

CORRELATION BETWEEN SLEEP QUALITY, QUALITY OF LIFE AND PHYSICAL ACTIVITY LEVEL FOR THE MIDDLE-AGED AND ELDERLY

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Introduction: The physical and mental development of middle-aged and elderly people is crucial to their healthy aging, and sleep quality and physical activity are the two focuses of daily life. Some studies have pointed out that sleep quality, quality of life, and the amount of physical activity of middle-aged and elderly people are negatively related. Therefore, this study aims to understand the correlation between the three specific suggestions, which will have positive significance for the development of aging in place for middle-aged and elderly people.

Methods: This cross-sectional study was conducted on 40 middle-aged and elderly people (X = 55~80 years old) in a Community exercise classes in Changhua city in Taiwan. Data was collected using a three part questionnaire including: short form of the International Physical Activity Questionnaire (IPAQ), World Health Organization Quality-of-Life Scale (WHOQOL-BREF), and Pittsburgh Sleep Quality Index (PSQI). The collected data was subjected to descriptive statistical, an independent sample t test, and regression

analysis using SPSS statistical software.

Results: (1) The amount of physical activity is positively significant on quality of life ($P < .001$, $B = 0.732$, $T = 6.629$), the regression equation is significant ($P < .001$, $F = 43.949$), and the explanatory power $R^2 = 52.4\%$. (2) The amount of physical activity is positively significant on sleep quality ($P = .001$, $B = .559$, $T = 4.106$), the regression equation is significant ($P < .001$,

$F = 16.855$), and the explanatory power $R^2 = 31.3\%$ has a positive and significant impact. (3) Sleep quality is positively significant on quality of life ($P < .001$, $B = .747$, $T = 6.827$), the regression equation is significant ($P < .001$, $F = 46.615$), and the explanatory power $R^2 = 55.7\%$.

Conclusion: (1) The higher the physical activity level of middle-aged and elderly people, the better their quality of sleep. (2) The higher the physical activity level of middle-aged and elderly people, the better their quality of life. (3) The higher the sleep quality of middle-aged and elderly people, the better their quality of life. It can be seen that the amount of physical activity, quality of life, and quality of sleep are highly correlated. Based on this result, it is recommended to pay attention to the impact of physical activity on the sleep quality of sleep of middle-aged and elderly people and move towards the road to successful aging.

Keywords: middle-aged and elderly, sleep quality, quality of life, physical activity level, healthy aging.

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