

Occupational Balance Improves Subjective Health and Quality of Life Family with Mental Health Disorders

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Abstract: *Background:* Occupational Balance (OB) is an important determinant of subjective health and quality of life. This study aimed to examine occupational balance's impact on subjective health and quality of life in families with schizophrenia.

Methods: We examined data from 60 adults over the age of 45.

Results: Although the effect size was small to medium, OB was identified as an important factor. Independent variables influence subjective health while quality of life variables in the final model, either directly or indirectly.

Conclusions: Our findings indicate that promoting better occupational balance can improve subjective health and quality of life. Further research in developing intervention programs based on occupational balance is needed to confirm the feasibility of the intervention and its effects on subjective health and quality of life of family members with schizophrenia.

Keywords: Family with schizophrenia, model, occupational balance, quality of life, subjective health.

INTRODUCTION

In occupational therapy, occupation refers to people's meaningful activities [1-3]. The occupations encompass all aspects of human life [4,5]. Personal health, subjective health, quality of life, happiness, and well-being are all positively related to work-life balance [6,7]. However, the occupational imbalance can lead to illness and dissatisfaction [8]. Occupational imbalance is defined as stress or boredom caused by an insufficient level of occupational engagement [9,10]. There is a negative relationship between happiness and occupational imbalance [8,11]

Previous studies on occupational balance involved measuring it [12,13], comparing groups with varying levels of occupational balance [10,14,15], and examining the relationship between occupational balance and other variables [6,10,16].

Define occupational balance as balance on and off the job, as an "individual's perception of having the right number of occupations and the right variation" of active and restful occupations based on personal preference, which leads to personal happiness [17,18]. Workplace engagement that leads to happiness Occupational balance can also be defined as a subjective perception of having a proper occupation level in terms of diversity and quantity [19]. A common

concept feature is a personal subjectivity and its relationship to health, well-being, and satisfaction [8]. Life balance is a concept similar to occupational balance [20,21]. The life balance model defines life balance as a daily activity pattern that is healthy, meaningful, and sustainable in the current environment, resulting in satisfaction [22].

Patterns of daily occupation change as life cycles change [23]. Individuals go through an occupational transition when a life event occurs, such as the death of a loved one or retirement [23]. During this transitional period, occupational balance approaches can be beneficial [8,24]. A balance between occupations, particularly for older adults, can aid in developing new daily routines while experiencing successful occupational transition [24]. As a family with schizophrenia, their daily activities become less varied, bringing their patients' health first [25]. It is recommended that families with schizophrenia try new activities to get as much active time as possible [23,26]. A daily routine devoid of meaningful activities and characterized by a low level of activity can result in a decline in physical or cognitive functions in a family with schizophrenia [27]. Population Furthermore, maintaining participation in daily activities is critical for personal development. Well-being and life quality [28]. People who work in various occupations can achieve a state of harmonious participation. It is advantageous to engage in different professions, but people must have a balanced occupational status [29]. Family-specific interventions are required to reduce the burden on

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family caregivers [26]. For the family with schizophrenia over the age of 45, achieving occupational balance positively affects their health status.

Other advantages of achieving occupational balance include lower stress levels and higher happiness or health productivity [22,30,31].

Previous studies [8,23,32] reported the importance of occupational balance as a health-related factor and suggested that the concept of occupational balance could be used to improve health [14]. However, research on the impact of occupational balance as an independent variable that can affect subjective health or quality of life is limited. We hypothesized in the study's research model that OB affects subjective health and quality of life. This study aimed to clarify the effects of occupational balance on subjective health and quality of life in families with schizophrenia.

MATERIALS AND METHODS

Participants

Research using a cross-sectional design. The study included a total of 60 participants. Respondent criteria include; 1) respondents aged between 17-60 years, 2) treating people with mental disorders for at least one year. Purposive sampling was employed. Most participants were recruited from a rural area in Ponorogo city. The respondents voluntarily participated in this study after they read the information on flyers in their community health centers. We assigned desks to the participants to complete the questionnaire. At least one researcher was present to assist the participants when they had a research question or needed help filling out questionnaires. When participants who visited desks requested interviews, the data was collected through the interviews method rather than self-reporting. Data collection started after approval from the HREC with REC Code 145/KEPK/FKM-UNEJ/XII/2021.

Measurements

The Korean version of the Life Balance Inventory (K-LBI) [33] was used to assess OB. A significant correlation between the K-LBI and the Korean version of the WHOQOL-BREF was found in a validation study. The average item-level content validity indices of 15 K-LBI items were 0.79 [33]. The Life Balance Inventory (LBI) [22] includes 13 daily activities such as getting enough sleep, working for pay, cooking, or caring for

pets. These are divided into four subcategories: health, identity, relationship, and challenge and interest. Participants self-rate their time use congruence by determining whether they spent enough time on each task.

Twenty-five items from the Korean version of the WHO Quality of Life-Brief (WHOQOL) [36] were used to assess the quality of life. The WHOQOL-BREF [34] originally contained 26 items: one question for general quality of life, one for overall health, and 24 items divided into four subcategories: physical, psychological, social, and environmental quality of life.

Except for one question about overall health, 25 items measured on a five-point Likert scale were analyzed in this study. A higher score was interpreted as better quality of life. Cronbach's $\alpha = 0.898$ was the reliability. Cronbach's $\alpha = 0.937$ was used to calculate reliability in this study.

To assess subjective health, twelve items from the Korean versions of the World Health Organization Disability Assessment Schedule 2.0 (KWHODAS 2.0) [35] were used. The KWHODAS 2.0 includes 12 items divided into six subcategories: cognition, mobility, self-care, coping, life activities, and participation. KWHODAS 2.0 subcategory scores reflect how much functional limitation the individual perceived in his or her daily activities. The high level of correlation ($r = 0.77$) between the KWHODAS and the Korean Functional Rating Index [36] confirmed the KWHODAS's concurrent validity.

The intra-class correlation coefficient (ICC) was 0.94 (self-rated score), and the inter-scoring reliability was 0.94-1.00 (interviewer rated score) [34]. We used raw scores on a five-point Likert scale in this study.

Statistical Analysis

For the analysis, we used raw data from the survey. The Statistical Package for the Social Sciences (SPSS) version 22 was used for descriptive analysis, and Smart PLS version 3.1 was used for structural examination, path analysis, and effect analysis.

The coefficient of the direct path was estimated using maximum likelihood. The significance of effectiveness via indirect path was investigated using nonparametric bootstrapping with maximum likelihood. A 1000-repetition limit and a 95% confidence interval were established.

Table 1: Demographic Data of Respondents

Demographic	Data	Total	Control group	Treatment group
Gender (%)	Male	31(100)	16 (52)	15(48)
	Female	29 (100)	14 (48)	15(52)
Education level (%)	Low education	42 (100)	20 (48)	22 (52)
	High education	18 (100)	10 (56)	8 (44)
Age (%)	Productive	38 (100)	18 (47)	20 (53)
	Not Productive	22 (100)	12 (55)	10 (45)
Occupation (%)	Self-employed	37 (100)	18 (49)	19 (51)
	Employee	8 (100)	5 (66)	3 (34)
	Unemployment	15 (100)	7 (47)	8 (53)
Marital status	Single	10 (100)	6 (60)	4 (40)
	Married	45 (100)	23 (51)	22 (49)
	Widow/widower	5 (100)	1 (20)	4 (80)

RESULTS

Although the effect size was small to medium, OB found as an important factor. Moreover, independent variables influencing subjective health and quality of life variables in the final model, either directly or indirectly, were also observed.

The results of the analysis show that the majority of respondents are male (31%), have a low education level (42%), are of productive age (38%), are self-employed (37%), and almost half of the respondents have married status (49%). Table 1 describes the research respondents by gender, education level, occupation, and marital status.

The T-test results showed that OB had an effect on QoL ($p=0.00$), OB had an impact on SH (0.00), and SH had an effect on QoL ($p=0.011$) (Table 2). Table 2 shows the T-test results with the SMART PLS tool.

Figure 1 shows that in the OB variable, identity and relationship are the dominant factors that make-up OB. Social is the main factor forming the QoL Variable. Coping is the dominant factor forming the SH variable.

Results also revealed the T-Statistic value effects of occupational balance on subjective health and quality

of life. QoL variable is influenced by OB and SH (Figure 2).

DISCUSSION

To the best of our knowledge, few studies currently confirm the effects of work balance on subjective health and quality of life using structural equation modeling.

The final model's pathways explain the relationship between occupational balance and subjective health and quality of life. Based on the findings of the analysis of the effects, we identified the value of occupational balance as an independent variable. The findings support the concept of occupational balance being used to improve subjective health and quality of life in a family with schizophrenia.

Furthermore, the occupational balance of people caring for schizophrenia has not been studied. However, previous research has found links between schizophrenia people's occupational balance and health determinants. The relationship between occupational balance and quality of life in male nursing home residents was studied [1], and Occupational balance, subjective health, health quality, and other health determinants in community-dwelling adults [2]. It

Table 2: Total Effect Model

	Original sample	Sample mean	SD	T Statistic	p
OB QoL	0.902	0.904	0.024	3.063	0.00
OB SH	0.929	0.930	0.015	63.223	0.00
SH QoL	0.419	0.415	0.163	2.564	0.011

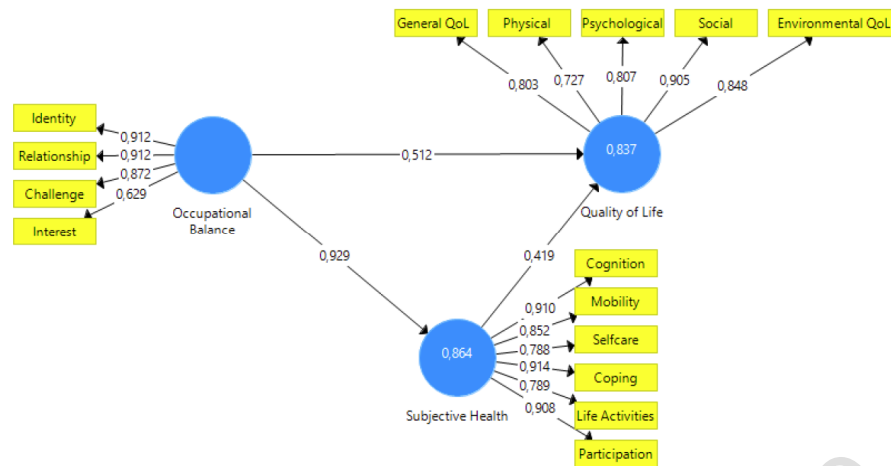


Figure 1: Coefficient Value Effects of Occupational Balance on Subjective Health and Quality of Life.

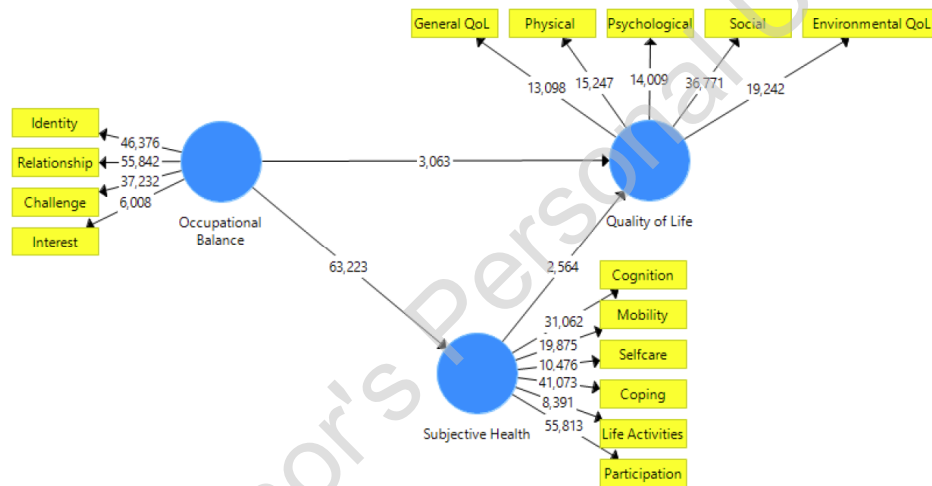


Figure 2: T-statistic value effects of occupational balance on subjective health and quality of life.

is hypothesized in the study's research model that OB affects subjective health and quality of life. OB affects SH through leisure satisfaction [2]. Gaining satisfaction is required for achieving occupational balance [15,22] and is necessary for improving health [8,37]. Previous studies on occupational balance focused on life satisfaction [10,15]. Occupational balance was measured using questions about satisfaction experienced in the last three months. The previous occupational balance in this cross-sectional study, three months had little effect on the overall life satisfaction of families with schizophrenia.

Subjectivity is currently regarded as an important structure in the concept of occupational balance [15]. However, objectivity must also be considered when applying the concept of occupational balance to protect people's health. Because the occupational balance measurement score is subjective, families with

schizophrenia may believe they are occupationally balanced if they are satisfied with their daily activity pattern, even if the diversity, amount, or intensity of daily activities are insufficient. Additional objective guidelines, such as professional counseling based on the physical and cognitive functions of a family with schizophrenia, are required to achieve an occupational balance that will help this population protect and improve their health and well-being. Some respondents found cigarette addiction. Nicotine is an oxide compound that can increase the body's oxidative stress [38]. As a result, smoking can harm the health of people with mental illnesses.

There are some limitations to the current study. First, despite all latent variables being measured using validated assessment tools and having confirmed discriminant validity, high correlations between them may have an impact on the results. Further research on

occupational balance in different groups is required to determine the effect of occupational balance on health-related variables. Future studies should look into additional health and well-being variables to better understand the impact of occupational balance on health and well-being. Furthermore, we propose developing an intervention program based on occupational balance in order to validate its practical effect on the lives of older adults.

CONCLUSION

This study's final model depicts the relationships between occupational balance and subjective health and quality of life. Among relatively healthy older adults, higher levels of occupational balance positively affect the observed variables. These findings support the importance of using the concept of occupational balance to protect a family with schizophrenia's subjective health and quality of life.

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CONFLICTS OF INTEREST

The authors declare they have no conflicts of interest

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