Mental Health Outcomes Among Montessori Educators in Pakistan

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Abstract

Montessori educators face numerous challenges that can lead to adverse mental health outcomes, such as stress and anxiety. This is due to the considerable effort required not only to educate children but also to maintain classroom discipline and promote activity-based learning. However, these mental health outcomes—particularly stress and anxiety resulting from such challenges—has not been widely studied, especially in the context of Pakistan. Therefore, the objective of this study is to examine the association between mental health outcomes, specifically stress and anxiety, among Montessori educators in Pakistan. To address the gap in existing literature and propose effective strategies and implications, the study adopted a cross-sectional correlational research design to collect data. The sample consisted of 200 Montessori educators from both public and private schools. Participants had a minimum educational qualification of matriculation and were at least 18 years old (Mean = 27.96, SD = 7.10). The study utilized the stress and anxiety subscales of the Depression Anxiety Stress Scale (DASS-21) to measure the mental health outcomes among participants. It was hypothesized that stress and anxiety would be positively and significantly associated with each other. Furthermore, it was expected that stress would significantly and positively predict anxiety. The correlational analysis supported the hypothesis, revealing a significant positive relationship between stress and anxiety. Additionally, stress was found to be a significant predictor of anxiety.

Keywords: Stress, Anxiety, Montessori Educators.

Introduction

An educator is an individual who provides instruction or education (Tariq, 2024). Montessori education is based on the belief that children have an innate ability to learn. With the support of a suitable environment and educator, children are guided through their developmental needs to reach their full potential (Mutmainna et al., 2024). A Montessori classroom typically

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includes a trained Montessori teacher and an assistant (Lillard, 2011). Montessori teachers hold standard teaching qualifications along with specialized Montessori training (Nehring Massie, 2017). The teacher acts as a guide and facilitator, supporting the child's self-development. The teacher observes each child carefully, recognizing their needs, and provides a link to the prepared environment. This involves introducing children to educational materials in an engaging manner. The key attribute of a Montessori teacher is the love and respect they have for each child's individuality. The assistant's role is to support the teacher, promote peace and order in the classroom, respect each child's uniqueness, and model a love of learning (Bărbieru, 2016; Whitescarver & Cossentino, 2007).

However, studies have shown that stress and anxiety are also prevalent among educators. Stress can be defined as a feeling of emotional or physical tension, often triggered by events or thoughts that make individuals feel frustrated, angry, or nervous. It is the body's reaction to a challenge or demand (Jiang, 2025). Anxiety is an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure (Kerr, 1988).

In South West England, primary school teachers reported high levels of psychological distress over 30 months, surpassing general professionals but being lower than clinical patients. Around 19–29% of these teachers experienced significant distress, highlighting the need for mental health support for both teachers and students (Titheradge et al., 2019). In Tabriz, Iran, over half of elementary teachers faced psychological distress, with factors such as age, gender, work experience, income, and emotional labor contributing. These findings emphasize the need for policies to support teacher well-being and improve educational outcomes (Rahmani et al., 2024).

A study of 67 New York City teachers found elevated depressive and psychophysiological symptoms linked to job-related stress and low morale. Distress was separate from morale, and colleague support was associated with reduced symptoms and increased job satisfaction (Schonfeld, 1990). In Japan, long working hours were significantly linked to psychological distress in male junior high school teachers, particularly those working over 60 hours weekly, suggesting a need for further investigation and policy change (Banani et al., 2015).

A study of 568 Egyptian teachers revealed high levels of occupational stress, anxiety, and depression, especially among older, female teachers with longer experience and heavier workloads, stressing the need for mental health support (Desouky & Allam, 2017). However, despite the extensive study of mental health outcomes among teachers worldwide, there has been less research on Montessori educators—specifically those working with playgroup, nursery, and prep classes—regarding stress and anxiety, particularly in Pakistan. Therefore, this study aims to fill this gap and propose targeted interventions.

Hypotheses

1. There is likely to be a positive and significant relationship between stress and anxiety among Montessori educators in Pakistan.
2. There is likely to be a positive and significant effect of stress on anxiety among Montessori educators in Pakistan.

Methodology

The study used a cross-sectional correlational design and stratified sampling to collect data from 200 Montessori educators (both men and women) in private and public institutions. Participants, aged 18 or older with a minimum qualification of matriculation, taught playgroup, nursery, or prep classes. The DASS-21, a 21-item scale with a four-point Likert scale (ranging from "Did not apply to me [0]" to "Applied to me most of the time [4]"), was used to measure anxiety and stress. The Cronbach's alpha values were 0.88 for depression, 0.82 for anxiety, and

0.90 for stress, indicating strong internal consistency. Only the anxiety and stress subscales were utilized in this study.

Ethical approval was obtained following the APA 7th edition guidelines. Permission was sought from the relevant department and the authors of the DASS-21. The questionnaire, along with a demographic form and consent form, was administered to participants, recruited through purposive sampling from special needs institutes. Confidentiality was ensured, and participants were informed of their voluntary participation and right to withdraw at any time. The data was analyzed using SPSS version 27.

Results

Table 1: Characteristics of Participants (N=100)

Characteristics	*f*	*%*	*M*	*SD*
Age			27.96	7.10
Gender				
Men	78	39		
Women	122	61		
Education				
Matriculation	33	16.5		
Intermediate	20	10		
Bachelor	67	33.5		
Master	80	40		

Note: f=Frequency, *%*= Percentage, *M*= Mean, *SD*= Standard Deviation.

The above table depicts those 122 women (78%) and 78 men (39%) participated in the study, with a mean age of 27.96 and a standard deviation of 7.10. The qualification categories show that 33 participants (16.5%) are matriculate, 20 (10%) have an intermediate level of qualification, 67 (33.5%) hold a bachelor's degree, and 80 participants (40%) are master's degree holders.

Table 2: Relationship among Study Variables (N=200)

Variables	Stress	Anxiety
Stress		.54**
Anxiety		

Table 3: Regression Analysis (N=200)

Variables	B	SE	β	R^2	P	F	95% CI	
							LL	UL
				.29		82.45		
Constant	4.08	.58			<.001		2.92	5.23
Stress	.74	.08	.54		<.001		.57	.90

Note: SMA=Social Media Addiction, SC= Social Connectedness, ****P<.001*

The above table depicts that stress significantly and positively predicts anxiety, accounts for 29% variance in the anxiety score.

Discussion

The study focused on a commonly observed yet under-researched issue: the relationship between mental health outcomes—specifically stress and anxiety—among Montessori educators in Pakistan. The aim was to address the existing literature gap and offer meaningful implications.

The correlational analysis confirmed the first hypothesis, indicating that stress and anxiety are significantly and positively associated among Montessori educators in Pakistan. This finding aligns with previous research, such as a study conducted in South West England, where primary school teachers reported high levels of psychological distress over 30 months—levels higher than those of general professionals but lower than clinical patients. Approximately 19–29% of participants experienced significant distress, highlighting the urgent need for mental health support to protect both teachers and students (Titheradge et al., 2019). Contributing factors to this distress may include low salaries, excessive workloads, challenging student behavior, lack of institutional support, and criticism from senior staff. In Pakistan, a general lack of understanding about constructive criticism may further intensify this issue.

The second hypothesis was also supported, as regression analysis revealed a significant effect of stress on anxiety, accounting for 29% of the variance in anxiety scores. This result is consistent with findings from previous research, which suggests that teacher stress is strongly linked to increased anxiety levels, as evidenced by significant positive correlations. High self-reported stress among teachers often coincides with heightened anxiety symptoms, indicating that stress is a key contributor to anxiety in educational settings (Kyriacou & Pratt, 1985). One reason stress may predict anxiety among Montessori educators in Pakistan is the lack of coping mechanisms and professional training. Many teachers are untrained, and there is an absence of structured government programs to support their mental well-being. In addition, there is a lack of proper payroll checks and balances—teachers are often underpaid and overburdened with responsibilities. Notably, most of the educators in this study were women, which may further explain the stress-anxiety relationship. The dual burden of managing both professional duties and household responsibilities can contribute to psychological distress due to the resulting work-life imbalance.

Conclusion

The quantitative cross-sectional correlational study, conducted on Montessori educators in Pakistan using a stratified sampling technique to collect data from 200 participants with a minimum qualification of matriculation, concluded that there is a positive and significant relationship between mental health outcomes—specifically stress and anxiety. Moreover, stress significantly and positively predicts anxiety among Montessori educators. The hallmark objective of the study is fulfilled; therefore, implications can be drawn accordingly.

Implications

The study underscores the urgent need for targeted interventions within early childhood education in Pakistan. Montessori educators would greatly benefit from awareness programs led by mental health professionals, including seminars, workshops, and webinars focused on emotional well-being. Given the widespread lack of awareness around mental health, such initiatives can empower educators to address their own challenges and support the emotional needs of their students. Practical strategies—such as developmentally appropriate behavior management, structured routines, consistency in reinforcement, and visual aids—are essential for fostering autonomy, stability, and a positive learning environment. Additionally, access to counseling and psychotherapy should be normalized for educators to maintain their well-being. Government investment in quality early childhood education and the expansion of Montessori

training institutions is crucial. Policy-level support must prioritize educators' mental health and professional development to enhance outcomes for young children.

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