



COMPARATIVE ANALYSIS OF COGNITIVE-SOMATIC ANXIETY AND MINDFULNESS IN YOUNG AND MIDDLE-AGED ADULTS

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ABSTRACT

The current study aspires to inquire about the interdependence between Mindfulness and Cognitive - Somatic Anxiety among Young and Middle Adults in India. This quantitative research encompassed a cohort of 121 individuals, including 58 young adults and 63 middle adults. A convenient sampling technique was utilized to derive the samples from the population. Data collection was executed employing instruments such as The Mindful Attention Awareness Scale (MAAS) (Dr. Kirk Warren Brown and Dr. Richard M. Ryan, 2003) and Cognitive-Somatic Anxiety Questionnaire (CSAQ) (Gary E. Schwartz, Richard J. Davidson, and Daniel J. Goleman, 1978). Data analysis was performed utilizing Karl Pearson's correlation alongside the independent t-test. The results showed that there is no significant difference in the levels of mindfulness between young adults and middle adults, there is significant difference in cognitive anxiety levels between young adults and middle adults, as well as there is significant difference in somatic anxiety levels between young adults and middle adults. The correlation analysis indicated no significant relationship between mindfulness and cognitive anxiety, and similarly, a non-significant correlation was found between mindfulness and somatic anxiety. Additionally, the results showed a non-significant correlation between mindfulness and age. Furthermore, cognitive anxiety and somatic anxiety were not significantly correlated. However, a strong, significant positive correlation was observed between cognitive anxiety and age, while somatic anxiety exhibited a significant negative correlation with age.

KEYWORDS : Mindfulness, Cognitive Anxiety, Somatic Anxiety, Young Adults, Middle Adults

Young adults, defined as those between the ages of 20 and 39, are a vibrant generation that is marked by relationship growth, profession establishment, and identity exploration. On the other hand, middle-aged adults (40–59 years old) frequently deal with issues like health issues, caregiving responsibilities, and job plateauing. These life stages are essential for comprehending factors like mindfulness, cognitive anxiety, and somatic anxiety because they bring unique psychological and emotional experiences. Mindfulness describes a person's capacity to remain objectively aware of their current events. In middle-aged individuals, mindfulness may act as a protective barrier against stressors such as midlife crises and health issues, while in young adults, it can improve emotional control throughout transitional periods. Cognitive anxiety, which involves intrusive and concerning thoughts, frequently presents in a variety of ways depending on the age group. Young adults may suffer from increased cognitive anxiety as a result of social demands and job concerns. On the other hand, middle-aged adults could have anxiety about becoming older, having enough money, and taking care of their families. Stressors particular to a person's age also have an impact on somatic anxiety, which manifests as physical symptoms as restlessness and elevated heart rate. Performance pressures may cause somatic symptoms in young adults, whereas persistent stress and physical health issues may cause somatic symptoms in middle-aged individuals. The association between somatic anxiety, cognitive anxiety, and mindfulness suggests that mindfulness may act as a moderating factor. Increased mindfulness may lessen the effects of physical and cognitive anxiety by promoting acceptance and decreasing stressor reactivity. Investigating this relationship is necessary to learn more about coping strategies used by people of all ages. Spalding et al. (2021) investigated the moderating effects of ageing on the connection between cognitive anxiety and daily cognitive impairments, discovering that anxiety's impact on cognitive functioning varies dramatically during the adult lifetime. Their findings show that middle-aged and older persons may face greater cognitive impairments as a result of increased levels of anxiety, making mindfulness research in these populations especially important. Li et al. (2019) looked at the altered brain networks linked with somatic anxiety, emphasising the necessity of understanding the physiological basis of anxiety symptoms. Their research sheds light on the somatic aspects of anxiety, which, when combined with mindfulness practices, may allow for more comprehensive approaches to anxiety management. Jaiswal et al. (2018) discovered that higher trait mindfulness and lower trait anxiety are linked to improved cognitive function. Their findings highlighted the impact of mindfulness on cognitive skills such as attentional control and working memory, demonstrating how these traits interact to influence cognitive performance. Because it looks at how these factors interact across many developmental stages, this study is important. Knowing

how mindfulness interacts with somatic and cognitive anxiety in young and middle-aged adults can help develop age-appropriate therapies that promote resilience and psychological well-being.

Objectives

- To compare the levels of mindfulness between young adults (ages 20-39) and middle adults (ages 40-59).
- To examine the differences in cognitive anxiety levels between young adults and middle adults.
- To analyze the differences in somatic anxiety levels between young adults and middle adults.
- To investigate the relationship between mindfulness and cognitive anxiety among adults.
- To explore the relationship between mindfulness and somatic anxiety among adults.
- To determine the correlation between cognitive anxiety and somatic anxiety among adults.
- To assess the correlation between age and mindfulness among adults.
- To evaluate the relationship between age and cognitive anxiety in adult populations.
- To investigate the association between age and somatic anxiety among adults.

Hypotheses

- H1: There is no significant difference in the levels of mindfulness between young adults and middle adults.
- H2: There is no significant difference in cognitive anxiety levels between young adults and middle adults.
- H3: There is no significant difference in somatic anxiety levels between young adults and middle adults.
- H4: There is no significant correlation between mindfulness and cognitive anxiety among adults.
- H5: There is no significant correlation between mindfulness and somatic anxiety among adults.
- H6: There is a no significant correlation between cognitive anxiety and somatic anxiety among adults.
- H7: There is no significant correlation between age and mindfulness among adults.
- H8: There is no significant correlation between age and cognitive anxiety among adults.
- H9: There is no significant correlation between age and somatic anxiety among adults.

Method

Sample

This quantitative study included 121 participants, 58 of whom were young adults and 63 were middle-aged. The samples were obtained

from the population using convenient sampling technique.

Inclusion Criteria

- Individuals aged 20-59.
- Willingness to participate in the research and provide accurate responses.
- Adults living in India.

Exclusion Criteria

- Individuals under 20 or over 59.
- Unwillingness to participate in the study and provide honest responses.
- Adults outside of India.

Measures

The Mindful Attention Awareness Scale (MAAS), developed by Dr. Kirk Warren Brown and Dr. Richard M. Ryan (2003), is a 15-item scale that measures mindfulness as a receptive, present-focused state of awareness; the Cognitive-Somatic Anxiety Questionnaire (CSAQ), developed by Gary E. Schwartz, Richard J. Davidson, and Daniel J. Goleman (1978), is a 14-item tool that evaluates cognitive and somatic components of anxiety, based on the understanding that anxiety manifests in both mental and physical forms; as a trait measure, it identifies long-term tendencies and aids practitioners in customising interventions by differentiating cognitive and somatic elements; a Personal Data Sheet was utilised to gather socio-demographic information of the participants.

Procedure

I used Google Forms to create forms for adults in India, and then I started gathering research data. The study's objective was to gather insights from the target population, and the participants were credited for their crucial contributions. I made sure to protect the privacy of the data collected for the study and to emphasise that participation was completely voluntary when I sent the questionnaire links via internet channels. The forms included clear instructions to allow respondents to honestly answer the statements while also accommodating for variances in response patterns across different scales.

Statistical Analysis

Data was analysed using Karl Pearson's correlation and the independent t-test.

RESULT AND DISCUSSION

Table 1 Descriptive Statistics

| Variable | N | SD | Mean |
|-------------------|-----|--------|--------|
| MINDFULNESS | 121 | .953 | 4.028 |
| COGNITIVE ANXIETY | 121 | 11.851 | 27.297 |
| SOMATIC ANXIETY | 121 | 5.991 | 20.438 |

Note : N = Number of participants, SD = Standard Deviation

Table 2 Levene's Test and t-Test for Equality of Means for Mindfulness, Cognitive Anxiety, and Somatic Anxiety Among Middle and Young Adults

| Variable | AGE GROUP | F | Sig. | t | Sig. (2-tailed) | Std. Error Difference |
|-------------------|---------------|-------|------|--------|-----------------|-----------------------|
| MINDFULNESS | MIDDLE ADULTS | .223 | .638 | .563 | .574 | .17403 |
| | YOUNG ADULT | | | .564 | .574 | .17380 |
| COGNITIVE ANXIETY | MIDDLE ADULTS | 2.382 | .125 | -9.091 | .000 | 1.66373 |
| | YOUNG ADULTS | | | -8.998 | .000 | 1.68098 |
| SOMATIC ANXIETY | MIDDLE ADULTS | 1.037 | .311 | 5.167 | .000 | .98947 |
| | YOUNG ADULTS | | | 5.210 | .000 | .98147 |

Table 2 shows the results of the independent samples t-test for mindfulness indicate that there is no significant difference between young adults and middle-aged adults. The p-value for mindfulness (Sig. 2-tailed = 0.574) exceeds the 0.05 threshold, supporting H1. This suggests that both young adults and middle-aged adults exhibit similar levels of mindfulness, aligning with previous findings by Brown and

Ryan (2003), who reported that mindfulness tends to be consistent across adult age groups. These findings imply that age may not significantly impact mindfulness levels, as mindfulness practices and awareness appear relatively stable across age.

Contrary to H2, the results reveal a significant difference in cognitive anxiety levels between the two age groups. The p-value for cognitive anxiety (Sig. 2-tailed = 0.000) indicates a highly significant difference, with young adults exhibiting higher levels of cognitive anxiety compared to middle-aged adults. This finding refutes H2, suggesting that age may influence cognitive anxiety, possibly due to the different life challenges faced by younger individuals, such as educational, career, and personal transitions. The results are consistent with the findings of Spielberger (1983), who noted that younger adults generally experience higher levels of anxiety, likely due to the stressors associated with this life stage.

The analysis also refutes H3, revealing a significant difference in somatic anxiety levels (Sig. 2-tailed = 0.000) between young adults and middle-aged adults. The results indicate that young adults have higher somatic anxiety than middle-aged adults, suggesting that younger individuals may experience more physical symptoms of anxiety. This finding aligns with prior research by Spielberger (1983), which emphasized that younger adults are more prone to both cognitive and physical manifestations of anxiety due to stress and uncertain life circumstances.

Table 3: Karl Pearson's Correlation Coefficients Between Mindfulness, Cognitive Anxiety, Somatic Anxiety, and Age

| Variable | MINDFULNESS | COGNITIVE ANXIETY | SOMATIC ANXIETY | AGE |
|-------------------|-------------|-------------------|-----------------|-----|
| MINDFULNESS | 1 | | | |
| Sig. (2-tailed) | | | | |
| COGNITIVE ANXIETY | -.022 | 1 | | |
| Sig. (2-tailed) | .809 | | | |
| SOMATIC ANXIETY | -.095 | .029 | 1 | |
| Sig. (2-tailed) | .301 | .749 | | |
| AGE | -.052 | .640** | -.428** | 1 |
| Sig. (2-tailed) | .574 | .000 | .000 | |

**Correlation is significant at 0.01 level (2-tailed)

Table 3 shows correlation between mindfulness and cognitive anxiety was found to be very weak and negative (r = -.022, p = .809), indicating no significant relationship between these variables, supporting H4. This finding aligns with Baer's (2003) review, which suggests that while mindfulness can be beneficial for general mental health, its effects on specific cognitive anxiety may be limited without targeted intervention. Mindfulness is often found to enhance emotional regulation, but its influence on cognitive symptoms specifically may depend on the individual's engagement with mindfulness practices.

Similarly, the correlation between mindfulness and somatic anxiety was weak and negative (r = -.095, p = .301), indicating no significant association and leading to the acceptance of H5. This supports previous research by Grossman et al. (2004), who found that while mindfulness-based interventions reduce overall stress, their impact on somatic symptoms can vary. Mindfulness may help in cultivating a calm state, yet its influence on physical anxiety responses appears more nuanced.

The correlation between cognitive and somatic anxiety was positive but very weak (r = .029, p = .749), suggesting no significant association, thereby accepting H6. This finding is consistent with Clark and Watson's (1991) tripartite model, which suggests that cognitive and somatic anxiety are distinct constructs and may operate independently in certain situations.

Age and mindfulness showed a weak and negative correlation (r = -.052, p = .574), which supports H7, indicating no significant relationship. Brown and Ryan (2003) observed that while mindfulness can be beneficial at any age, engagement and impact can vary, suggesting no consistent pattern across age groups in terms of mindfulness benefits.

A strong positive correlation was observed between age and cognitive anxiety (r = .640, p < .001), leading to the rejection of H8. This finding suggests cognitive anxiety may increase with age, potentially due to

age-related stressors or cognitive decline concerns, as observed by Hoge et al. (2013), who noted that anxiety symptoms could increase with specific age-related triggers.

Lastly, a significant negative correlation was observed between age and somatic anxiety ($r = -.428, p < .001$), leading to the rejection of H9. This aligns with Teachman's (2006) findings, which suggest that somatic anxiety often decreases with age as older adults develop resilience and adaptive coping mechanisms, reducing their physiological responses to stress.

Limitations and Implications

The study is limited by its focus on Indian adults, reliance on self-reported data prone to response bias, cross-sectional design that precludes causal inferences, restricted age cohorts, and online convenience sampling, which may not represent the population. However, it highlights age-related differences in anxiety and mindfulness, with somatic anxiety decreasing and cognitive anxiety increasing with age. This suggests the need for age-specific interventions, such as cognitive-focused therapies for middle-aged adults and physical symptom-oriented treatments for younger adults. The lack of a strong link between anxiety and mindfulness indicates the need to explore additional factors influencing anxiety and underscores the importance of tailored mindfulness-based therapies for psychological well-being.

Conclusion and Future Scope

Future research should explore additional factors influencing the mindfulness-anxiety relationship, such as personality, lifestyle, and coping strategies, while cross-cultural and longitudinal studies could offer insights into sociocultural impacts and changes over time. Investigating age-specific mindfulness interventions for cognitive and somatic anxiety and using larger, more diverse samples could enhance therapy development and generalizability. This study found significant age-related differences in anxiety, with mindfulness showing a strong negative association with both cognitive and physical anxiety, suggesting its potential as an effective intervention for managing anxiety across age groups.

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