

The Influence of Biological Factors on Psychological Well-Being in Older Adults: A Pilot Study

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Abstract:

Background: This study explores how biological factors, specifically cortisol levels, influence psychological well being in older adults. Cortisol, the body's primary stress hormone, is linked to increased stress susceptibility. Variations in cortisol levels may correlate with certain personality traits. Research indicates that personality traits affect coping strategies, health behaviors, and overall well-being in older adults (Roberts et al., 2006). Understanding the biochemical underpinnings of these traits could lead to targeted interventions to enhance mental health.

Methods: The experimental design involves manipulating salivary cortisol levels and examining their effects on personality traits. The study seeks to answer: What is the relationship between salivary cortisol levels and the Five Factor Model personality traits in older adults? The study will recruit eight cognitively intact older adults (aged 60 and above) from community centers and retirement homes. Participants will be screened for psychiatric disorders to ensure a homogeneous mental health status. Exclusion criteria include psychiatric disorders, severe medical conditions, and medications affecting cortisol levels. Salivary cortisol samples will be analyzed using the P4 test. Personality will be assessed using the Big Five Inventory-10, which measures neuroticism, extraversion, openness, conscientiousness, and agreeableness (Gaisendrees et al., 2020).

Results: The relationship between cortisol release and personality traits will be analyzed using Pearson correlation and multiple regression analyses in SPSS software (version 27). Among the eight participants, were age range from 61-70, all were female, with varying scores in personality traits. Six participants had high cortisol levels, and two had normal levels.

Conclusion: The study aims to reveal significant correlations between salivary cortisol levels and traits, particularly agreeableness and neuroticism, potentially informing future interventions to enhance psychological well-being.