

Influence of Rehabilitation Therapists Six Personality Factors on Job Stress and Turnover Intention

This study aimed to analyze the six personality factors of rehabilitation therapists and to identify the effects of these factors on their job stress and turnover intention. This study involved physical therapists and occupational therapists as rehabilitation therapists. A structured questionnaire was distributed to rehabilitation therapists, and 186 answered copies were used for data analysis. The results of the survey were as follows: Among the six personality factors, the rehabilitation therapists showed the highest level of honesty-humility and the lowest level of openness to experience. In terms of job stress, the subjects experienced the highest level of stress from job autonomy and the lowest level of stress from relationship conflict. In terms of turnover intention and work motivation reduction, the subjects scored above the median points, showing their high levels of turnover intention. In addition, higher levels of extraversion and agreeableness in the rehabilitation therapists led to a statistically significant reduction in their turnover intention and a statistically significant decrease in most of their job stress factors. Based on these results, organizational management aimed at increasing the personality factors of extraversion and agreeableness is necessary as a measure to effectively manage rehabilitation therapists' job stress and turnover intention.

Key words: *Job Stress, Physical Therapist, Six personality factors, Turnover intention*

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INTRODUCTION

In the medical and healthcare sector, basic studies have been conducted to identify the personality types of doctors and nurses and to effectively manage personnel in relation to their duties using these personality types^{1, 2)}. In the workplace, individuals show various responses not only under the influences of their internal and external environments but also according to their personality types, and the results of these responses are linked to their job behaviors or performance³⁾. However, to date, only a limited number of studies have been conducted on the psychosocial characteristics of rehabilitation therapists (physical and occupational therapists) for their job management. Notably, no domestic research has attempted to identify the job stress and turnover intention of rehabilitation therapists according to their personality types.

The review of trends in existing studies related to rehabilitation therapists shows that most studies identified the relationship between physical therapists' job stress and turnover intention and between occupational therapists' job stress and self-efficacy^{4, 5)}. These studies are limited in that they did not consider the aspect of the subjects' personality. Therefore, a new approach is required to analyze rehabilitation therapists' personality types and to investigate their psychological characteristics in relation to their duties as efforts toward a multidirectional approach to improve not only organizational management but also rehabilitation therapists' work environment and conditions.

In this study, the HEXACO model, which comprises six factors, was used to examine the correlations between the subjects' personality types and job behaviors. This model has been assessed as largely contributing to industrial-organizational psychology

research. The model consists of six factors as a lexical approach in the research on personality structures: extraversion, agreeableness, conscientiousness, emotionality, openness to experience, and honesty-humility. It has been evaluated as a proper model for studies on the personality types of South Koreans since Yoo et al.⁶⁾ translated it into Korean and verified its validity. To date, the HEXACO model has been used in various ways in studies on job stress and turnover intention for various occupational clusters^{7, 8)}.

Analyzing rehabilitation therapists' levels of personality factors and the effects of these personality factors on their jobs stress and turnover intention is necessary to prepare effective personnel management plans at the individual level and to reduce frequent career changes.

In accordance with this need for a specific type of research, the present study aimed to suggest basic data and effective plans to help improve rehabilitation therapists' job stress and turnover intention by analyzing the correlations of personality types with job stress and turnover intention in physical and occupational therapists based on a psychosocial approach.

SUBJECTS AND METHODS

Subjects

This study aimed to verify the correlations between the personality types of rehabilitation therapists, which comprise physical and occupational therapists, and their job stress and turnover intention. To examine rehabilitation therapists' personality types, jobs stress, and turnover intention, copies of the structured questionnaire were mailed to the rehabilitation therapy rooms at the medical care institutions in Gyeonggi-do between January and March 2018. The anonymous and self-administered copies were collected via mail. In total, 200 copies were mailed to the rehabilitation therapy rooms at eight medical care institutions, and 188 copies were returned. Among these collected copies, 186 were used for the final analysis, excluding two copies that could not be used as data because of poor and incomplete answers.

Measurement Methods

Personality Types

The subjects' personality types were measured using

the HEXACO model of personality structure, for which Yoo et al.⁶⁾ had produced a Korean version through translation and verified validity. This measurement tool consists of 6 factors and 60 questions (10 questions for each factor). The questions were based on a five-point Likert scale, and the score for each question was added up for use. The Cronbach's α values, which indicate the reliability of the six-factor personality types, ranged from .646 to .809 according to the lower-level types.

Job stress

The subjects' job stress was measured using the Korean Occupational Stress Scale developed by the Korea Occupational Safety and Health Agency⁹⁾. This scale consists of 8 domains and 43 questions based on a four-point Likert scale. However, the section for rehabilitation therapists' general characteristics in the questionnaire was reorganized by modifying and improving to suit the characteristics of the present study. In this study, the Cronbach's α value for the rehabilitation therapists' job stress was .875.

Turnover intention

The subjects' turnover intention was measured using Wang and Kim's scale⁴⁾, which was proposed by reorganizing the questionnaire in Han's study on hospital workers' turnover intention¹⁰⁾ to fit for rehabilitation therapists. This scale comprises two subdomains of turnover intention and work motivation decreases as well as 10 questions made up of 5 questions for each subdomain based on a five-point Likert scale. In the study, the Cronbach's α values, which indicate the reliability of the five questions on turnover intention, were .822 for turnover intention and .705 for work motivation decreases.

Data analysis

All of the data collected in this study were analyzed using the statistical processing program SPSS WIN 25.0. Descriptive statistics was employed to obtain the means and standard deviations of the rehabilitation therapists' general characteristics, personality types, job stress, and turnover intention. Pearson's correlation coefficient was used to identify the statistical correlations between the subjects' personality types and their job stress and turnover intention. The statistical significance level for all data was set to $p = .05$.

RESULTS

General characteristic of subjects

The subjects consisted of 72 men (39.1%) and 112 women (69.0%), showing a larger proportion of women. In terms of age, the subjects in their 20s accounted for the largest portion (56%), followed by those in their 30s (33.2%). With regard to subjective health conditions, majority of the respondents (57.6%) answered “average” and 9.2% answered “poor.” Among the subjects, 90.1% were in permanent positions and 9.9% in temporary positions. In addition, 14.7% worked over 40 hours per week. In terms of the previous year’s monthly wage, 35.9% of the subjects earned 1.5–2 million won, and 31.5% earned 2–2.5 million won. Regarding the experience of a career change, 46.2% responded that they had experienced it (Table 1).

Table 1. General characteristic of subjects

Variable		N	%
Gender	Male	72	39.1
	Female	112	60.9
Job	Physical therapist	119	64.7
	Occupational therapist	65	35.3
Age	20–29	103	56.0
	30–39	61	33.2
	40 and over	20	10.9
Self-rated general health	very bad	0	0
	bad	17	9.2
	moderate	106	57.6
	good	49	26.6
Employment status	permanent	164	90.1
	temporary	18	9.9
Working hours a week	< 39	13	7.1
	40	144	78.3
	41 ≤	27	14.7
Average salary (million)	<1.5	5	2.7
	1.5–2.0	66	35.9
	2.0–2.5	58	31.5
	2.5–3.0	27	14.7
Experience of Turnover (time)	3.0 ≤	26	14.1
	No	99	53.8
Experience of Turnover (time)	Yes	84	46.2
	1	31	16.8
	2	22	12.0
	3	23	12.5
	4	5	2.7
	5 ≤	3	1.6

Descriptive statistics of the personality type, Job stress, Turnover intention

In terms of the rehabilitation therapists’ levels of the six personality factors, they showed the highest level of honesty–humility at 3.30 out of 5 points, followed by conscientiousness at 3.28 points, emotionality at 3.25 points, agreeableness at 3.22 points, extraversion at 3.19 points, and openness to experience at 3.10 points. In the examination of the level of job stress in each domain, the subjects experienced the highest level of stress from job autonomy at 55.87 out of 100 points, followed by stress from inappropriate compensation (44.47 points) and job demands (44.45 point). The lowest level of job stress was attributed to relationship conflict at 33.97 points. The analysis of the subjects’ turnover intention revealed 2.71 points in terms of turnover intention and 3.04 points in terms of work motivation decreases, indicating a turnover intention of above 2.5 points, which is the median point (Table 2).

Table 2. Descriptive statistics of the personality type, Job stress, Turnover intention (Unit: Score)

Variable		Mean ± SD
Personality type	Honesty–Humility	3.30 ± .46
	Emotionality	3.25 ± .46
	Extraversion	3.19 ± .52
	Agreeableness	3.22 ± .45
	Conscientiousness	3.28 ± .54
	Openness to experience	3.10 ± .40
Job stress	Physical environment	43.90 ± 15.85
	Job requirement	44.45 ± 13.98
	Job autonomy	55.87 ± 11.34
	Relationship conflict	33.97 ± 13.23
	Job instability	38.80 ± 11.64
	Structure and organization	41.98 ± 12.75
	Inappropriate compensation	44.47 ± 12.37
Turnover intention	Workplace culture	39.90 ± 17.50
	Total score	42.92 ± 8.48
	Turnover intention	2.71 ± .75
Turnover intention	Work motivation decreases	3.04 ± .63
	Total score	2.87 ± .62

Correlation analysis of the personality type, job stress and turnover intention

A correlation analysis was conducted to verify the correlations of the rehabilitation therapists' personality traits with their job stress and turnover intention. Their six personality factors showed correlations with the lower-level variables of job stress and turnover intention [Table 3]. Specifically, their personality factors of honesty-humility and emotionality did not exhibit statistically significant correlations with their job stress and turnover intention, whereas their personality factors of extraversion and agreeableness showed statistically significant correlations with their job stress and turnover intention.

DISCUSSION

This study was conducted to analyze rehabilitation therapists' personality factors, job stress, and turnover intention in their psychosocial working environment and to contribute to effective job management. The main results of the analysis are as follows:

First, the rehabilitation therapists recorded the highest level of honest-humility among the personality factors with $3.30 \pm .46$ points. This personality factor was followed by conscientiousness, emotionality, agreeableness, extraversion, and openness to experience in order. This result may be due to the fact that therapists should serve customers with physical diseases and continue to conduct medical

treatment during the set treatment hours. This study suggests new implications of rehabilitation therapists' personality types by analyzing their personality types based on the HEXACO model.

Second, although the rehabilitation therapists' job stress level was below the median point in most domains, the level of job stress in the domain of job autonomy was particularly high, with at least a 10-point gap with the other domains. Rehabilitation therapists' job-related autonomy is an important factor in improving professionalism¹¹⁾, and thus various efforts are required for institutional improvements that can reduce job autonomy-related job stress, which recorded a high level in this study.

Third, the rehabilitation therapists' turnover intention level was $2.71 \pm .75$ points in terms of turnover intention and $3.04 \pm .63$ points in terms of work motivation decreases; both points were above the median. In particular, the level of turnover intention due to work motivation decreases was high. Separation management in general is a highly important factor in continued medical services¹²⁾, and separation management for rehabilitation therapists is also necessary for continued treatment services and customer management. A recent study on physical therapists' turnover intention⁴⁾ presented a total score of $2.80 \pm .70$ points, with a higher score than the mean in the two sub-factors: $2.60 \pm .84$ points for turnover intention and $2.99 \pm .69$ points for work motivation decreases. The present study showed a similar result to that of the previous study, thus suggesting the need for managing the turnover intention of rehabilitation therapists.

Table 3. Correlation analysis of the personality type, job stress and turnover intention

Variable	Honesty-Humilit	Emotionality	Extraversion	Agreeableness	Openness to experience	Conscientiousness
Physical environment	.106	.142	-.178*	-.279**	-.002	.131
Job requirement	.114	.044	-.114	-.218**	.039	.154*
Job autonomy	-.075	.077	-.157*	-.059	-.118	.086
Relationship conflict	-.008	-.070	-.327**	-.079	-.164*	-.022
Job instability	.093	.124	-.200**	-.198**	.005	.053
Structure and organization	.076	.045	-.209**	-.277**	.092	.171*
Inappropriate compensation	-.086	.096	-.361**	-.216**	-.109	-.037
Workplace culture	.036	.094	-.303**	-.185*	-.112	.186*
Turnover intention	-.051	.127	-.158*	-.180*	-.151*	.119
Work motivation decreases	-.133	.094	-.026	-.214**	-.023	.141

*p<.05, **p<.01

Fourth, the analysis of the correlation between the rehabilitation therapists' personality factors and their job stress and turnover intention showed a negative correlation: higher levels of extraversion and agreeableness resulted in a lower level of job stress and turnover intention. This outcome indicates that rehabilitation therapists with a gentle, non-critical, and well-rounded personality that compromises with others also had low levels of job stress and turnover intention.

In an existing study, stress from job autonomy, structure and organization, inappropriate compensation, and workplace culture, among the domains of physical therapists' job stress, were considered as the major factors that increase turnover intention⁴⁾. Occupational therapists' job satisfaction and organizational commitment were found to have statistically significant effects on their turnover intention¹³⁾. Therefore, the education of rehabilitation therapists on stress management and coping is necessary to minimize the negative effects of their job stress by identifying their personality types.

This study has its limitations. First, the personality types, job stress, and turnover intention of physical therapists and occupational therapists were not compared between their job clusters. Second, the possibility of the differences in rehabilitation therapists' personality types according to their task elements was not taken into account. Accordingly, this study recommends follow-up studies to set control variables that consider these limitations to help facilitate various studies to improve rehabilitation therapists' workfare.

CONCLUSION

The findings of this study suggest the need for efforts to reduce rehabilitation therapists' job stress and turnover intention through the careful observation and management of extraversion and agreeableness among rehabilitation therapists' personality types.

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