

Research Article

Job Satisfaction of Workaholic Nurses

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Introduction

Currently, a shortage of health care staff is becoming a common problem in the global health sector. In this context, the absence of nursing staff holds significant importance in ensuring the effective operation of healthcare systems [1]. Hence, skillful, effective, and efficient human resource management has become a necessity today. In order to make appropriate managerial decisions concerning the available human capital, it is essential to systematically identify the sources of key issues that employees encounter. Employees' problems become managers' problems. They influence the effectiveness of management in nursing teams. Since the level of employee satisfaction is closely linked to their motivation and productivity [2]. Previous research demonstrates that the job satisfaction of nurses is significantly associated with patient safety, the quality of care, and employee loyalty [3]. In the context of a shortage of

Abstract

The skillful, effective, and efficient human resource management has become a necessity today. In order to make appropriate managerial decisions concerning the available human capital, it is essential to systematically identify the sources of key issues that employees encounter. The aim of the study was to develop a model that covers the various aspects that contribute to job satisfaction among nurses who have been diagnosed with workaholism or are at risk of developing it.

Data were collected from 335 nurses over the course of eight measurement cycles spanning from 2016 to 2019. The primary method of data collection employed in this study was a diagnostic survey, utilising a questionnaire as the research tool. The Kendall's coefficient was applied to evaluate the degree of correlation. Furthermore, a linear regression model was developed to describe the level of job satisfaction among nurses who exhibit workaholic tendencies.

The multifactorial model incorporating the following variables: *Perspectives at work, Bragging job, Trust superior, Trust in colleagues, Interest in finance, Competencies of others, Readiness, Weariness*, all of which have a positive influence on the achieved level of job satisfaction. The obtained eight-factor model explains 81.4% of the variance in job satisfaction.

The model developed describing the factors determining the job satisfaction of workaholic nurses allows the adaptation of the research results to management practice in many areas of human resource management. Irrespective of the healthcare system adopted at the national level, taking into account the specificities of each healthcare institution.

Keywords Nurses; Workaholism; Job satisfaction; Commitment; Motivation; Working conditions

nursing staff, this is indeed one of the key factors determining the reduction of employee turnover and departures, thereby minimising the consequences of staffing shortages [4,5]. Health care professionals with a higher level of job satisfaction exhibit a stronger sense of belonging to the hospital where they work [6]. This results in better patient care as it enhances their motivation and enthusiasm, thus positively impacting patients' satisfaction with healthcare services [7]. Hence, regular measurements of job satisfaction among healthcare professionals are crucial in order to continuously identify not only the sources of its improvement but also its decline [8]. Moreover, the level of professional satisfaction is indicated as the most significant predictor of occupational stress [9]. Job satisfaction measurements gain significance, especially in the context of the needs and preferences of employees from Generations Y (born between

1981 and 1996) and Z (born after 1996), for whom achieving job satisfaction is an essential element for engaging in work and identifying with their job, and consequently, identifying with the company they work for [10].

Job satisfaction is a multidimensional construct, encompassing various aspects. However, there is still no consensus on which factors are most important [11]. Many similar-sounding definitions of the term “work satisfaction” have been put forward to date [12]. It is described as a positive orientation towards one's work [2]. In a common understanding, it is perceived as the degree of an employee's contentment with their current job. For the purposes of this study, a broader temporal perspective and a significantly more extensive external context beyond the specific workplace have been adopted. This perspective is described in the literature as “Job Satisfaction” (JS), which is understood as “a positive attitude of employees towards their assigned tasks, working conditions, superiors, and colleagues, requiring work to provide intellectual challenges, a sense of accomplishment, joy in professional development and self-realisation, as well as full identification with the job and/or the organisation” [10]. JS is determined by a number of elements that can be classified into the following three groups of factors: individual, i.e. personality, education, marital status, age, professed values; social, i.e. supervision and control exercised, relations with colleagues, teamwork; and organisational, i.e. company size, formal structure, management, policies and procedures, technology, development opportunities, organisational culture [12].

Staff shortages combined with a low level of managerial skills among the leadership can result not only in a low level of job satisfaction [13] but sometimes can also foster counterproductive behaviours manifested in the organisational dimension. These include pathological forms of employee engagement [14]. Each time resulting in a reduction in work effectiveness. In the case of the aforementioned behaviours occurring within a particular team, there is an expectation of increased work engagement from the employees. Sometimes even explicitly rewarding those who show “exceptional commitment”. This may contribute to the occurrence of workaholism, which is classified as a behavioural addiction. “It is a self-destructive behaviour, defined as a sharp disturbance in the balance between work and other important areas of life” [15]. It is a work addiction, a form of pathology, with negative consequences [16], impacting both the affected employee and the entire organisation. Despite the passage of time, authors describing the phenomenon of workaholism have reached a consensus primarily on the compulsivity index related to the need for work, or the uncontrollable urge for work, that characterises workaholics. However, the core essence of the phenomenon remains unchanged. Workaholics struggle to establish boundaries between work and personal life or leisure time. They have an illusory belief in their uniqueness and irreplaceability. Since they do not experience a sense of fulfillment from their job, it leads to a stagnation in their development [15]. An individual addicted to work experiences unpleasant somatic symptoms when not working, known as withdrawal symptoms, which are classified as classical features of addiction [16].

In the common understanding, workaholism is primarily identified through the lens of working hours significantly exceeding the established norms of working time. This, coupled with the observed practice of holding multiple positions among healthcare professionals, including members of the nursing

community, where more than 40% of Polish nurses work in two organisations [17] due to the consequences it entails, invites reflection. Currently, individuals working hours not exceeding the equivalent of one full-time position (Art. 129 § 1 of the Labour Code), which is typically an average of 160 hours per month [18], appear to be in the minority. Although the sole criterion of the number of hours worked is not a decisive factor in diagnosing workaholism, the sheer scale of its occurrence [19] has led the authors of this study to focus their research attention on job satisfaction among workaholic nurses.

Due to the fact that previous studies in the field of job satisfaction among nurses have often been limited to the analysis or assessment of selected dimensions, typically ignoring the relationships between them and their significance [20], the aim of the paper is to develop a model describing the factors influencing job satisfaction among nurses who have been diagnosed with workaholism or are at risk of its occurrence.

Method

Research Design

The research it had a quantitative, descriptive, cross-sectional design and utilised a traditional paper-and-pencil questionnaire format. The predominant method of data collection involved a diagnostic survey, utilising a questionnaire consisting of three parts: the first part comprised the standardised Multidimensional Workaholism Assessment Questionnaire (Pol. WKOP) [21], consisting of 94 statements/traits related to workaholism and classified into 13 dimensions; the second part included a standardised questionnaire for measuring job satisfaction, based on the Polish version of the Employee Satisfaction and Motivation Index (Pol. ISMP), described in the “F” section, containing 15 statements/traits related to job satisfaction [12], presented on a five-point Likert scale; and the third part included demographics with 6 questions concerning sociodemographic data. The research was carried out between 2016 and 2019.

Sample and Setting

The research subjects comprised a representative group of Polish nurses, total 1622 nurses to whom the questionnaire survey was administered. In return, 1182 questionnaires were obtained (72.9% of all distributed questionnaires). In the preliminary analysis, 26 questionnaires were excluded (partially incomplete in the section related to workaholism). Further statistical analysis was conducted on 1156 questionnaire surveys, from which a group of nurses/nursing professionals with workaholism was identified. The qualification was based on the results obtained in the WKOP - average values in the entire WKOP scale, i.e. all in the scope of 13 workaholism traits: *Work as value, Conscientiousness, Impairment of alternative, Stress and anxiety, Stimulants, Inability to delegate, Disturbed social Relations, Enthusiasm for work, Destructive perfectionism, Need for predictability, Extreme dutifulness, Absorption, Work compulsion*. This group comprised 454 people, representing 39.25% of the total number of respondents. Individuals in this group were classified based on the data obtained from the questionnaire survey, which indicated the presence of workaholism or the risk of its occurrence. After verifying the completeness of the 454 aforementioned questionnaires in the section related to job satisfaction, those with incomplete responses, lacking at least 50% of the required answers, were excluded. 119 survey questionnaires were rejected. The research material subjected

to statistical analyses consisted of 335 survey questionnaires. The inclusion criterion was to obtain average values above 4. This value meant that these were people diagnosed with the risk of workaholism or workaholism. Among the participants, the most numerous group consisted of individuals aged 46 and above ($n=128$; 38.2%), with over 26 years of professional experience ($n=136$; 40.5%). Most were employed under a contract of employment, for an indefinite period ($n=210$; 62.7%). Mostly in a stable relationship and with children ($n=188$; 56.1%). Holders of a bachelor's degree in nursing ($n=138$; 41.2%). The detailed characteristics of the surveyed group in terms of the adopted sociodemographic variables is presented in Table 1.

Table 1: Characteristics of the surveyed group (N=335).

No.	Socio-demographic variable		"N" number	% value
1	Age	30 years and under	93	27.8
		31 – 45 years	114	34.0
		46 years and over	128	38.2
2	Length of service	5 years and under	93	27.7
		6 – 15 years	19	5.6
		16 – 25 years	87	26.2
		26 years and over	136	40.5
3	Family status*	Single without children	57	17.0
		Single with children	35	10.4
		In a relationship without children	55	16.4
		In a relationship with children	188	56.1
4	Education	Secondary Medical School (SMS)	49	14.6
		Medical High School (MHSc)	127	37.9
		Bachelor (Bsc)	138	41.2
		Master on Nursing (MoN)	21	6.3
5	Form of employment**	Indefinite term employment contract	210	62.7
		Fixed-term employment contract	96	28.6
		Other type of contract*	29	8.6

* The 'Family' variable concerns 'Family status', it does not apply to family relationships

**e.g. civil-law contract, contract of mandate.

Table 2: Results of analysis using the χ^2 test.

Variable	WorkExp=1	2	3	4
	5 years and under	6 – 15 years	16 – 25 years	26 years and over
Workaholic level 2+3	31(33.3%)	9(47.4%)	26(33.8%)	23(16.9%)
Workaholic level 4	40(43.0%)	5(26.3%)	26(33.8%)	77(56.6%)
Workaholic level 5	22(23.7%)	5(26.3%)	25(32.5%)	36(26.5%)

Data Collection

Due to the nature and characteristics of the work of the surveyed group, it was decided to conduct the survey outside of the participants' workplace. Sampling was purposive and random. The criterion for selection was the choice of individuals who, in addition to being professionally active at the time of the survey, were simultaneously participating in one of the available institutional forms of postgraduate nursing education. Ultimately, participation in the survey was determined by chance, i.e. attendance at classes on the day of measurement and consent to participate in the survey. The survey was voluntary and anonymous.

Data Analysis

Basic information about the respondents was described by counts (N) and percentages (%). Job satisfaction was measured by means (M) and standard deviations (SD). The overall level of job satisfaction for each participant was calculated based on their overall average score in the questionnaire, using a five-point Likert scale, for 15 traits specified in section "F" of the ISMP questionnaire. The responses provided were categorised into one of five values corresponding to the values adopted in the five-point scale, i.e., 1 – negative attitude, 2 – no job satisfaction/feeling uncomfortable, 3 – job satisfaction, 4 – professional satisfaction achieved, 5 – high professional satisfaction. The sum of these values formed the basis for calculating the individual job satisfaction level of each survey participant as well as the levels for each of the factors describing it. Interpreting the results for assessing the level of job satisfaction in the surveyed group, the following threshold values were used: 1 – 2,9 no job satisfaction; 3 – 3,9 job satisfaction; 4 – 5 high professional satisfaction.

Due to the presence of skewed distributions, Kendall's correlation coefficient and the significance test of the coefficient were utilised to determine the correlations between two features/variables. Simple linear regression models and a stepwise backward regression method were used to create a multifactorial model for the dependent variable corresponding to the level of workaholism. Statistically significant results were considered when $p < 0.05$. Data analysis was performed using Analysis of Complex Survey Samples version 4.2 – 1, R version 4.3 – 0, R Studio 2023.03.0 Build 386, Posit Software, PBC and Stata/SE 17.0 for Windows (StataCorp LLC).

Results

In the surveyed group, the mean score for job satisfaction was 59.12 (SD=17.32), and the mean score for an individual factor describing job satisfaction was 3.9 (SD=1.1), indicating that job satisfaction was achieved. Values above the mean, determined for the entire surveyed group, were obtained for eight factors describing job satisfaction, including three factors: *punctuality* – 4.55 (SD=0.91), *lateness and absence* – 4.55 (SD=1.01), and *commitment to work* – 4.51 (SD=0.82), indicating a high level of job satisfaction. In relation to the above factors, there was also the highest percentage of people whose results indicated a higher than average level of job satisfaction, namely: SSJ=87%, PJS=86%, PJS=85%, and additionally in terms of the *readiness* factor (PJS=86%). The higher level of professional satisfaction achieved by workaholic nurses, compared to the entire population of Polish nurses, is probably due to the fact that among the 13 features of workaholism, the feature that strongly correlated with the achieved level of professional satisfaction was the second most important feature *Enthusiasm for work*.

In the surveyed group, none of the 15 factors describing job satisfaction included in the survey questionnaire received a score, the average value for the entire group, indicating a lack of job satisfaction. Whereas for individual results, the highest percentage of people refer to the following factors: *fatigue* (32%), *trust superior* (32%), *bragging job* (27%) and *perspectives at work* (25%). There is a statistically significant relationship between the level of satisfaction and WorkExp ($p=0.0034$). There is no relationship between the level of satisfaction *age*, *length of service*, *family status*, *education*, and *form of employment* Table 2.

Table 3: Detailed results describing the correlations between factors describing job satisfaction.

	Pleasure	Pride	Perspectives at work	Commitment to work	Bragging job	Trust superior	Trust in colleagues	Interest in finance	Feel needed at work	Competencies of others	Readiness	Lateness and absence	Punctuality	Fatigue
Pride	0.68 ***													
Perspectives at work	0.54 ***	0.63 ***												
Commitment to work	0.47 ***	0.43 ***	0.38 ***											
Bragging job	0.41 ***	0.51 ***	0.42 ***	0.32 ***										
Trust superior	0.24 ***	0.29 ***	0.22 ***	0.24 ***	0.53 ***									
Trust in colleagues	0.31 ***	0.31 ***	0.26 ***	0.35 ***	0.36 ***	0.41 ***								
Interest in finance	0.31 ***	0.32 ***	0.33 ***	0.44 ***	0.23 ***	0.16 ***	0.30 ***							
Feel needed at work	0.48 ***	0.44 ***	0.40 ***	0.40 ***	0.44 ***	0.32 ***	0.34 ***	0.45 ***						
Competencies of others	0.41 ***	0.40 ***	0.36 ***	0.37 ***	0.46 ***	0.39 ***	0.43 ***	0.33 ***	0.56 ***					
Readiness	0.39 ***	0.39 ***	0.29 ***	0.50 ***	0.27 ***	0.23 ***	0.25 ***	0.45 ***	0.44 ***	0.40 ***				
Lateness and absence	0.25 ***	0.18 ***	0.17 ***	0.28 ***	0.13 **	0.09 *	0.10 **	0.35 ***	0.28 ***	0.19 ***	0.36 ***			
Punctuality	0.26 ***	0.23 ***	0.22 ***	0.34 ***	0.13 ***	0.08 *	0.11 **	0.27 ***	0.27 ***	0.20 ***	0.38 ***	0.50 ***		
Fatigue	-0.15 ***	-0.14 ***	-0.14 ***	-0.01	-0.07 *	-0.02	-0.15 ***	0.01	-0.05	-0.03	-0.01	0.09 *	0.03	
Weariness	0.01	-0.03	-0.05	0.22 ***	0.09 *	0.17 ***	0.09 **	0.36 ***	0.30 ***	0.29 ***	0.36 ***	0.47 ***	0.37 ***	0.55 ***

Where the level of statistical significance: * p<0.05; ** p<0.01, *** p<0.001.

The correlation between factors describing job satisfaction was analysed using the Kendall correlation coefficient. The results show correlations of varying intensity. The strongest correlations are observed for: *pleasure, pride, bragging job, readiness, feel needed at work, fatigue, and commitment to work, competencies of other, lateness and absence*. The detailed results of the Kendall test are shown in Table 3.

The next step was to create a simple and multivariate linear regression model. In simple models, all factors describing job satisfaction, except for the *fatigue* variable, had a statistically significant impact on the level of job satisfaction. Also, the adopted sociodemographic variables, such as *age, length of service, family status, education, and form of employment*, did not have an impact on job satisfaction. Detailed results of simple linear regression for factors describing job satisfaction in the surveyed group are presented in Table 4.

Using the stepwise backward regression method, a multivariate model was developed containing the following variables: *perspectives at work, bragging job, trust superior, trust in colleagues, interest in finance, competencies of others, readiness, and weariness*. All variables in the model have a positive impact on the level of satisfaction. The model explains 81.4% of the variation in job satisfaction (adjusted $R^2 = 0.814$). Based on this model, we can conclude that (with fixed levels of the other variables):

- if the level of *perspectives at work* increases by 1, satisfaction increases by 0.17 on average;

Table 4: Simple linear regression results for factors describing job satisfaction of workaholic nurses.

Factor describing job satisfaction	Coefficient	Std. err.	p-value	[95% conf. interval]	
Pleasure	0.456	0.029	<0.001	0.400	0.513
Pride	0.446	0.026	<0.001	0.394	0.498
Perspectives at work	0.332	0.023	<0.001	0.286	0.378
Commitment to work	0.552	0.044	<0.001	0.466	0.638
Bragging job	0.364	0.022	<0.001	0.320	0.408
Trust superior	0.325	0.025	<0.001	0.275	0.374
Trust in colleagues	0.345	0.031	<0.001	0.284	0.406
Interest in finance	0.359	0.032	<0.001	0.296	0.422
Feel needed at work	0.435	0.026	<0.001	0.383	0.487
Competencies of others	0.471	0.028	<0.001	0.415	0.526
Readiness	0.559	0.043	<0.001	0.474	0.643
Lateness and absence	0.295	0.040	<0.001	0.216	0.373
Punctuality	0.355	0.044	<0.001	0.269	0.441
Weariness	0.427	0.049	<0.001	0.331	0.523

- if the level of *bragging job* increases by 1, satisfaction increases by 0.12 on average;

- if the level of *trust superior* increases by 1, satisfaction increases by 0.087 on average;

- if the level of *trust in colleagues* increases by 1, satisfaction increases by 0.07 on average;

- if the level of *interest in finance* increases by 1, satisfaction

Table 5: Multivariate linear regression model describing job satisfaction of workaholic nurses.

Factor describing job satisfaction	Coefficient	Std. err.	p-value	[95% conf. interval]	
Perspectives at work	0.167	0.016	<0.001	0.135	0.198
Bragging job	0.119	0.018	<0.001	0.083	0.156
Trust superior	0.076	0.018	<0.001	0.041	0.111
Trust in colleagues	0.072	0.019	<0.001	0.034	0.110
Interest in finance	0.075	0.020	<0.001	0.035	0.115
Competencies of others	0.109	0.022	<0.001	0.065	0.154
Readiness	0.145	0.029	<0.001	0.088	0.202
Weariness	0.223	0.029	<0.001	0.166	0.281

increases by 0.07 on average;

- if the level of *competencies of others* increases by 1, satisfaction increases by 0.11 on average;

- if the level of *readiness* increases by 1, satisfaction increases by 0.15 on average;

- if the level of *weariness* increases by 1, satisfaction increases by 0.22 on average.

The detailed results of the regression analysis for selected predictors of workaholic nurses' job satisfaction are presented in Table 5.

The results presented above confirm the multidimensional perspective of the examined area of job satisfaction among workaholic nurses. The obtained results allow for the identification of not only its key dimensions but also indicate the mutual relationships between the factors describing it.

Discussion

Today, there is no need to convince anyone that a satisfied employee is simply more productive [22]. They not only perform better at work but, in the context of healthcare, what is most important is that the job satisfaction of healthcare professionals is directly related to patient satisfaction with the care they receive during hospitalisation (Akinwale and George, 2020). Therefore, managers should make every effort to ensure a high level of job satisfaction among their employees, as it will improve work efficiency and, consequently, provide better patient care [22]. Low job satisfaction contributes to neglecting some tasks in patient care, which can lead to adverse events and a general decline in the quality of services provided by nursing staff [3]. Research shows that a decrease in job satisfaction can have a significant impact on the level of patient care because high-quality nursing care typically correlates with high levels of job satisfaction [3]. Considering that job satisfaction is one of the positive and significant consequences of work engagement [24,25], the study focused on a group of workaholic nurses as the research subjects. The results obtained (average value of 3.9 on a five-point scale) confirm a higher level of job satisfaction in the surveyed group compared to the results obtained in the general population of nurses (average value of 3.5 on a five-point scale) [12]. This is also confirmed by other studies [26,27]. However, it is essential to remember that workaholism is an organisational [26] pathology and, in the long run, carries negative consequences. This can also lead to the reversal of this positive relationship between work engagement and job satisfaction [28]. Similarly, this happens when greater work engagement is mandated

by law or policies adopted during times of increased demand for healthcare staff [29] (e.g., during a pandemic, with existing shortages in the nursing workforce, or rising societal needs due to an aging population). The results indicate a higher level of job satisfaction among workaholic nurses than in the general population of nurses. However, due to the lowest values obtained for factors identified in the literature [12,27,29] as significantly influencing job satisfaction, such as FATIGUE, TRUST SUPERIOR, BRAGGING JOB, these results are not as optimistic. These are factors primarily influenced by the management team, their competencies, and the way they communicate with the team [13,30,31]. It is essential to recognise that low job satisfaction is often linked to a lack of communication within the team or even a lack of support from colleagues and supervisors [32]. Low job satisfaction among nurses can lead to more frequent absences, ultimately resulting in lower quality care provided to patients Plevová et al., "The Relationship between Nurse's Job Satisfaction and Missed Nursing Care." [3,33,34].

In the surveyed group, statistically significant correlations between job satisfaction, its describing factors, and sociodemographic variables, as described in the literature [2,34-36], were not confirmed.

The aim of the study was to develop a model describing job satisfaction in the surveyed group. The highest values were obtained for the workaholic nurses' job satisfaction model in which the following factors were found to be most significant: *Perspectives At Work, Bragging Job, Trust Superior, Trust In Colleagues, Interest In Finance, Competencies Of Others, Readiness, Weariness*. Thus, previous reports on the importance of each of these factors in the overall level of job satisfaction have been confirmed [37,38].

The model approach to key dimensions of job satisfaction allows management to easily adapt research results to practical applications aimed at improving job satisfaction in the future. This is important because, in addition to the fact that low job satisfaction is associated with an overall decrease in nursing care [3], job satisfaction itself is positively correlated with the intention to stay in a particular workplace [39,40] and negatively with nurses' turnover intentions [41]. The methodology used in this survey can also assist nursing leaders in visualising not only the current state of affairs but can also be helpful in the optimal allocation of human resources in the future. Regular surveys of healthcare professionals' job satisfaction provide essential information for effective decision-making processes, and analysing this data allows for targeted actions aimed at improving the functioning of the healthcare system. The results of the survey are primarily a point of reference for improving the professional satisfaction of nursing staff.

Limitations

As with other cross-sectional studies, some limitations were identified, including: 'definition of the type of workaholic', therefore they require further research.

Conclusions

The results of the survey indicate that workaholic nurses are characterised by high levels of job satisfaction. However, due to the pathological nature of workaholism, the results obtained should not be interpreted solely in a positive dimension. The findings resulting from the survey can serve as a basis for better understanding and assessing job satisfaction in the context of nursing care in the country. They provide a starting point for

decision-making in the area of human resource management in a dynamically changing environment. The model developed identifies eight key factors characterising the job satisfaction of workaholic nurses, providing a convenient framework for adapting research results to managerial practice in various areas of human resource management. Regardless of the health care system adopted at national level. At the same time, it allows for the consideration of the specifics of each healthcare institution.

The results obtained can help in promoting the role and significance of job satisfaction in the nursing work process, which will ultimately result in improving access to high-quality nursing care.

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