Capstone submission!