

Örgütsel Davranış Araştırmaları Dergisi

Journal Of Organizational Behavior Research

Cilt / Vol.: 9, Sayı / Is.: 2, Yıl/Year: 2024, Sayfa/Pages: 28~41

https://doi.org/10.51847/Hx3ZrNIk4Z



COMPARISON OF JOB SATISFACTION AMONG PHARMACISTS IN DIFFERENT PRACTICE SETTINGS IN NIGERIA

Ayodapo Oluwadare JEGEDE1*

¹Department of Clinical Pharmacy and Pharmacy Administration, Faculty of Pharmacy, Obafemi Awolowo University, Ile Ife, Osun State, Nigeria.

*Corresponding Author E-mail: dapojegede@oauife.edu.ng

ABSTRACT

The objectives of the study were to determine the satisfaction of pharmacists in five practice areas with various elements of their work environment and to evaluate the relationship between demographic parameters like age, gender, and academic degree and the satisfaction of pharmacists with their working environment. The study was a cross-sectional survey of pharmacists in Nigeria. The population of the study included graduate pharmacists and the sample size was determined to be 618 (attrition considered). A simple random sampling method was employed, and a set of pretested questionnaires was used to collect data for the study. The results showed that most of the respondents in the different areas of practice were not satisfied with their working environment especially hospital pharmacists (χ^2 (4) = 9.652, p = .047). Most of the respondents who were younger in age (χ^2 (3) = 17.346, p = .001), not married (χ^2 (3) = 12.558, p = .006), with few years of experience (χ^2 (5) = 47.701, p = .000, who belong in the lower cadre (χ^2 (2) = 32.641, p = .000) and were first degree holders (χ^2 (2) = 9.228, p = .010) were not satisfied with their work environment. The study revealed that pharmacists in Nigeria are not satisfied with their work environment. However, the satisfaction with the work environment varied with age, marital status, cadre, years of experience, level of education, and across practice settings, with the pharmacists in academia being the most satisfied and the least satisfied hospital pharmacists.

Keywords: Job satisfaction, Pharmacists, Work environment, Salary, Motivation, Practice setting.

INTRODUCTION

The workplace environment has a significant impact on an employee's performance and productivity (Khamlub *et al.*, 2013). It plays a major role in the commitment of employees which has been found to influence the productivity of pharmacists in various settings which includes, hospitals, community, academia, administrative, and industry (Al-Muallem & Al-Surimi, 2019; Jegede & Toyosi, 2023; Ooi *et al.*, 2023). Oludeyi (2015) expressed work environment as the conditions, situations, settings, and circumstances in which people work. Numerous studies have shown that a wide range of factors, including competitive pay, adequate staffing, a pleasant working environment, opportunities for personal and professional growth, a reasonable workload, supervision, recognition, noticeable patient progress, positive relationships with coworkers, autonomy on the job, job security, career advancement, and contingent rewards, can affect job satisfaction (Carvajal *et al.*, 2018; Davidescu *et al.*, 2020; Khan *et al.*, 2020 Jegede & Ola-Olorun, 2021). One study highlighted the significance of job satisfaction by examining the

Geliş tarihi/Recieved: 12.04.2024 – Kabul tarihi/Accepted: 29.07.2024 – Yayın tarihi/Published: 15.09.2024

relationship between job satisfaction and patient satisfaction with the outcome of therapy (Yilmaz & Karakus, 2023).

On the other hand, job dissatisfaction has a detrimental effect on the organizational structure and work processes. Among pharmacists in the hospital specifically, job dissatisfaction can lead to low productivity and increased turnover (Balkhi *et al.*, 2017). Every day, pharmacists who work in academia across basic and applied sciences must strike a balance between their passion for learning and discovery and other crucial responsibilities. These include writing academic papers, speaking at conferences, motivating students through their instruction, and even conducting external examinations. These pharmacists, though, wouldn't have it any other way. Even though the hours may be lengthy, there should be chances for career progression, international employment, and possibly having a significant impact on society (Arbab *et al.*, 2022).

In most developed countries, pharmacists are easily accessible to the population for expert advice on several health issues (Valliant et al., 2022). This makes pharmacists the first port of call for individuals who need medical attention in most communities. Therefore, it is vital to have a good understanding of the nature and extent of the myriads of factors necessary for pharmacists to do their best for their patients in hospitals and communities (Duggan, 2020). It is well known that the role of the pharmacist has changed from dispensing medicines to patient care, this in turn requires the pharmacist to possess s skills that would ensure proper patient counseling and delivery of professional pharmaceutical services (Pizzi et al., 2001). The need for these important skills should make the pharmacy profession lucrative and enticing to practice as the rewards should be encouraging. However, a bad work environment can negatively affect the performance of even highly skilled professionals which ultimately affects their productivity on the job.



Ahead of World Pharmacists Day (WPD), 2021, pharmacists under the aegis of the Clinical Pharmacists Association of Nigeria (CPAN) said, "lack of adequate pharmaceutical care in health facilities is partly if not majorly responsible for Nigeria's low health index." National Chairman, of CPAN, Dr. Joseph Madu said, "It is indisputable that the majority of patients/clients who visit healthcare facilities do receive drugs, but sadly enough they do not receive the expected accompanying pharmaceutical care." The absence of the expected pharmaceutical care can be attributed to the fact that most pharmacists in the health sector are not properly motivated to deliver their duties accordingly. The deterioration of the Country's health sector has raised significant concerns, particularly given the increasing number of health professionals joining the system. This situation has prompted an examination of possible contributing factors, with job satisfaction among pharmacists emerging as a major issue (Medical World Nigeria, 2023). Demographic factors like age, gender, level of education, marital status, etc., have been known to affect the satisfaction of pharmacists. Take for instance gender of pharmacists, studies have revealed that female pharmacists earn less, have fewer appealing jobs, and are not frequently promoted when compared to male pharmacists (Carvajal & Popovici, 2018). However, female pharmacists have also been found to be more satisfied than male pharmacists and both genders respond in different ways to the different facets of their jobs (Carvajal & Popovici, 2018; Radwan et al., 2022). The study by Clark further shows that the gender differences disappear for highly educated, professional, young females who are in male-dominated workplaces (Clark, 1997). Bender and Heywood reveal in their study that females in academia are less satisfied than their

male counterparts which is the opposite for those in non-academic sectors (Webber & Rogers, 2018).

Age has also been found to affect the level of job satisfaction of pharmacists with their work environment, young and middle-aged pharmacists were found to be less satisfied when compared to older pharmacists (Avele et al., 2020). The level of education of pharmacists also affected the level of their satisfaction, pharmacists with degrees beyond a bachelor's degree were more satisfied than those who had only a bachelor's degree as the highest qualification.

While previous research has explored job satisfaction among pharmacists in various countries, there is a dearth of comprehensive studies focusing on different practice settings and the Nigerian context. This study aims to fill this gap by specifically examining job satisfaction among pharmacists in five distinct practice areas: hospital, community, academia, administrative, and industry settings. This study sought to explore the various elements of their work environment and to evaluate the relationship between demographic parameters like age, gender, and degree and the satisfaction of pharmacists with their work environment. It will provide a deeper understanding of job satisfaction among Pharmacists in different practice settings, thus offering insightful information about factors impacting job satisfaction in professional environments. Results obtained from this study would help to discover the major areas of Pharmacy practice where job satisfaction needs to be improved through modification of factors related to the work environment.

MATERIALS AND METHODS

The study was a descriptive cross-sectional survey that explored the factors affecting the satisfaction of pharmacists with their work environment in Nigeria. It included pharmacists who graduated from the selected schools of pharmacy in Nigeria. Primary data was employed for the study.

The number of registered pharmacists who made up the population of the study as obtained from the Pharmacy Council of Nigeria (PCN) was 15,900. The Sample size for the graduate population was determined using Krejcie and Morgan (1970) formula. A simple random sampling method was employed to draw a sample from the population obtained from the PCN list. The calculated sample size was 560, considering the attrition rate in data collection, an overage was added which brought the total sample size to 618. Graduates from universities offering PharmD programs were excluded because PharmD has just been approved for schools of Pharmacy by the PCN.

The variables of the study include the satisfaction of pharmacists, age, marital status, years of experience, area of practice, cadre (refers to positions of the respondents in their organizations), academic qualification, and gender. Individuals at the entry level were labeled as belonging to the lower cadre, those positioned between the entry level and those in management positions or at the peak of their careers (senior cadre) were designated as part of the intermediate cadre.

A set of pretested questionnaires was used as a data collection instrument for the study. The questionnaire elicited information on the demographic characteristics of the pharmacists and investigated the degree of satisfaction of respondents with elements of their work environment. The responses were measured on a Likert scale of agreement namely, strongly disagree= 1, disagree= 2, neutral= 3, agree= 4, and strongly agree= 5. The major constructs of the

questionnaire were salary satisfaction, job fulfillment and engagement, promotions and career development, practice area satisfaction, and working conditions among others.

The questionnaire was validated by relevant senior faculty members. A Cronbach alpha value in the determination of the internal consistency of the questionnaire was obtained to be 0.86. This was done using thirty respondents who were not part of the study sample. The questionnaires were administered twice (two-week intervals), retrieved, and subjected to a test-retest reliability check to obtain a coefficient average of 0.89.

Ethical approval was obtained from the Institute of Public Health, Obafemi Awolowo University, Ile Ife, Osun State with reference number IPHOAU/12/1214.

The questionnaires were issued to respondents for completion after informed consent was obtained from them with the help of research assistants who were trained to do so. The copies of the questionnaire were retrieved after the respondents had filled them and checked to reduce the incidence of erroneous data or blanks. Data collection involved sending the survey directly to respondents' email addresses or WhatsApp numbers, and the collection period spanned five months. The responses obtained yielded a return rate of 92.7%.

The questionnaires retrieved were checked for errors and sorted in preparation for data for analysis. The software used for data analysis was the Statistical Package for Social Sciences (SPSS) (Version 25). The data collected were encoded, cleaned, and loaded into the software and subsequently analyzed with descriptive statistics like frequencies and percentages. Correlation, Binomial, and Kruskal Wallis statistics were used for inferential determinations at a 5% level of significance. The binomial test was carried out to determine the overall satisfaction of the respondents with their work environment (with the neutral responses excluded), strongly agree (SA) and agree (A) represented "satisfied" while strongly disagree (SD) and disagree (D) depicted "not satisfied".



RESULTS AND DISCUSSION

Table 1 shows the demographic characteristics of the study sample. There were slightly more males (50.8%) than females (49.2%). Most of the respondents were below the age of 40 years (60.5%), married (71.2%), had a first degree in pharmacy (66.0%), and had less than 10 years of work experience (52.2%). The lowest proportion of the respondents were from industrial practice (8.3%) while the majority were from Hospitals (37.5%) and community practice (35.1%).

Variables	Options	N	%
	Below 40	373	60.5
A 00	40~50	141	22.8
Age -	51~60	373 141 74 29 617 304	12.0
-	Above 60	29	4.7
	Total	617	100.0
Gender -	Female	304	49.2
Gender	Male	314	50.8

Table 1. Socio-demographic Characteristics

32 Örgütsel Davranış Araştırmaları Dergisi Journal of Organizational Behavior Research

Cilt / Vol.: 9, Sayı / Is.: 2, Yıl/Year: 2024, Sayfa/Pages: 28-41

	Total	618	100.0
	Single	153	24.8
Marital Clatre	Engaged	Single 153 Engaged 22 Married 440 Divorced 3 Total 618 1-5years 177 6-10years 146 11-20years 153 21-30years 84 31-40years 50 41-50years 6 Total 616 Academia 81 stration and research 37 Community 217 Hospital 232 Industry 51 Total 618 First Degree 408 Masters 174 PhD 36 Total 618 Junior Cadre 215 ermediate Cadre 159	3.6
Marital Status	Married	440	71.2
	Divorced	3	0.5
	Total	618	100
	1~5years	177	28.6
	6~10years	146	23.6
Vacus of Properties	11~20years	153	24.8
Years of Experience	21~30years	84	13.6
	31~40years	50	8.1
	41~50years	6	1.0
	Total	616	100.0
	Academia	81	13.1
	Administration and research	37	6.0
Area of Practice	Community	217	35.1
	Hospital	232	37.5
	Industry	51	8.3
	Total	618	100.0
	First Degree	408	66.0
Academic Qualification	Masters	174	28.2
	PhD	36	5.8
	Total	618	100.0
	Junior Cadre	215	34.8
Cadre	Intermediate Cadre	159	25.8
	Senior Cadre	243	39.4
	Total	617	100.0

The distribution of respondents with respect to the schools they finished is represented in Table 2. The highest number of respondents were from Obafemi Awolowo University (63, 10.2%) while the least were from three new generation pharmacy schools, Delta State University (25, 4.0%), Igbenedion University Okada (25, 4.0%) and Nnamdi Azikiwe University (25, 4.0%).

Table 2. Distribution of Respondents across Pharmacy Schools

S/N	Name of School	NY .	Domoontooo
5/ N	Name of School	N	Percentage
1	Obafemi Awolowo University Ile-Ife	63	10.2
2	Ahmadu Bello University, Zaria	50	8.1
3	University of Benin	53	8.6
4	University of Nigeria	55	8.9
5	University of Ibadan	55	8.9



	·		-
6	University of Lagos	62	10.0
7	University of Jos	34	5.5
8	University of Uyo	33	5.3
9	Olabisi Onabanjo University	30	4.9
10	University of Maiduguri	26	4.2
11	Niger Delta University	30	4.9
12	Madonna university	26	4.2
13	University of Port-Harcourt	26	4.2
14	Delta State University	25	4.0
15	Nnamdi Azikiwe University	25	4.0
16	Igbinedion university	25	4.0
	Total	618	100

Table 3 shows the perception of respondents with respect to their satisfaction with their work environment. Most were not satisfied with their salaries (61.0%) and were not motivated to work extra hours (47.8%). The results revealed a higher percentage of respondents were not satisfied with the compensation their efforts received (64.9%) and agreed that their salary scheme was not justified (62.5%). Most of the respondents also indicated their income was not a source of job motivation (55.4%), and working conditions were not good (50.8%). These all constituted the work context aspects of their jobs. They were however satisfied with the work content aspect of their job as they found their job fulfilling (60.5%), were satisfied that their promotions were not held up (43.7%), and agreed their job affords the time to do other activities (56.3%).



Table 3. Perception of the Satisfaction of Respondents with their Work Environment

Variables		ngly gree	Disa	igree	Nei	Neutral		Agree		Strongly agree	
·	N	%	N	%	N	%	N	%	N	%	
My salary is satisfying	206	33.3	171	27.7	71	11.5	126	20.4	44	7.1	
My job is fulfilling	77	12.5	108	17.5	59	9.5	251	40.6	123	19.9	
I have time for other activities	74	12.0	143	23.1	53	8.6	272	44.0	76	12.3	
I work a convenient schedule	91	14.7	183	29.6	52	8.4	227	36.7	65	10.5	
My promotions are not held up	83	13.4	121	19.6	144	23.3	184	29.8	86	13.9	
My practice setting is satisfying	100	16.2	165	26.7	71	11.5	201	32.5	81	13.1	
My pay comes in due time	77	12.5	103	16.7	49	7.9	231	37.4	158	25.6	
I am personally motivated to work extra hours	137	22.2	158	25.6	78	12.6	161	26.1	84	13.6	
The salary scheme in my practice setting is justified	208	33.7	178	28.8	69	11.2	115	18.6	48	7.8	
My efforts are compensated by my salary	213	34.5	188	30.4	73	11.8	108	17.5	36	5.8	

Journal of Organizational Behavior Research

Cilt / Vol.: 9, Sayı / Is.: 2, Yıl/Year: 2024, Sayfa/Pages: 28~41

My income is a source of motivation	181	29.3	161	26.1	80	12.9	146	23.6	50	8.1
My working conditions are good	141	22.8	173	28.0	69	11.2	180	29.1	55	8.9

Table 4 shows the result of the correlation analysis to interrogate the relationship between demographic characteristics and the work environment of pharmacists. It was observed that a very strong relationship exists between Work Environment and Age of respondents (p=.000), Marital Status (p=.001), Years of Experience (p=.000), and Cadre (p=.000) while a weak correlation exists between Work Environment and Academic Qualification (p=.088) of respondents. The analysis also revealed that there was no relationship between Gender and Work Environment (p=.290).

Table 4. Relationship between Demographic characteristics and Work Environment of Pharmacists

Item	Statistics	The work environment of pharmacists		
	Correlation Coefficient	.165		
Age in Years	Sig. (2-tailed)	.000		
-	N	617		
	Correlation Coefficient	.043		
Gender	Sig. (2-tailed)	.290		
-	N	617		
N	Correlation Coefficient	.133**		
Marital Status of - Respondents -	Sig. (2-tailed)	.001		
respondents –	N	618		
N CT : C	Correlation Coefficient	.241**		
Years of Experience of Respondents	Sig. (2-tailed)	.000		
	N	616		
A C. D C.	Correlation Coefficient	~.078		
Area of Practice of Respondents	Sig. (2-tailed)	.052		
	N	618		
	Correlation Coefficient	.088**		
Academic Qualification	Sig. (2-tailed)	.028		
_	N	618		
	Correlation Coefficient	.178**		
Cadre	Sig. (2-tailed)	.000		
-	N	617		

Table 5 shows the result of a Kruskal Wallis test conducted to determine if the demographic characteristics of the respondents affect their work environment. The test showed significant difference for Age (χ 2 (3) = 17.346, p = .001), Marital Status (χ 2 (3) = 12.558, p = .006), Years



of Experience ($\chi 2$ (5) = 47.701, p = .000), Area of Practice ($\chi 2$ (4) = 9.652, p = .047), Academic Qualification ($\chi 2$ (2) = 9.228, p = .010) and Cadre ($\chi 2$ (2) = 32.641, p = .000). The results show that differences in these parameters affects the satisfaction of pharmacists with their work environment. A Mann-Whitney test conducted to ascertain the effect of the gender of the respondents on their satisfaction with the work environment showed no effect (p = .290). It follows therefore that those below the age of 40 years (mean rank= 288.22), those that were single (mean rank= 274.79), those with 1 to 5 years (mean rank= 258.09), and those 41 to 50 years (mean rank= 192.83) of work experience, those in hospital practice (mean rank= 288.01), those with first degree (mean rank= 301.30) and those in the junior cadre (mean rank= 261.53) were the least satisfied with their work environment.

Table 5. Kruskal Wallis one way analysis of Variance of Work Environment on Demographic Parameters

	Academic Qualification	N	Mean Rank	Asymp. Sig.
	Below 40	373	288.22	
AGE	40~50	141	337.91	.001
-	51~60	74	345.28	.001
	Above 60	29	343.12	•
	Total	617		
	Single	153	274.79	
MARITAL	Engaged	22	310.05	.006
STATUS	Married	440	320.58	.008
-	Divorced	3	450.50	•
	Total	618		
-	1~5	177	258.09	
	6~10	146	291.28	•
Years of	11~20	153	342.81	.000
Experience	21~30	84	368.83	.000
-	31~40	50	344.78	•
-	41~50	6	192.83	•
	Total	616		
	Academia	81	343.69	
-	Administrative and Research	37	308.53	•
Area of - Practice -	Community	217	315.22	.047
Tractice -	Hospital	232	288.01	•
_	Industry	51	329.32	•
	Total	618		
	First Degree	408	301.30	
Academic - Qualification -	Masters	174	313.76	.010
Qualification -	PhD	36	381.83	•



Journal of Organizational Behavior Research

Cilt / Vol.: 9, Sayı / Is.: 2, Yıl/Year: 2024, Sayfa/Pages: 28~41

	Total	618		
	Junior	215	261.53	
Cadre	Intermediate	159	344.73	.000
	Senior	243	327.62	
	Total	617		

The overall level of satisfaction of the respondents was assessed. Of the 618 respondents, 265 had a resultant value for neutral, 146 satisfied (strongly agree and agree), and 207 not satisfied (strongly disagree and disagree). The total of 353 respondents (SD, D, A, SA) tested showed 146 (41.4%) 'satisfied' while 207 (58.6%) were 'not satisfied'. This proportion of those 'not satisfied' had a 95% CI of 53.3% to 63.8%, p = .001 (Table 6). The findings show that pharmacists generally were not satisfied with the elements of their work environment, and this varied with age, marital status, years of experience, area of practice, cadre, and academic qualifications of the pharmacists. Majority of the

respondents were in hospital pharmacy and community pharmacy practice which could mean that the preferred areas of pharmacy practice in Nigeria are hospital and community practice. A study by Abdu-Aguye et al. (2022) and Gargalicano et al. (2023) revealed similar results. Over the years, it has been observed that most students opt for either of these practice areas for varying reasons, such as better remuneration, greater fulfillment, and other personal reasons (Cain et al., 2012). The pharmacy profession offers the flexibility to pursue one's area of interest and provides options that other professions might lack. It was observed that the respondents were mostly first-degree holders which may be because most pharmacists start making money as soon as they leave school which can be a distraction, and this can discourage the pursuit of higher degrees.

Table 6. Exact binomial test with exact Clopper-Pearson 95% CI of the level of Satisfaction

		Binomial Test				
		Category	N	%	Test Prop.	Exact Sig. (2~tailed)
LEVEL OF JOB SATISFACTION	Group 1	Satisfied	146	41.4	0.50	.001
	Group 2	Not Satisfied	207	58.6	0.50	
SATISTACTION	Total		353	100		
Confidence Internal Type	Danamatan	Fatimata	(95% Con	fidence In	terval
Confidence Interval Type	Parameter	Estimate	Lower			Upper
One-Sample Binomial Success rate (Clopper-Pearson)	Probability	0.586	0.533			0.638

Most of the respondents were not satisfied with their jobs according to the study which was made more obvious by their agreement to not willing to work extra hours, dissatisfaction with their salaries, the belief that the salary scheme was not equitable, and bad working conditions. This could have great implications considering the study of Carvajal and Popovici (2018) and Yean et al. (2022) who posited that the effects of job or career satisfaction/dissatisfaction include higher motivation or performance or increased lateness to work and dissatisfaction towards management and support. Also, Mott (2000) stated that job dissatisfaction can lead to low productivity and increased turnover.

The satisfaction with the work environment was found to be correlated to the age, marital status, years of experience, cadre of respondents, and academic qualification but not to the gender of respondents. As is to be expected, the preferences of pharmacists would vary with age because there are things older pharmacists would appreciate in the work context that the younger generation of pharmacists may be dissatisfied with. The same explanation applies to marital status, years of experience, cadre, and academic qualification of pharmacists as it pertains to the work environment. This is very instructive for pharmacy employers and managers about the kind of work environment they create for their employees considering these variations, as this could affect their productivity.

The study also showed the effects distinct categories in age, marital status, years of experience, area of practice, cadre and academic qualification had on the work environment. Pharmacists less than 40 years old were the least satisfied with their jobs. A lot has changed in the world in the last two decades which has affected job content and context generally. The younger generation has been affected more by this change because this is all they have known, and this has led to increased job mobility in this population. As a result, there are a lot of expectations the younger generation has that might put a lot of pressure on employers in terms of job content and context dynamics. This means they would have reduced commitment to a job that is not dynamic enough to explore their creativity. Single respondents were also the least satisfied with their work environment. A study by Uhlíř and Řehoř (2020) shows that married academics were more satisfied with their jobs than unmarried academics which agrees with the direction of the results of this study. Other studies showed that marital status is a predictor of Job satisfaction (Mocheche *et al.*, 2018; Duah & Kofi, 2022). The study of Inayat and Khan (2021) shows however that marital status did not affect the job satisfaction of respondents.

It was observed that pharmacists in academia were the most satisfied with their work environment and hospital pharmacists were the least satisfied. This could be due to several opportunities available to academics like taking a study leave, attending international conferences, sponsorship for postgraduate studies, sabbaticals, etc. which are not available for pharmacists practicing in the hospital. This broadens the scope of their jobs which allows for skill variety which is usually absent in the monotonous schedule of hospital pharmacists. The result agrees with the work of Iheanacho and Odili (2021) who reported that academic pharmacists were the most satisfied with their jobs and hospital pharmacists were the least satisfied. Cobaugh (2005) also posited that there are benefits that academic pharmacy practice offers that cannot be obtained in other practice areas in pharmacy. A study by Berassa *et al.* (2021) concluded that hospital pharmacists in Ethiopia were poorly satisfied with their jobs with uncomfortable work environment as one of the major reasons for this.

The academic qualification of respondents also influenced their satisfaction with the work environment as it was discovered that Ph.D. holders had more satisfaction with their work environment than Masters and First-degree holders. This can be explained since Ph.D. holders, a lot of whom are in academia, are better placed than others without a Ph.D. and earn an appreciably better income. Also, having a Ph.D. opens up more opportunities to earn more as the pharmacist is viewed as having reached the peak of one's education in particular and can be



consulted by individuals and organizations beyond the pharmacist's immediate environment. Also, pharmacists with the highest qualifications usually hold managerial positions when compared with those who are first-degree holders. They are also better qualified to handle such positions. The same explanation applies to those with master's degrees as they were more satisfied with their work environment than those with only a first degree although less satisfied than those with Ph.D. Gender, however, did not affect the satisfaction with the work environment of respondents. This result agrees with studies that have reported that gender did not affect job satisfaction. Some studies however showed that gender affects the satisfaction of employees (Uhlíř & Řehoř, 2020).

The main limitation of the study was the bias that might have existed with the non-proportionate sample sizes obtained from the different areas of practice, but this was minimized with the use of the Kruskal Wallis Test.

Recommendations

Employers and policymakers implementing targeted interventions in the following areas may contribute significantly to enhancing overall job satisfaction among pharmacists in Nigeria.

- Implement measures to improve the working conditions for pharmacists, especially in hospital settings, where dissatisfaction was particularly notable.
- Explore strategies to address salary-related dissatisfaction among pharmacists. This could include revisiting compensation structures and ensuring timely payment.
- Provide opportunities for career development and advancement, particularly for younger pharmacists. Implement mentorship programs, training, and support for professional growth.
- Recognize and address the varying needs of pharmacists based on demographic factors such as age, marital status, and years of experience. Tailor workplace policies to accommodate these differences.
- Encourage and support pharmacists in pursuing higher education, as the study suggests that those with advanced degrees, especially Ph.D. holders, reported higher satisfaction.
- Implement employee engagement programs to foster a sense of motivation and commitment among pharmacists. This could include recognition programs, opportunities for skill development, and a supportive work culture.
- Conduct regular surveys to monitor job satisfaction levels over time and identify emerging issues. This ongoing feedback can inform continuous improvement strategies.
- Foster collaboration between the pharmaceutical industry and academic institutions to provide pharmacists with a broader scope of opportunities and enhance job satisfaction.

CONCLUSION

The study revealed that pharmacists in Nigeria are not satisfied with their work environment. However, satisfaction with the work environment varied across the practice setting, with the pharmacists in academia being the most satisfied and the least satisfied, hospital pharmacists. Other factors that correlated with and predicted the satisfaction of pharmacists with their work environment include, age, marital status, years of experience, area of practice, cadre, and



academic qualification. Gender, however, had no significant effect on satisfaction with the work environment of respondents.

ACKNOWLEDGMENTS: Appreciation goes to Prof. W. O. Erhun, who was an advisor and support throughout the study.

CONFLICT OF INTEREST: None

FINANCIAL SUPPORT: None

ETHICS STATEMENT: Ethical approval was obtained from the Institute of Public Health, Obafemi Awolowo University, Ile Ife, Osun State with reference number IPHOAU/12/1214.

References

- Abdu-Aguye, S. N., Suleiman, M. M., Shehu, A., & Mohammed, E. N. A. (2022). Factors influencing choice of a pharmacy degree and career preferences of final year pharmacy students in Northern Nigeria: A multi-institutional study. *Nigerian Journal of Pharmaceutical Research*, *18*(2), 125-134. doi:10.4314/njpr.v18i2.4
- Al-Muallem, N., & Al-Surimi, K. M. (2019). Job satisfaction, work commitment and intention to leave among pharmacists: A cross-sectional study. *BMJ Open*, 9(9), e024448. doi:10.1136/bmjopen-2018-024448
- Arbab, A. H., Eltahir, Y. A., Elsadig, F. S., & Yousef, B. A. (2022). Career preference and factors influencing career choice among undergraduate pharmacy students at University of Khartoum, Sudan. *Pharmacy*, 10(1), 26. doi:10.3390/pharmacy10010026
- Ayele, Y., Hawulte, B., Feto, T., Basker, G. V., & Bacha, Y. D. (2020). Job satisfaction among pharmacy professionals working in public hospitals and its associated factors, eastern Ethiopia. *Journal of Pharmaceutical Policy and Practice*, 13(1), 1-9. doi:10.1186/s40545-020-00209-3
- Balkhi, B., Alghamdi, A., Alshehri, N., & Alshehri, A. (2017). Assessment of job satisfaction among hospital pharmacists in Saudi Arabia. *IOSR Journal of Pharmacy*, 7(5), 34-40. doi:10.9790/3013-0705013440
- Berassa, M. S., Chiro, T. A., & Fanta, S. (2021). Assessment of job satisfaction among pharmacy professionals. *Journal of Pharmaceutical Policy and Practice*, 14(1), 71. doi:10.1186/s40545-021-00356
- Cain, J., Romanelli, F., & Smith, K. M. (2012). Academic entitlement in pharmacy education. *American Journal of Pharmaceutical Education*, 76(10), 189. doi:10.5688/ajpe7610189
- Carvajal, M. J., & Popovici, I. (2018). Gender, age, and pharmacists' job satisfaction. *Pharmacy Practice* (*Granada*), 16(4), 1396. Available from: https://www.pharmacypractice.org
- Carvajal, M. J., Popovici, I., & Hardigan, P. C. (2018). Gender differences in the measurement of pharmacists' job satisfaction. *Human Resources for Health*, *16*, 1-8.
- Clark, A. E. (1997). Job satisfaction and gender: Why are women so happy at work? *Labour Economics*, 4(4), 341-372. doi:10.1016/S0927-5371(97)00010



- Cobaugh, D. J. (2005). Academia: A rewarding and critically important career path. American Journal of Health-System Pharmacy, 62(11), 1204. doi:10.1093/ajhp/62.11.1204
- Davidescu, A. A., Apostu, S. A., Paul, A., & Casuneanu, I. (2020). Work flexibility, job satisfaction, and job performance among Romanian employees—Implications for sustainable human resource management. Sustainability, 12(15), 6086. doi:10.3390/su12156086
- Duah, F., & Kofi, K. (2022). The nature of job satisfaction and the effect of marital status on job satisfaction in organisations in Ghana. Journal Management and *Science*, 12(1), ofdoi:10.26524/jms.12.16
- Duggan, C. (2020). Advancing the workforce to meet the primary health care agenda: Pharmacy's contribution to universal health coverage. International Journal of Pharmacy Practice, 28(2), 118-120. doi:10.1111/ijpp.12579
- Gargalicano, C. A. G., De Oca, P. R., Hernane Jr, S. G., Arosa, A. A. M., Radadon, S. T. A., & Gargalicano, F. G. (2023). Factors that influence career choice of graduating pharmacy students. *International* Journal of Multidisciplinary: Applied Business and Education Research, 4(2), 663-670. doi:10.11594/ijmaber.04.02.32
- Iheanacho, C. O., & Odili, V. U. (2021). Job satisfaction among pharmacists practicing in Benin City, Pharmaceutical *Research*, 20(8), Nigeria. Tropical Journal of 1721-1728. doi:10.4314/tjpr.v20i8.25
- Inayat, W., & Jahanzeb Khan, M. (2021). A study of job satisfaction and its effect on the performance of employees working in private sector organizations, Peshawar. Education Research International, 2021(1), 1751495. doi:10.1155/2021/1751495
- Jegede, A. O., & Ola-Olorun, O. J. (2021). Evaluation of the job satisfaction of hospital pharmacists in Osun State, Nigeria. Nigerian Journal of Pharmaceutical Research, 17(2), 245-256. doi:10.4314/njpr.v17i2.10
- Jegede, A. O., & Toyosi, O. K. (2023). Nature of organizational commitment across community pharmacy and academic pharmacy practice settings. Journal of Contemporary Pharmacy Practice, 70(4), 15-22. doi:10.37901/jcphp21-00016
- Khamlub, S., Harun-Or-Rashid, M. D., Sarker, M. A. B., Hirosawa, T., Outavong, P., & Sakamoto, J. (2013). Job satisfaction of health-care workers at health centers in Vientiane Capital and Bolikhamsai Province, Lao PDR. Nagoya Journal of Medical Science, 75(3-4), 233-241. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4345678/
- Khan, H., Rehmat, M., Butt, T. H., Farooqi, S., & Asim, J. (2020). Impact of transformational leadership on work performance, burnout and social loafing: A mediation model. Future Business Journal, 6(1), 40. doi:10.1186/s43093-020-00043-8
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological 607-610. Measurement, *30*(3), https://journals.sagepub.com/doi/10.1177/001316447003000308



- Medical World Nigeria [Internet]. [cited 2023 Dec 2]. 'Poor pharmaceutical care responsible for Nigeria's low health index.' Available from: https://medicalworldnigeria.com/post/Poor-Pharmaceutical-Care-Responsible-for-Nigerias-Low-Health-Index?pid=54064
- Mocheche, E. K., Raburu, P. A., & Bosire, J. (2018). Is marital status a predictor of job satisfaction of public secondary school teachers. *International Journal of Psychology and Behavioral Sciences*, 8(3), 51-58. Available from: http://ir.jooust.ac.ke:8080/xmlui/handle/123456789/9351
- Mott, D. A. (2000). Pharmacist job turnover, length of service, and reasons for leaving, 1983–1997. *American Journal of Health-System Pharmacy*, 57(10), 975-984.
- Oludeyi, O. S. (2015). A review of literature on work environment and work commitment: Implication for future research in citadels of learning. *Journal of Human Resource Management*, 18(2), 32-46.
- Ooi, K. L., Rajiah, K., Maharajan, M. K., & Wong, P. S. (2023). Empowering sustainable growth and workforce: Unveiling challenges and strategies for retaining community pharmacists in Malaysia. *Pharmacy*, 11(5), 163. doi:10.3390/pharmacy11050163
- Pizzi, L. T., Menz, J. M., Graber, G. R., & Suh, D. C. (2001). From product dispensing to patient care: The role of the pharmacist in providing pharmaceutical care as part of an integrated disease management approach. *Disease Management*, 4(4), 143-154. doi:10.1089/10935070152744525
- Radwan, R. M., Bentley, J. P., Patterson, J. A., Dixon, D. L., & Salgado, T. M. (2022). Predictors of job satisfaction among pharmacists: A regional workforce survey. *Exploratory Research in Clinical and Social Pharmacy*, *5*, 100124.
- Uhlíř, L., & Řehoř, P. (2020). Gender, education and marital status as determinants of job satisfaction. *Acta Universitatis Bohemiae Meridionales*, 23(2). doi:10.2478/acta-2020-0003
- Valliant, S. N., Burbage, S. C., Pathak, S., & Urick, B. Y. (2022). Pharmacists as accessible health care providers: Quantifying the opportunity. *Journal of Managed Care & Specialty Pharmacy*, 28(1), 85-90. https://www.jmcp.org/doi/10.18553/jmcp.2022.28.1.85
- Webber, K. L., & Rogers, S. M. (2018). Gender differences in faculty member job satisfaction: Equity forestalled? *Research in Higher Education*, 59(8), 1105-1132. Available from: http://www.jstor.org/stable/45180361
- Yean, T. F., Johari, J., Yahya, K. K., & Chin, T. L. (2022). Determinants of job dissatisfaction and its impact on the counterproductive work behavior of university staff. *Sage Open*, 12(3), 21582440221123289. doi:10.1177/21582440221123289
- Yilmaz, F. K., & Karakuş, S. (2023). The relationship between healthcare workers' satisfaction level and patients' satisfaction: Results of a path analysis model. *Journal of Healthcare Quality Research*, 38(6), 338-345. doi:10.1016/j.jhqr.2023.08.003

