



RESEARCH ARTICLE

Influence of Job Satisfaction, Job Stress, Job Identity, and Job Values on Turnover Intention among Male Physician Assistant Nurses

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ARTICLE INFO	ABSTRACT
Received: Apr 24, 2024	<p>This study aims to identify factors influencing turnover intention among male nurse practitioners (NPs) in South Korea, including job satisfaction, job stress, job identity, and job values. This study employs a descriptive survey research design to assess the levels of job satisfaction, job stress, job identity, and job values among male NPs and to determine the factors affecting turnover intention. The total explanatory power of this study was 42.1%. The factors influencing turnover intention were the perception of fairness in human resources ($\beta = -.14$, $p = .027$), job satisfaction ($\beta = -.49$, $p < .001$), and job values ($\beta = .16$, $p = .019$). Job stress and job identity did not show significant effects on turnover intention. Although this study found that job stress does not directly influence turnover intention, previous research has identified it as an important factor. Therefore, organizational efforts to manage and reduce job stress are necessary.</p>
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INTRODUCTION

1.1 Significance of the Study

Physician Assistant (PA) nurses refer to nurses who perform roles as part of medical departments, under the responsibility of medical staff, delegating some tasks (medical acts) from physicians in various medical departments [1]. In South Korea, PA nurses have been utilized as alternative manpower for surgical specialists, stemming from dynamic changes due to societal demands arising from shortages of medical personnel [3,4].

With advancements in medical technology in modern society, the importance of skilled medical professionals is emphasized [5]. Recently, the demand for high-quality medical services has been increasing, while domestic medical institutions face various challenges such as imbalances in the supply of specialists and increasing demands from patients for complex and diverse medical services [1]. To address the issue of physician shortage, medical institutions are utilizing PA nurses selected and utilized internally as PA, dedicated nurses, or specialist nurses, rather than utilizing professionally trained nurses who have completed systematic education programs [1].

Since the introduction of PA nurses in 1997, their numbers have increased steadily in South Korea. In 2021, there were a total of 4,721 PA nurses deployed in 105 hospitals for internal medicine and 3,340 in 126 hospitals for surgery [6]. Due to ongoing economic downturns and job shortages, nursing majors with high employment rates have become increasingly popular among male students.

This phenomenon is attributed to the flexibilization of societal gender norms regarding occupations, the expansion of professionalism, and the stability of occupations [7]. As a result, the cumulative number of male nurses in 2016 was 15,420, with a significant portion working as PA nurses, comprising 17.6% of the total [1]. However, despite the increase in male nurses, many are considering job changes [7]. The high turnover rate among male nurses can be attributed to entrenched stereotypes that nursing is inappropriate for men [8] and experiences of rejection from patients and guardians, as well as significant conflicts [10].

Previous studies related to turnover intention among male nurses in South Korea have focused on practical experience [11], job satisfaction, and organizational commitment [12]. It was found that higher job satisfaction and job identity were associated with lower turnover intentions among male nurses [13], while lower job values, job stress, and organizational commitment were associated with higher turnover intentions [14].

Male nurses tend to perceive nursing as a lifelong career and are confidently recognized as nursing professionals, which can contribute to securing nursing manpower that can meet various nursing demands in the field and enhance the quality of nursing care [15]. As PA nurses are increasingly preferred among male nurses, it is important to understand the variables affecting turnover intention.

Given the recent increase in attention to PA male nurses, it is important to identify variables influencing their turnover intention. However, existing research in South Korea has mostly targeted all PAs, with limited studies focusing specifically on male PA nurses. Additionally, existing studies have mainly focused on job satisfaction among male dedicated nurses [17].

Given the growing interest in PA male nurses, it is important to reduce their turnover intention. Therefore, this study aims to provide basic data necessary for establishing personnel management strategies for PA male nurses by examining the impact of job satisfaction, job stress, job identity, and job values on turnover intention.

1.2 Purpose

The objective of this study is to identify the factors influencing turnover intention among male Physician Assistant (PA) nurses, specifically focusing on job satisfaction, job stress, job identity, and job values. The specific goals are as follows:

- To assess the levels of job satisfaction, job stress, job identity, job values, and turnover intention among male PA nurses.
- To compare the levels of job satisfaction, job stress, job identity, job values, and turnover intention among male PA nurses.
- To compare the differences in job satisfaction, job stress, job identity, job values, and turnover intention among male PA nurses based on various demographic factors.
- To examine the relationships between job satisfaction, job stress, job identity, job values, turnover intention, and demographic factors among male PA nurses.
- To identify the factors influencing differences in turnover intention among male PA nurses

2. MATERIALS AND METHODS

2.1. Study Design

This study is a descriptive survey research aimed at identifying the factors influencing turnover intention among male Physician Assistant (PA) nurses, specifically focusing on job satisfaction, job stress, job identity, and job values.

2.2 Participants

The participants in this study were male nurses working as PAs in nursing departments or medical departments of 20 tertiary hospitals in the metropolitan area, with at least one year of experience. Participants were required to understand the purpose of the study and consent to participate. The sample size was determined using G*Power, with regression analysis as the main analytical method, requiring 147 participants based on a significance level of .05, power of 90%, medium effect size of .15, and 10 predictor variables in regression analysis. Considering dropout rates, a convenience sample of 170 participants was selected, with 150 participants included in the final analysis.

2.3. Research Instruments

(1) Job Satisfaction

The job satisfaction instrument was adapted from the tool developed by Stamp et al. [18], modified and validated for PA nurses by Lim & Kang [17]. The instrument consists of 25 items covering various aspects of job satisfaction, each rated on a 5-point Likert scale. The Cronbach's α was .85 in Lim & Kang's study [17] and .85 in this study.

(2) Job Identity

The job identity instrument was adapted from the tool developed by Hall [19], modified and validated for PA nurses by Lim & Kang [17]. The instrument comprises 50 items rated on a 5-point Likert scale. The Cronbach's α was .75 in Lim & Kang's study [17] and .86 in this study.

(3) Job Stress

The job stress instrument was adapted from the tool developed by Park [20], revised by Lee (2012) to include 18 items, and modified and validated for PA nurses by Lim & Kang [17]. The instrument consists of 18 items rated on a 5-point Likert scale. The Cronbach's α was .78 in this study.

(4) Job Values

The job values instrument was adapted from the tool developed by Han [22], modified and validated for PA nurses by Lim & Kang [17]. The instrument comprises 8 items rated on a 5-point Likert scale. The Cronbach's α was .72 in Lim & Kang's study [17] and .74 in this study.

(5) Turnover Intention

Turnover intention was measured using a tool developed by Kim et al. [23], consisting of 4 items rated on a 5-point Likert scale. The Cronbach's α was .85 in the original study and .72 in this study.

2.4. Data Collection

Data collection for quantitative data took place from February to April 2024. Surveys were administered directly at tertiary hospitals located in Seoul, Gyeonggi Province, and Gangwon Province, or distributed online or via mail to eligible participants.

2.5. Data Analysis

Data were analyzed using SPSS/WIN 23.0. Descriptive statistics were used to analyze the general characteristics of male PA nurses. Differences in turnover intention based on demographic characteristics were analyzed using t-tests and ANOVA, with Scheffé post hoc tests. Means and standard deviations were calculated for job satisfaction, job stress, job identity, job values, and turnover intention, and Pearson correlation coefficients were calculated to examine relationships between variables. Factors influencing turnover intention among male PA nurses were analyzed using stepwise multiple regression.

2.6. Limitations of the Study

This study targeted PA male nurses in some medical institutions, limiting the generalizability and interpretation of the study results.

3. RESULTS

3.1. General Characteristics of Participants and Turnover Intention by General Characteristics

The average age of the subjects in this study was 31.2(\pm 4.17), with individuals in their 20s comprising 59(39.3%), those in their 30s making up 87(58.0%), and only 4(2.7%) aged 40 or above. The number of unmarried individuals was 83(55.3%), outnumbering the married individuals, who totaled 67(44.7%). Regarding educational background, 86(57.3%) held a bachelor's degree, 56(37.3%) held a 3-year college degree, and 8(5.3%) had a graduate degree or higher. In terms of salary, the majority (56.7%) earned between 200 to 300 million won, while 64(42.7%) earned over 300 million won and only one(0.7%) earned less than 200 million won.

Regarding work experience as a general nurse, 38(25.3%) had less than one year of experience, 48(32.0%) had 2 to 4 years, 28(18.7%) had 5 to 7 years, 24(16.0%) had 8 to 10 years, and 12(8.0%) had over 10 years. As PA nurses, 28(18.7%) had less than one year of experience, 63(42.0%) had 2 to 4 years, 35(23.3%) had 5 to 7 years, 16(10.7%) had 8 to 10 years, and 8(5.3%) had over 10 years. The majority worked in general nursing uniforms (11.3%), followed by PA nursing uniforms (25.3%), and lab coats (44.0%).

Most subjects were full-time workers (94.7%), working more than 40 hours per week (94.7%). Regarding additional overtime pay, 90(60.0%) received it, while 60(40.0%) did not, showing a significant difference in turnover intention ($t=-2.27$, $p=.025$). On-call duty was reported by 65(43.3%) participants, whereas 85(56.7%) did not have it, showing a significant difference in turnover intention ($t=2.24$, $p=.027$). There were 47(31.3%) subjects who had duty shifts, while 103(68.7%) did not, showing a significant difference in turnover intention ($t=3.05$, $p=.003$). The majority did not have dedicated workspaces (56.7%), and most held the title of PA nurse (84.7%), showing a significant difference in turnover intention based on the title ($t=2.03$, $p=.044$).

Pre-awareness of roles before working as a PA nurse was reported by the majority (71.3%), and written regulations regarding PA nursing duties were reported by 71(47.3%), while 79(52.7%) did not have such regulations. Pre-employment education was received by 47(31.3%), while 103(68.7%) did not receive it. Regarding the understanding of PA nursing duties by acquaintances, 135(90.0%) reported understanding, while 15(10.0%) did not, showing a significant difference in turnover intention based on acquaintances' understanding ($t=-2.80$, $p=.006$).

Regarding the evaluation of work and fairness in personnel matters, 42(28.0%) reported fairness, while 108(72.0%) did not, showing a difference in turnover intention ($t=-2.70$, $p=.006$) (Table 1).

Table 1. Turnover Intention According to General Characteristics (N = 150)

Characteristic	Category	n(%)	t or F	p
Age	20s	59(39.3)	1.84	.163
	30s	87(58.0)		
	Above 40s	4(2.7)		
Marital Status	Married	67(44.7)	-.63	.530

	Single	83(55.3)		
Educational Level	3 Year College	56(37.3)	1.18	.311
	4 Year College	86(57.3)		
	Graduate School or Higher	8(5.3)		
Salary	Under 200 Million Won	1(0.7)	2.47	.088
	200~300 Million Won	85(56.7)		
	Above 300 Million Won	64(42.7)		
Work Experience as a General Nurse	Less than 1 year	38(25.3)	0.23	.924
	2-4 years	48(32.0)		
	5-7 years	28(18.7)		
	8-10 years	24(16.0)		
	More than 10 years	12(8.0)		
Work Experience as a PA Nurse	Less than 1 year	28(18.7)	0.54	.708
	2-4 years	63(42.0)		
	5-7 years	35(23.3)		
	8-10 years	16(10.7)		
	More than 10 years	8(5.3)		
Type of Uniform	Nurse Uniform	17(11.3)	0.96	.414
	PA Nurse Uniform	38(25.3)		
	Lab Coat	66(44.0)		
	Other	29(19.3)		
Type of Employment	Full-time	142(94.7)	-1.34	.182
	Two-shift rotation	8(5.3)		
Weekly Working Hours	Less than 40hrs	4(2.7)	-0.64	.521
	More than 40hrs	146(97.3)		

Overtime Payment	Exist	90(60.0)	-2.27	.025
	None	60(40.0)		
On-call Duty	Exist	65(43.3)	2.24	.027
	None	85(56.7)		
Duty Shifts	Exist	47(31.3)	3.05	.003
	None	103(68.7)		
Exclusive Workspace	Exist	65(43.3)	-1.11	.270
	None	85(56.7)		
Position	PA	127(84.7)	2.03	.044
	Other	23(15.3)		
Awareness of roles	Exist	107(71.3)	-0.30	.762
	None	41(27.3)		
Existence of written regulations	Exist	71(47.3)	-0.03	.980
	None	79(52.7)		
Pre-employment training	Exist	47(31.3)	-1.88	.062
	None	103(68.7)		
Perception of PA duties by acquaintances	Exist	135(90.0)	-2.80	.006
	None	15(10.0)		
Fairness in evaluations	Fair	42(28.0)	-2.70	.008
	Unfair	108(72.0)		

3.2. PA Nurse's Work Characteristics

Among the subjects of this study, the employment status indicated that regular employment was more prevalent with 134(89.3%) compared to 16(10.7%) under contract. Regarding departmental affiliation, the nursing department accounted for 122(81.3%), while the clinical department comprised 27(18.0%), with one(0.7%) falling under "other". Conversely, the issuance of tasks was more common in the clinical department, with 74(49.3%) receiving instructions, compared to 23(15.3%) in the nursing department. Both departments jointly issued tasks to 53(35.3%). The number of fellow PAs within the working department ranged from 1 to 5 for 119(79.3%), followed by 6 to 10 for 12(8.0%), 11 to 15 for 7(4.7%), 16 to 20 for 6(4.0%), and more than 20 for 6(4.0%). The most common method of competence development among PA nurses was seeking advice from physicians or specialists, with 89(59.3%), followed by seeking assistance from fellow PAs with 88(58.7%). Utilizing books or video education was observed in 44(29.3%), while 19(12.7%) referred to manuals, and 9(6.0%) underwent pre-employment training. As for external education attendance, 42(28.0%) did not attend, while 56(37.3%) attended once a year, 43(28.7%) twice a year, 8(5.3%) three times a year, and one(0.7%) attended four times or more annually.

The time required for PA nurses to adapt to their roles was most commonly reported as 6 months to 1 year by 89(59.3%), followed by over a year by 48(32.0%), over 2 years by 8(5.3%), and over 3 years by 5(3.3%). Regarding the necessity of clinical experience when working as a PA nurse, 124(82.7%) reported it as necessary, while 26(17.3%) did not. The most essential qualities for working as a PA nurse were perceived as clinical knowledge by 87(58.0%), diligence by 72(48.0%), physical fitness by 44(29.3%), pride in work by 25(16.7%), and other qualities by 6(4.0%). The primary tasks during work were reported in duplicate, with surgical procedures being the most common among 136(90.7%), followed by wound or tube management by 88(58.7%), invasive medical procedures by 70(46.7%), collaboration and coordination with medical staff or other departments by 69(46.0%), review of test results by 60(40.0%), prescription tasks by 52(34.7%), education and counseling for patients and families by 45(30.0%), and health assessment by 36(24.0%). Other tasks, reported by 16(10.7%), included outpatient assistance, clinical research, ECMO, and extracorporeal circulation management. Occupations where role conflicts occurred during work were mainly among nursing managers in clinical departments, with 40(26.7%), followed by nurses in clinical departments with 38(25.3%), specialists in the respective clinical departments with 33(22.0%), and specialists in the respective clinical departments with 32(21.3%). Conflicts with fellow PA nurses were reported by 9(6.0%), while others, accounting for 6(4.0%), included specialists in other departments such as anesthesiology. Regarding obstacles during work, ambiguities in task classification were reported by 94(62.7%), followed by insufficient opportunities for promotion by 74(49.3%), inappropriate compensation by 71(47.3%), excessive workload by 70(46.7%), excessive administrative tasks by 50(33.3%), job insecurity by 46(30.7%), poor working environments by 38(25.3%), lack of educational opportunities by 34(22.7%), absence of task guidelines by 31(20.7%), lack of autonomy in task performance by 27(18.0%), lack of a sense of accomplishment by 21(14.0%), inadequate job systems by 21(14.0%), unprofessional task execution by 18(12.0%), and others by 9(6.0%). Other issues reported included departmental affiliation, friction with nursing managers, conflicts with superiors, and discrepancies between task guidelines and actual demands.

3.3. Job Satisfaction, Job Stress, Job Identity, Job Values, and Turnover Intention

The level of job satisfaction among the subjects in this study was rated at an average of 3.21 (± 0.42) out of 5 points, while job stress averaged 2.89 (± 0.42) out of 5 points. Job identity scored an average of 3.41 (± 0.37) out of 5 points, and job values averaged 3.82 (± 0.43) out of 5 points. Additionally, the level of was rated at an average of 3.11 (± 0.92) out of 5 points (Table 2).

Table 2. The Level of Study Variables (N = 150)

Variable	M±SD	Min	Max
Job Satisfaction	3.21±0.42	2.1	4.5
Job Stress	2.89±0.42	1.8	3.9
Job Identity	3.41±0.37	2.6	4.3
Job Values	3.82±0.43	2.9	5.0
Turnover Intention	3.11±0.92	1.0	5.0

4. The Correlation Between Job Satisfaction, Job Stress, Job Identity, Job Values, and Turnover Intention.

In the analysis of the correlation between job satisfaction, job stress, job identity, job values, and turnover intention among the subjects of this study, significant negative correlations were observed between job satisfaction and job stress ($r=-.64$, $p<.001$), as well as between job satisfaction and turnover intention ($r=-.62$, $p<.001$). A significant positive correlation was found between job satisfaction and job identity ($r=.60$, $p<.001$). Job stress exhibited a negative correlation with job identity ($r=-.29$, $p<.001$) and a positive correlation with turnover intention ($r=.50$, $p<.001$). Job identity showed a positive correlation with job values ($r=.28$, $p<.001$) and a negative correlation with turnover intention ($r=-.32$, $p<.001$) (Table 3).

Table 3. Correlations between Job Satisfaction, Job Stress, Job Identity, Job Values, and Turnover Intention (N = 150)

	1	2	3	4	5
	$r(p)$				
1. Job Satisfaction	1				
2. Job Stress	$-.64(<.001)$	1			
3. Job Identity	$.60(<.001)$	$-.29(<.001)$	1		
4. Job Values	$.19(.054)$	$-.09(.289)$	$.28(<.001)$	1	
5. Turnover Intention	$-.62(<.001)$	$.50(<.001)$	$-.32(<.001)$	$.05(.553)$	1

5. The Impact of Job Satisfaction, Job Stress, Job Identity, and Job Values on Turnover Intention

To identify the factors influencing turnover intention among male PAs, statistically significant differences in general characteristics such as the presence of overtime pay, on-call duty, duty shifts, position, perception of fairness in human resources, were treated as dummy variables. Job satisfaction, job stress, job identity, and job values were used as independent variables for multiple

regression analysis. The Durbin-Watson test showed no autocorrelation issues, with a value of 1.82. The tolerance values were below 0.1, and the Variance Inflation Factor (VIF) values were less than 10, indicating no problems with multicollinearity. Next, residual analysis confirmed linearity of the model, the normality of the errors, and the homoscedasticity. The total explanatory power was 42.1%. Factors influencing turnover intention were the perception of fairness in human resources ($\beta=-.14$, $p=.027$), job satisfaction ($\beta=-.49$, $p<.001$), and job values ($\beta=.16$, $p=.019$). job stress and job identity did not significantly influence turnover intention (Table 4).

Table 4. Influencing Factors of Turnover Intention (N = 150)

Variable	B	S.E.	β	t	p	VIF	R ²	Adj R ²	F(p)
(Constant)	16.80	4.74		3.54	.001		.46	.421	11.84
The Perception of Fairness in Human Resources†	-1.17	.52	-.14	-2.23	.027	1.06			(< .001)
Job Satisfaction	-0.17	0.04	-.49	-4.82	< .001	2.68			
Job Stress	0.07	0.04	.13	1.54	.125	1.91			
Job Identity	0.01	0.05	.02	.25	.807	1.80			
Job Values	0.17	0.07	.16	2.38	.019	1.16			

4. DISCUSSION

This study is a descriptive survey aimed at understanding the impact of job satisfaction, job stress, job identity, and job values on turnover intention among male Physician Assistant (PA) nurses. PA nurses have emerged to address the shortage of physicians and play crucial roles in healthcare institutions. However, the recent increase in turnover rates among male nurses necessitates systematic approaches to personnel management to mitigate this trend. Therefore, based on the findings of this study, we aim to initiate a discussion regarding the need for systematic personnel management strategies to reduce turnover intention among male PA nurses.

Based on the research findings, when examining the age distribution, the majority were in their 30s, followed by those in their 20s. This indicates that individuals in their early to mid-career stages, typical for PA nurses, are predominantly active. Lee & Kim [2] also reported that age influences turnover intention among nurses, with younger nurses showing a higher tendency to consider turnover. Regarding marital status, unmarried individuals outnumbered married ones, potentially due to unmarried nurses being able to dedicate more time to their duties compared to married ones who may have family caregiving responsibilities. According to Yoon & Kang [5], although married nurses may have lower turnover intention due to family caregiving responsibilities, dissatisfaction with the work environment can still lead to a high turnover intention among them.

In terms of education level, graduates from 4-year universities were the most common, followed by graduates from 3-year universities, reflecting the educational requirements necessary to fulfill the role of a PA nurse. Research also suggests that nurses with higher education are more likely to seek job opportunities elsewhere. Regarding salary, the majority fell within the range of 2 to 3 million won, with those earning over 3 million won following. This underscores the importance of salary in influencing turnover intention, as higher salary levels are associated with lower turnover intention.

In terms of work experience, the most common years of experience as a PA nurse were 24, indicating that many PA nurses are in the early stages of their careers. The same applies to general nursing experience, with 24 years being the most common. This suggests the importance of accumulating sufficient clinical experience before transitioning to become a PA nurse.

Most PA nurses wore lab coats as their uniform, but this can vary depending on hospital policies and work environments, with the impact of uniform wearing on turnover intention likely to be minimal.

Most PA nurses worked full-time, with the majority working more than 40 hours per week. This indicates that PA nurses generally experience high workload intensity and long working hours. Choi & Kim [8] also confirmed that long working hours and high workload intensity have a negative impact on turnover intention.

There was a significant difference in turnover intention depending on whether overtime pay was provided, indicating that adequate compensation for overtime work can reduce turnover intention. Additionally, the presence of on-call and duty work also influenced turnover intention, suggesting that additional work burdens can increase turnover intention.

Many PA nurses did not have dedicated workspaces, and most held positions as PA nurses, indicating that job title differences could influence turnover intention based on job satisfaction as a PA nurse.

Most PA nurses had prior awareness of their role before working as PA nurses, highlighting the importance of clear understanding of the PA nurse role.

Many PA nurses felt that job evaluations and fairness in human resources were unfair, which significantly influenced turnover intention. This indicates that fair evaluations and human resource systems can reduce turnover intention, consistent with the findings of Shin & Kim [14].

The turnover intention of PA nurses is influenced by various individual and job-related factors, among which work environment, compensation, job evaluation, and fairness in human resources play important roles. Therefore, improving these factors is necessary to reduce turnover intention among PA nurses. Specifically, establishing an appropriate compensation system, establishing fair evaluation and human resource systems, and improving the work environment are important. Through these measures, job satisfaction among PA nurses can be increased, and turnover intention can be reduced.

The research findings revealed that the participants' job satisfaction averaged 3.21 points, indicating a moderate level of satisfaction among PA nurses regarding their job. Previous studies [5-9] have consistently shown that job satisfaction is a key factor negatively influencing turnover intention. In other words, higher job satisfaction tends to be associated with lower turnover intention. Therefore, efforts to increase job satisfaction should include improvements in the work environment, establishment of an appropriate compensation system, and provision of job-related education and training.

Job stress was reported at an average of 2.89 points, indicating a relatively low level of stress experienced by PA nurses. However, job stress is a significant factor influencing turnover intention, with high job stress leading to increased turnover intention. To mitigate this, measures such as workload adjustment, implementation of stress management programs, and fostering smooth communication with colleagues and supervisors are necessary.

Job identity was relatively high, averaging 3.41 points, indicating that PA nurses have a positive perception of their profession. Higher job identity is associated with increased job engagement, which in turn reduces turnover intention. Therefore, educational programs and support systems that instill a positive perception of the profession are needed to enhance the job identity of PA nurses.

Job values scored the highest at an average of 3.82 points, indicating that PA nurses attribute high value to their profession. Previous studies [15-17] have shown that nurses with high job values tend to have higher job satisfaction, leading to lower turnover intention. To strengthen job values, education and information provision highlighting the roles and importance of PA nurses are essential.

Turnover intention averaged 3.11 points, indicating a moderate level of intention to leave among PA nurses. To reduce turnover intention, a comprehensive approach considering various factors such as job satisfaction, job stress, job identity, and job values is necessary. For example, efforts to increase job satisfaction and reduce job stress while simultaneously enhancing job identity and job values are needed.

In this study, a significant negative correlation was found between job satisfaction and job stress ($r=-.64, p<.001$), indicating that higher job satisfaction is associated with lower levels of job stress. This result is consistent with previous research [14-16], which suggests that nurses with higher job satisfaction experience lower levels of stress in their work, leading to positive outcomes in job performance and job retention.

Furthermore, a significant negative correlation was observed between job satisfaction and turnover intention ($r=-.62, p<.001$), implying that higher job satisfaction is linked to lower turnover intention. This underscores the importance of job satisfaction as a predictor of turnover intention and aligns with previous findings that higher job satisfaction among nurses is associated with lower turnover intention.

A significant positive correlation was found between job satisfaction and job identity ($r=.60, p<.001$), indicating that higher job satisfaction is associated with a stronger sense of job identity. Previous research suggests that nurses with a strong job identity tend to have higher job satisfaction, which positively influences their job performance.

Moreover, a significant negative correlation was observed between job stress and job identity ($r=-.29$, $p<.001$), indicating that higher job stress is associated with lower job identity. Job stress weakens nurses' job identity, negatively impacting their job engagement and satisfaction.

Additionally, a significant positive correlation was found between job stress and turnover intention ($r=.50$, $p<.001$), indicating that higher job stress is associated with higher turnover intention. This finding is consistent with previous research suggesting that higher job stress among nurses is linked to higher turnover intention.

Furthermore, a significant positive correlation was observed between job identity and job values ($r=.28$, $p<.001$), indicating that higher job identity is associated with higher job values. Nurses with a strong job identity attribute positive values to their profession, which positively influences their job satisfaction and performance.

Lastly, a significant negative correlation was found between job identity and turnover intention ($r=-.32$, $p<.001$), indicating that higher job identity is associated with lower turnover intention. Nurses with a strong job identity have a positive perception of their profession, which acts as a factor in reducing turnover intention.

In this study, perceived organizational justice was found to have a significant negative impact on turnover intention ($\beta=-.14$, $p=.027$). This indicates that higher levels of fairness in organizational management are associated with lower turnover intention among nurses. Previous research suggests that fair human resource management and evaluation systems increase employees' trust in the organization, enhance job satisfaction, and ultimately reduce turnover intention. Therefore, to reduce turnover intention among PA nurses, it is necessary to establish a fair human resource management system.

Job satisfaction emerged as the most significant negative predictor of turnover intention ($\beta=-.49$, $p<.001$). This implies that higher job satisfaction is associated with lower turnover intention. Consistent with previous research, job satisfaction is a key factor in reducing turnover intention, as higher satisfaction with one's job leads to a stronger tendency to remain in the current position. Therefore, various strategies to increase job satisfaction, such as improving working conditions, redesigning job roles, and strengthening compensation systems, are needed.

Interestingly, job values were found to have a significant positive impact on turnover intention ($\beta=.16$, $p=.019$), indicating that higher job values are associated with higher turnover intention. This somewhat paradoxical result suggests that nurses who place higher value on their profession may be more likely to seek better working conditions or environments elsewhere. Hence, providing working conditions and opportunities that fulfill nurses' professional values is crucial.

Although job stress and job identity did not directly influence turnover intention in this study, previous research has highlighted the importance of job stress in affecting turnover intention. Therefore, organizational efforts to manage and reduce job stress are still necessary. Additionally, while this study did not find a direct impact of job stress and job identity on turnover intention, future research should consider various conditions and contexts to explore their potential indirect effects.

5. CONCLUSIONS

Considering the negative impact of perceived organizational justice on turnover intention, it is essential to establish and maintain a fair human resource management system within the organization. This should be done by enhancing the transparency and fairness of evaluation and reward systems. Additionally, given that job satisfaction emerged as the most significant factor influencing turnover intention, various strategies are needed to increase job satisfaction among PA nurses. Specifically, this may include improving working conditions, providing appropriate compensation, redesigning job roles, and offering continuous education and training.

Reflecting the result that PA nurses with higher job values are more likely to consider turnover, it is crucial to provide working conditions and opportunities that fulfill their professional values. For instance, opportunities to demonstrate professionalism and programs supporting career development can be implemented.

While this study did not find a direct impact of job stress on turnover intention, organizational efforts to manage and reduce job stress are still necessary based on previous research. Additionally, although job stress and occupational identity did not directly influence turnover intention in this study, further research considering various conditions and contexts is needed to explore their potential indirect effects.

In conclusion, organizations should focus on establishing fair human resource management systems, enhancing job satisfaction, managing job stress, and providing opportunities that fulfill nurses' professional values to reduce turnover intention among PA nurses. Further research exploring these relationships under different conditions and contexts is warranted.

Abbreviations

None

Availability of Data and Materials

It is strongly encouraged that all datasets on which the conclusions of a manuscript depend should be available to readers, unless they are already provided as part of the submitted article. Where datasets are included in the study, authors should include an "Availability of Data and Materials" section in the article, stating where the data supporting their findings may be found. Authors who do not wish to share their data must state this fact, and also provide an explanation as to why the data are unavailable. More information at: <https://www.mrepress.net/resources/editorial-policies/#3.AvailabilityofDataandMaterials>.

Author Contributions

These should be presented as follows: Study conception and design acquisition -PSJ, IYS, JHN, KHJ; Drafting and critical revision of the manuscript--PSJ, IYS; Data collection- JHN, KHJ; Analysis and interpretation of the data- PSJ, IYS; Discussion and conclusions, suggestions- PSJ; English review, JHN, KHJ; Abstract and References and Final Submission, JHN, KHJ. All authors contributed to editorial changes in the manuscript. All authors read and approved the final manuscript.

Ethics Approval and Consent to Participate

Informed consent was obtained from me.

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Conflict of Interest

The authors declare no conflict of interest.

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