

Nursing satisfaction in county hospitals at the closing of health system reform round

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Abstract

Nurses are key actors in the healthcare sector and their satisfaction is essential for patient care delivery. Assessing their professional satisfaction at the closing of a national health system reform round is therefore vital. This cross-sectional study estimated the relative importance of professional satisfaction components, evaluated the overall level of job satisfaction among nurses, and examined how the components of their perceived satisfaction vary with demographic variables. A total of 276 registered nurses from three (3) county hospitals across Jiangsu Province in China were surveyed using the Index of Work Satisfaction scale. Multiple regression models represented as structural equation models were used to estimate the effects of demographic variables on each dimension of job satisfaction. Nurses appeared to be more satisfied with their pay and professional status but dissatisfied with their task requirements and interactions. Statistically significant correlations were also found between nurses' age and years of experience and some job satisfaction components. At the end of this health system reform round, the overall level of satisfaction among nurses is still low, showing a slim contribution to the new transformations. The findings and recommendations may provide clues to help nursing managers implement informed strategies and address critical issues to increase nurses' satisfaction.

Index Terms- County hospitals, Health System, Index of Work Satisfaction, Multiple Regression, Registered Nurses.

I. INTRODUCTION

Job satisfaction expresses how happy a worker is, content with, or enjoys his or her job (Jun & Jo, 2016). It has also been defined as the degree of positive affect towards a job or its components or as a pleasurable and positive emotional state resulting from the affection and the appreciation that someone has about his or her job experience (Nehrir, Ebadi, Tofighi, Karimi, & Honarvar, 2010; Zangaro & Soeken, 2007). P. L. Stamps (1997) understood it as the degree to which workers appreciate their jobs and have a positive or negative attitude towards them. Nursing satisfaction has been discussed a lot in the literature, but as long as the nursing profession exists, taking an interest in their well-being remains important (Chien & Yick, 2016). Focus on nursing satisfaction traces its way long back in the '40s when Nahm, conducted the first significant study on job

satisfaction among nurses at the University of Minnesota (Andriotti et al., 2017). Subsequent researches have shown that many different factors drive nurses' job satisfaction and the common ones include workload, leadership, and support (Lundmark, Nordin, Yepes-Baldó, Romeo, & Westerberg, 2020), environmental and demographic characteristics (K. Liu et al., 2012; Tao, Guo, Liu, & Li, 2018), communication or interaction, autonomy (Itzhaki, Ea, Ehrenfeld, & Fitzpatrick, 2013), promotion, educational training and improvement, internal policies, insurance and safety, schedule flexibility, salary and fringe (George & Zakkariya, 2015; Linh, Jin, Kiong, & Fah, 2016; L.-F. Zhang et al., 2014). The role that nurses play in any given society is no longer to be demonstrated, as they provide services and help patients with their health issues around the clock (Thorne, 2020; Tourangeau, Patterson, Saari, Thomson, & Cranley, 2017). They must then be in a perfect state of mind, without worries and anxieties to avoid costly or irreversible mistakes (Riklikien, Krušinskait, Gatautis, & Bagdonait, 2015). It has been demonstrated that nurses' commitment, service quality, and retention are related to their job satisfaction, for when they are satisfied, they have that inner drive which prompts them to perform well and achieve personal and collective goals (Ijadi Maghsoodi, Abouhamzeh, Khalilzadeh, & Zavadskas, 2018; Y. Wang, Chang, Fu, & Wang, 2012; A. Zhang, Tao, Ellenbecker, & Liu, 2013). Contrariwise, nurses whose needs are not met at the workplace tend to be low productive and could experience some level of work stress and burnout that can impoverish their health, cause them to make a poor clinical judgment, endanger their lives, and those of the patients under their care (H. Wang et al., 2020). Likewise, nursing professional dissatisfaction is generally associated with a high turnover rate leading to workers shortage in medical organizations (Riklikien et al., 2015; Yıldız, Ayhan, & Erdoğan, 2009; Yun, Jie, & Anli, 2010).

However, many studies have focused on examining the extrinsic (environmental, physical, and social) factors that can influence job satisfaction (Hayes, Douglas, & Bonner, 2015; L.-F. Zhang et al., 2014). Still, it has been argued that workers can experience different levels of job satisfaction while having the same job and working in the same environment (Spector, 2006). Some authors have attributed that difference to intrinsic factors such as personal characteristics (Curtis, 2008). Besides education, age, and years of experience have been generally associated with job satisfaction. Results from some studies on the relationship between age, years of experience, and nurses' job

satisfaction showed a proportional relationship (Curtis, 2008; Eberhardt, Pooyan, & Moser, 2012; Hayes et al., 2015; Hu & Liu, 2004; Qu & Wang, 2015; Ramoo, Abdullah, & Piaw, 2013), while others showed a disproportional (Agho, 1993; Baggs & Ryan, 1990) or no (Oermann, 1995) correlation between nurses' job satisfaction, age, and years of experience.

In the context of China, the health system has been repeatedly criticized for its imperfections and inequalities (La Forgia & Yip, 2017; Yun et al., 2010; T. Zhang, Xu, Ren, Sun, & Liu, 2017). Nurses who constitute the largest hospital workforce complained of being marginalized for the benefit of doctors. For hospitals (which are more than 60% self-funded), physicians have been considered as a source of gain through a shot up of consultations, treatments, and medications prices (La Forgia & Yip, 2017; Milcent, 2016). With the high rate of nursing shortage due to the increasing turnover Chinese hospitals are facing now, hospital managers tend to recruit more contract-based nurses. It has been reported that contract-based nurses already represent more than 54% of nurses in Chinese hospitals (Shang et al., 2014). For instance, 59% of the participants in this study had a contract-based employment status. Moreover, they don't enjoy the same benefits (permanent contract, fixed income, health insurance, housing, and retiring allowances) as formally employed nurses and their pay and job-related benefits can vary between employers (Shang et al., 2014; Yun et al., 2010). This is a considerable threat to their retention since Chinese nurses are more and more highly educated by holding a bachelor's degree or above, which is an asset for better work positions. In our cohort, for example, 75% of nurses are university graduates. On the other side, patients also complained of the fact that healthcare services were not easily accessible and affordable (Meng, Mills, Wang, & Han, 2019; Milcent, 2016; Yau et al., 2012; Yun et al., 2010). It was therefore necessary to find a balance between those who provide health care and those who receive care. To remedy this, the Chinese central government instructed reforms to the health system. After the first one (1996-2007) had failed, especially with the outbreak of severe acute respiratory syndrome (SARS) in 2003 which still exposed its limits, a second-round was launched in 2009. The primary purpose of this second reform round was to make the healthcare services equitable and more accessible to all and to provide people with better financial health protection by 2020 (Meng et al., 2019). The reform also advocates the old market-centered care system to be progressively replaced by a patient-centered care system, where more efforts are orientated towards providing high-quality care services (A. Zhang et al., 2013). Indeed, finding a balance between patient satisfaction and that of the medical care providers is not easy, because while the emphasis is on one, the other will feel neglected. With the rapid economic growth and development of the Chinese society, nurses in their daily professional life have to cope with a competitive and hostile environment and requirements of performances and adaptability that are increasingly tough, and above all, they must provide quality service (Guo et al., 2016). This only confirms that the nursing profession is one of the most stressful works (Chan, Lai, Ko, & Boey, 2000). Likewise, as reported by many studies, nurses' job dissatisfaction is exacerbated by their work stress (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Ellenbecker, Porell, Samia, Byleckie, & Milburn, 2008; Kalkidan, Moges

Wubie, & Cheru Tesema, 2018; Ma, Samuels, & Alexander, 2003; Tourangeau et al., 2017; Vander Elst et al., 2016; Yun et al., 2010). With all this in view, one wonders how Chinese nurses manage to appreciate their job, or are there still some aspects of their job that they would like to see improved, to work under better conditions that allow them to flourish and produce the expected results?

Although some studies have been devoted to nurses' job satisfaction in China (Chien & Yick, 2016; Hu & Liu, 2004; Tao et al., 2018; A. Zhang et al., 2013), few focused on how it varies with biographic variables such as age and year of experience. This especially with the rampant number of contract-based nurses in Chinese hospitals, who do not enjoy the same privilege as formally employed nurses. Additionally, the search for understanding the dimensions involved in the satisfaction or dissatisfaction experienced by Chinese nurses remains an ongoing area of interest for nursing managers and healthcare policymakers, because of their contribution to the stability of the health system. This study then intended to estimate the overall level of job satisfaction among Chinese nurses and determine the job components for which they are more satisfied or dissatisfied at the end of the reformation period, as a consequence of significant transformations in their workplace. Moreover, the effects of their age and clinical experience on the elements of their perceived job satisfaction were investigated. The findings of this research may provide clues to help nursing managers and policymakers implement informed strategies and address critical issues to increase nurses' satisfaction and guarantee their retention

II. MATERIALS AND METHODS

2.1. Study design

A descriptive and cross-sectional study was carried across Jiangsu province, using questionnaires to collect data. The province was divided into three main zones (northern, middle, and southern) and a purposive sampling approach was used to select three second-level hospitals, such as one in each zone. Second-level hospitals are hospitals found in small cities at the county or district level with medium size (100-500 beds), which offer comprehensive medical and healthcare services (A. Zhang et al., 2013).

2.2. Data collection and participants

A two-part questionnaire form was designed and sent to the selected hospitals between June-August 2019. The survey package also contained a cover letter stating the purpose of the study and assuring participants that it was voluntary and anonymous. The questionnaires were translated from English to Chinese to avoid communicational issues. Prior to the actual data collection, a pilot study was conducted in one county hospital on a sample of 10 nurses, to refine and clarify the instrument and ensure that there was no ambiguity in the questions and for the Chinese health system context. With the help of the nurses' administrators of the targeted hospitals, 300 volunteer nurses were recruited for the study. Registered nurses (RNs) who had been working for at least one full year were eligible to willfully participate in the survey. After completion of the survey

questionnaire, nurses were supposed to seal their responses in a self-address return envelop provided in the survey package, and deposit it in the nursing office mailbox. A total of 276 responses were received from registered nurses who consented to respond and mail the questionnaire, for a response rate of 92%.

2.3. Instruments

The survey questionnaire included a self-designed socio-demographic information questionnaire and the Index of Work Satisfaction (IWS) questionnaire. The collection of the socio-demographic information was essential to identify social and personal factors that may influence or be related to nurses' job satisfaction. The socio-demographic information consisted of gender, age, educational level, wards, clinical experience, and employment status.

The Index of Work Satisfaction (IWS) questionnaire is one of the few models providing a comprehensive framework to assess nursing job satisfaction. This model has been widely cited and used in nursing research (Ahmad, Oranye, & Danilov, 2016; Hayes et al., 2015; Itzhaki et al., 2013; Oermann, 1995). It was developed by L. Stamps & Piedmont (1986), based on a critical review of occupational theories in the social sciences and a series of interviews with nurses. They intended to develop a valid and reliable scale to get a quantitative estimation of the extent to which nurses appreciate their job (P. L. Stamps, 1997). The IWS is a two-part measurement tool that assesses job satisfaction based on six components. Part A of the IWS questionnaire is a paired-comparison technique which consists in calculating the impact that each component has on the overall satisfaction of the nurses surveyed. This part is made of fifteen pairings of the six components, and participants are asked to choose one component from each pair that influences the most their level of satisfaction. Part B estimates the satisfaction level for each component as well as the overall level of satisfaction. It consists of randomly ordered 44 items with positively and negatively worded statements distributed among the six component: payment (six items), autonomy (eight items), task requirements (six items), organizational policies (seven items), professional status (seven items) and interactions (ten items), subdivided into two subscales: nurse-nurse interaction (five items) and nurse-physician interaction (five items).

Responses were scored on a seven-point Likert scale, going from "strongly agree" (7) to "strongly disagree" (1) for the negatively worded statements and from "strongly disagree" (1) to "strongly agree" (7) for the positively worded statements (the wording style was considered only during the analysis).

2.4. Validity and reliability

The IWS questionnaire content validity and construct validity have been established through factor analysis. The Cronbach's alpha of the original scale ranged from 0.82 to 0.91, with the reliability of the overall score being 0.81 (P. L. Stamps, 1997). Multiple studies have reported that the IWS scale is valid and reliable, the Cronbach's alpha of its subscales ranging from 0.50 to 0.92 (Ahmad et al., 2016; Hayes et al., 2015; Itzhaki et al., 2013). For instance, in their study titled "Meta-analysis of the reliability and validity of Part B of the Index of Work Satisfaction across studies," the authors concluded that the IWS was reliable and valid in different settings, including community

and acute care hospitals, universities, and multisite studies (Zangaro & Soeken, 2005). In the present study, the total scale Cronbach's coefficient alpha was 0.864, indicating a valid degree of reliability and internal consistency.

2.5. Data analysis

Descriptive statistical estimators were computed to examine the sample characteristics using the Statistical Package for Social Sciences (SPSS v22). The scoring procedures described in the workbook for the Index of Work Satisfaction questionnaire were applied to evaluate the perceived importance of job satisfaction components. Onyx (version 1.0-1010) was used to perform multiple regression modeling as structural equation models and estimate fitness indicators (Oertzen, Brandmaier, & Tsang, 2015). Confidence intervals and P-values for estimating the parameters were subsequently estimated using the Laavan package (version 0.6-5) in R software (version 3.6.2). The level of significance was set to $P < 0.05$.

2.6 Ethical Statements

The Ethical Review Committee of the University approved the conduction of this study. An introductory text on the questionnaire informed the nurses about the study's purposes and clearly stated the participation conditions, the willingness, the anonymity, and other ethical aspects of the study. The Index of Work Satisfaction (IWS) questionnaire and the scoring manual originally developed by Paula Stamp were purchased from the Market Research Street, Inc., the full-service agency in charge. Consent was obtained to use the copyrighted Index of Work Satisfaction and to adapt it to the needs of the study.

III. RESULTS

3.1 Demographic characteristics of registered nurses

The demographic characteristics of the respondents are summarized in Table 1. The participants were nearly all female (97.82%). The age range of RNs was 23 to 49 (mean age 33.43 years). Their clinical experience ranged from one to twenty years (mean 10.25 years and a standard deviation of 5.57 years). Regarding education, 75.00% graduated from university, and 25.00% had a professional diploma. The majority of participants work in the internal medicine ward (30.00%) and the surgical department (28.00%). As for the employment status, 59% of the nurses are contract employed, while 41% are formally employed.

3.2 Perceived importance of job satisfaction components among RNs

Figure 1 presents the results from part A of the questionnaire and shows the perceived level of importance of job satisfaction components by RNs. The component of job satisfaction ranked as the most important by the nurses was pay (weight = 3.525), followed by professional status (weight = 3.330) and task requirements (weight = 3.113). Autonomy obtained a score of 2.953, interactions a score of 2.871, and organizational policies a score of 2.809. participation were also greater than the associated latent variables correlations (see Table 2).

Table 1. Validity and reliability of the scales

Variables	Category	Total (N= 276)	Proportion (%)
Gender	Male	6	2.18
	Female	270	97.82
Age	23-25	40	14.50
	26-35	142	51.50
	36-45	72	26.10
	46-49	22	7.90
Clinical experience	1-5	69	25.00
	6-10	80	29.00
	11-20	127	46.00
Educational level	Professional diploma	69	25.00
	University education	207	75.00
Ward	Intensive care unit	23	8.41
	Medical ward	83	30.00
	Obstetrics and Gynecology ward	31	11.31
	Operation room	16	5.79
	Outpatient department (OPD)	24	8.69
	Pediatrics	11	4.13
	Surgical ward	78	28.00
	Other	10	3.67
	Employment status	Contract employed	163
Formally employed		113	41.00

Table 3. Levels of job satisfaction components and overall IWS

Component	Weighting Coefficient (Part A)	Component Scale Score (Part B)	Component Mean Score (Part B)	Adjusted Scores
Pay	3.525	20.420	3.440	12.126
Autonomy	2.953	26.790	3.350	9.893
Task Requirements	3.113	18.340	2.290	7.129
Organizational Policies	2.809	27.640	3.460	10.770
Professional status	3.330	26.940	3.370	11.222
Interaction	2.871	34.570	3.460	9.934
Nurse-Nurse	-	18.500	3.700	-
Nurse-Physician	-	16.070	3.200	-
Total Scale Score: 154.700 (range: 44-308)		Mean Scale Score: 3.228 (range: 1-7)		Overall IWS: 10.179 (range: 0.9-37.1)

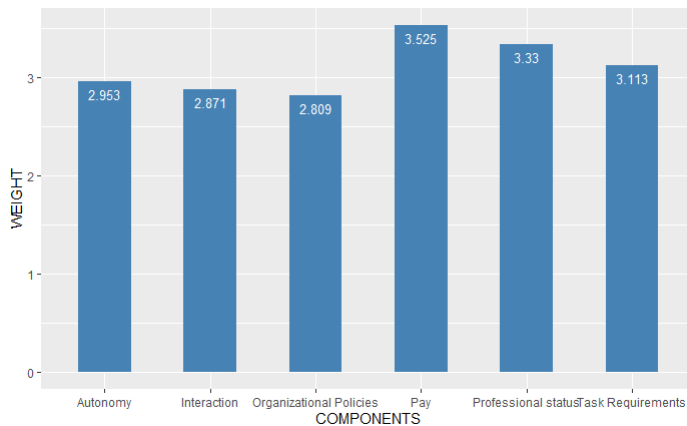


Figure 1. Relative importance of job satisfaction components among RNs

3.3 Levels of job satisfaction components and overall job satisfaction

The IWS components scores for part B are shown in Table 2. Chinese nurses in county hospitals were most satisfied with their pay (score = 12.126) and their professional status (score = 11.222). They were the least satisfied with their task requirements (score = 7.129) and their interactions (score = 9.934). The organization policies component obtained a score of 10.770, while the autonomy component yielded a score of 9.893. Overall, the Index of Work Satisfaction for all the participant nurses is low (IWS score = 10.179), falling in the first quartile.

3.4 Relationship between demographic characteristics and job satisfaction components

The above results are useful for understanding what dimensions of their satisfaction the RNs value most, and the overall satisfaction level of nurses in our cohort. However, they do not tell us how demographic variables such as age and the number of years of clinical experience affect job satisfaction components. To this end, further multiple regression analyses modeled as SEM were performed to evaluate the effect of age and years of clinical experience on the perception of job satisfaction components. We experimented with six different models, and their path analysis results are shown in Figure 2. All the models produced acceptable fit to the sample data as shown by numerous goodness-of-fit statistics, and the hypotheses were examined based on standard coefficients and p-values. Fitness indicators and estimates of regression coefficients are given in Table 3.

There were statistically significant positive relationships between age and years of experience and the perception of job satisfaction for some components, including organizational policies ($\beta = 0.18, p = 0.041$ for age, $\beta = 0.23, p = 0.001$ for experience), task requirements ($\beta = 0.28, p = 0.043$ for age), and interactions ($\beta = 0.47, p = 0.04$ for age, $\beta = 0.39, p = 0.007$ for experience). Little but statistically significant reverse relationships were found between age and years of experience and the job satisfaction components pay ($\beta = -0.08, p = 0.035$ for age, $\beta = -0.12, p = 0.048$ for experience), and professional status ($\beta = -0.16, p = 0.015$ for age, $\beta = -0.09, p = 0.025$ for experience). No statistically significant relationships were found for a few paths, as can be seen in Table 3.

The R^2 obtained for the six models show that 49.6% of the variance in the perceived satisfaction with pay, 46.7% of the

variance in the perceived satisfaction with autonomy, 45.2% of the variance in the perceived satisfaction with task requirements, 58.8% of the variance in the perceived satisfaction with organizational policies, 51% of the variance in the perceived the satisfaction with professional status, and 46.7% of the variance in

perceived satisfaction with interactions, can be explained by the two demographic variables (age and years of experience)..

Model fit: ($X^2 = 518.983$; df

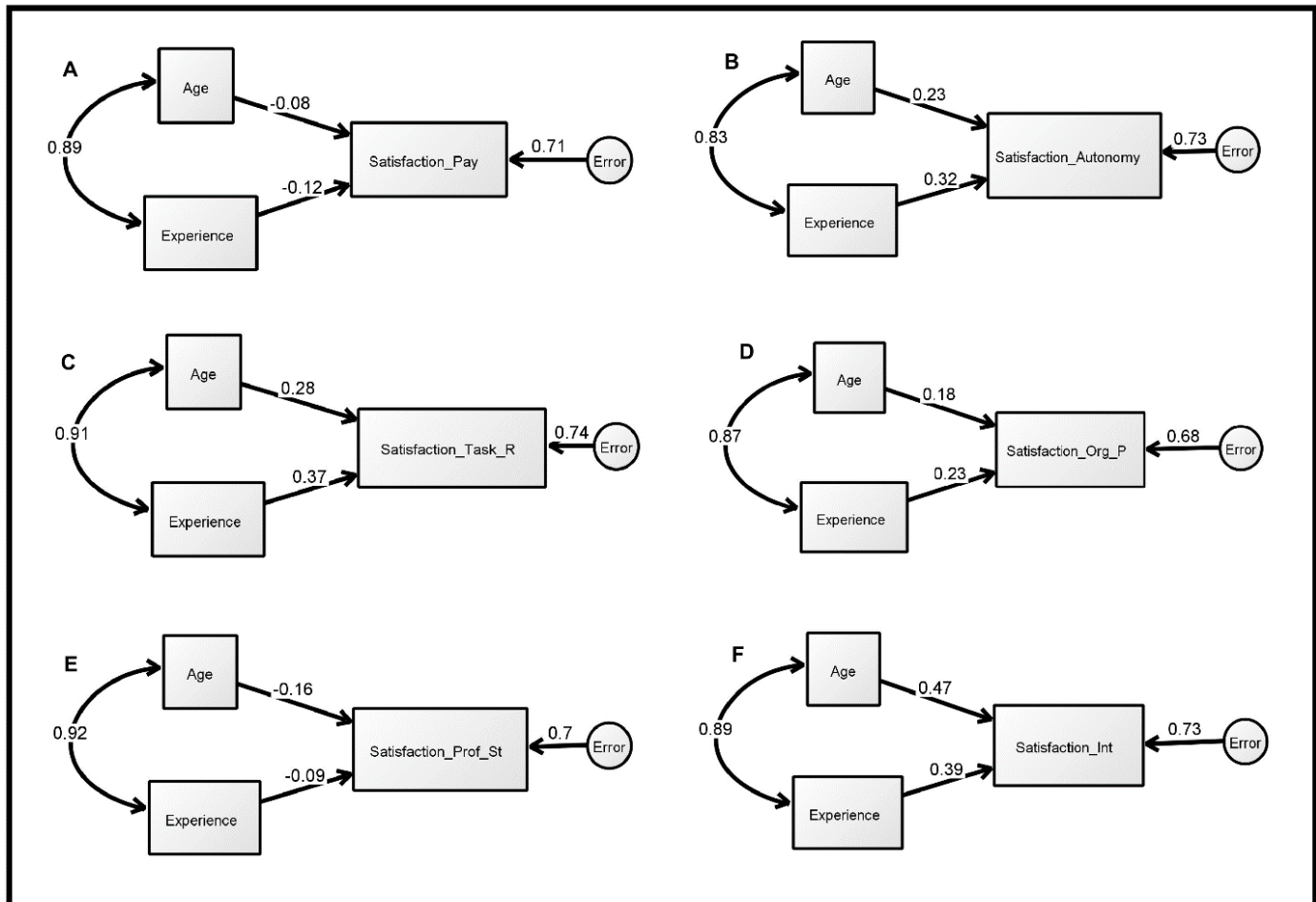


Figure 2: Multiple regression models for evaluating the effects of demographic variables on job satisfaction components

IV. DISCUSSION

In this paper, the perceived importance of job satisfaction components was assessed as well as the overall level of job satisfaction among Chinese nurses. Moreover, the variations of the levels of job satisfaction components with the age and clinical experience of the nurses were also investigated. At the closing year of this round of the health system reform in China, the results show that the nurses perceived the new policies brought by the reform as the least contributing factor to their general satisfaction. Besides, the overall level of job satisfaction was found to be low (IWS = 10.2 points).

Several studies aiming at evaluating the professional satisfaction of nurses in various provinces of China and

conducted before or at the beginning of the current round of health system reform have also reported a low level of nursing satisfaction. For example, Lu, While, & Louise Barriball (2007) surveyed 512 nurses in Beijing (before the ongoing reform round) and reported that 79.2% of nurses were dissatisfied with their jobs with low salaries being the leading cause. In the early beginning of the current reform, similar results were found by Ning, Zhong, Libo, & Qiuji (2009) in Harbin, where 650 nurses from six hospitals were surveyed, and the main reasons for their dissatisfaction were a heavy workload and insufficient compensations. An investigation of 2,250 nurses from 19 general hospitals in Shanghai revealed that the majority of the nurses were dissatisfied with their jobs for several reasons including the absence of extra rewards and fringe benefits, the lack of annual leave right, and low salaries (C. Liu et al., 2012).

Table 3: Fitness indicators and estimates of regression coefficients

Model	SRMR	CFI	SRV	R ²	Path name	β	95% CI	P-value
A	0.001	1.00	0.50	0.4959	-	-	-	-
					Age → Pay†	-0.08	[-0.14, -0.06]	0.035*
					Experience → Pay†	-0.12	[-0.16, -0.07]	0.048*
B	0.001	0.99	0.53	0.4671	-	-	-	-
					Age → Autonomy†	0.23	[0.17, 0.29]	0.059
					Experience → Autonomy†	0.32	[0.21, 0.34]	0.065
C	0.001	0.98	0.54	0.4524	-	-	-	-
					Age → Task requirements†	0.28	[0.17, 0.29]	0.063
					Experience → Task requirements†	0.37	[0.29, 0.40]	0.043*
D	0.002	0.99	0.46	0.5376	-	-	-	-
					Age → Policies†	0.18	[0.10, 0.21]	0.041*
					Experience → Policies†	0.23	[0.18, 0.26]	0.001*
E	0.000	0.99	0.49	0.51	-	-	-	-
					Age → Professional Status†	-0.16	[-0.21, -0.03]	0.015*
					Experience → Professional Status†	-0.09	[-0.17, -0.07]	0.025*
F	0.000	0.98	0.53	0.4671	-	-	-	-
					Age → Interactions	0.47	[0.41, 0.50]	0.040*
					Experience → Interactions	0.39	[0.31, 0.42]	0.007*

SRMR: Standardized Root Mean Square Residual, CFI: Comparative Fit Index, SRV: Standardized residual covariance, R2: Coefficient of determination, β: Standardized coefficients, †: Observed level of satisfaction concerning a given component; for example, pay † denotes the observed level of satisfaction concerning the component pay.

In a study conducted among 524 Chinese nurses working in five first-class tertiary hospitals in Tianjin, Yang, Liu, Chen, & Pan (2013) reported a mean level of job satisfaction of 2.51, using the Minnesota Satisfaction Questionnaire (MSQ). While the MSQ and the IWS questionnaire used in this study operate on different scales, the overall level of job satisfaction in these two studies falls in the first quartile. A more recent study conducted on a sample of 11,337 nurses from 92 hospitals across mainland China by Wu et al. (2018) showed a little improvement in the nurses' level of satisfaction mainly influenced by a more conducive working environment. While nurses in the current study did not perceive the changes brought by the reform in organizational policies as very important for their satisfaction, more experienced and older nurses were found increasingly more satisfied with this component, suggesting that the new policies were somewhat effective in this respect.

Nurses in Jiangsu Province perceived pay and professional status as more important to their job satisfaction and were more satisfied with these two components. These results seem a little surprising since, in most of the above comparison

studies, nurses were more dissatisfied with their pay compared to nurses surveyed in this study who seem to appreciate their salary. A possible explanation for this could be the fact that about 46% of participants have been working for more than 10 years and some of them could own a managerial position with more advantages, bonuses, and fringes benefits. Although the nurses were most satisfied with these components, however, their satisfaction with these components was found decreasing with age and professional experience. This finding disagrees with some studies early mentioned in this paper, where younger and less experienced nurses were found less satisfied compared to their older colleagues. A study by Curtis (2008) on the impact of biographical variables on job satisfaction among nurses in Dublin, Ireland, showed that nurses under 35 years old were less satisfied than nurses over the age of 36. Other studies among Chinese (Hu & Liu, 2004), Australian (Hayes et al., 2015), and Malaysian nurses (Ramoo et al., 2013) revealed that job satisfaction and nurses' intention to leave had a significant association with age and work experience influencing that relationship; younger nurses and those with shorter work

experience had lower satisfaction. Similar results were reported by Qu & Wang (2015) in their study of a sample of Chinese nurses, in which those under the age of 30 and those with less than five years of clinical experience had a lower level of satisfaction associated with burnout. But this finding corroborates with those of Baggs & Ryan (1990) and Agho (1993) who also found that job satisfaction was higher for younger nurses and those with less experience and lower for the older and the more experienced ones. A plausible explanation of this finding is that with growing age and experience, nurses might have lost their initial motivation when they saw their expectations not being met and their personal goals as related to their profession not being achieved.

The dissatisfaction of older nurses with their professional status could be explained by the fact that our experimental data sample is composed of 59% of contract-based nurses and 46% having worked for more than ten years. The preceding round of national reform has brought some changes to nursing employment in China. Formally employed nurses enjoy a position with state-guaranteed lifetime employment, opportunities for career development, and other benefits, while there is a more significant number of contract-based nurses, with limited opportunities and, job security, low wages, and benefits. Contract employed nurses tend to be more dissatisfied with their professional status and salary, compared to state-employed nurses who have more advantages (Hu & Liu, 2004; Shang et al., 2014).

In this study, the first area of nurses' dissatisfaction was with their task requirements. However, it is some glimmer of hope here as their satisfaction with this component slightly increased with experience. Given the context of nursing shortage in China due to the high rate of turnover in recent years, nurses are assigned different, multiple responsibilities, making their workload heavier and more complex (Yau et al., 2012). The absence of a clear description of their role and tasks may result in some confusion as to what they are expected to do at any given moment or situation, which in turn may increase their level of stress.

The second component for which nurses were dissatisfied is interactions. Interactions among nurses have been shown as one of the most critical determinants of professional quality of life and job satisfaction (Bagheri et al., 2018). Conflict at the workplace has also been identified as an essential source of job dissatisfaction among nurses (Itzhaki et al., 2013; Masood & Afsar, 2017). As a profession, nursing is associated with diverse and conflicting demands from unit managers, supervisors, physicians, the executive staff, and even patients and their families (Alshehry et al., 2019). However, when assessing their success and their achievement in the work setting, Chinese nurses highly value their interpersonal relationships with physicians (Chien & Yick, 2016).

The third area of less satisfaction among nurses, which is close to the previously discussed, is autonomy. The lack of autonomy of nurses has already been reported in China, in comparison with Western countries. Li & Lambert (2008) found in their investigation that Chinese nurses think they lack autonomy compared to nurses in Western countries. In China, nurses rely more on physicians for directions in their practices. Some nurses have complained of being verbally abused and not

respected by patients and their relatives, and sometimes by physicians (Li & Lambert, 2008; Yau et al., 2012). With the overall improvement of the national economy and Chinese citizens' lifestyle, the pressure on nurses by patients and their families for a better quality of care services could be higher. The same issues were found in the USA by Wright & Khatri and Khatri (2015) in their study, where they reported that nursing practice was almost compromised due to workplace incivility between nurses and colleagues, supervisors, patients and their relatives. Independence in decision making makes nurses feel that they have the authority and the responsibility to make appropriate decisions about patient's care in any given situation. Besides, autonomy develops in them the satisfaction of being trusted by the physician and the feeling that their contribution is appreciated and that their qualification is recognized.

4.1. Limitations

This research had some limitations. The IWS questionnaire used in this study was initially designed to estimate the level of job satisfaction in a single organization. However, in this study, it was used to measure the level of job satisfaction across hospitals located in different cities of Jiangsu province. Thus, the results may be biased by some heterogeneities between hospitals and their surroundings. Data were collected from county hospitals that have approximately the same characteristics across the province to reduce this effect. Another limitation is that the data were collected in county hospitals only; the perceived level of job satisfaction reported by these respondents may not be representative of those of other types of hospitals or areas in Jiangsu province. More importantly, a comprehensive assessment of nursing satisfaction in China at the current time should include all hospitals and nurses across the entire nation. Though robust and more accurate, however, such an approach requires resources beyond those available for this study. This limitation might affect the generalizability of our findings. Thus, future studies could assess nursing job satisfaction and its components in other provinces of mainland China, considering the new and challenging context of the COVID-19's outbreak.

4.2. Implications for clinical practice

The results of this study are pointers to healthcare leaders and policymakers as to how do they need to consolidate the positive aspects of the reform and address the areas that need improvements as far as the job satisfaction, and professional well-being of nurses are concerned. The study revealed that nurses' satisfaction with pay and professional status was found decreasing with age and clinical experience. Alleviating older nurses' dissatisfaction could be done by reviewing the bonuses and other benefits related to their age and seniority. Additionally, reconsidering the clauses of the Nursing Regulation published by the Ministry of Health in 2008, emphasizing on "equal pay for equal work" could help to eliminate the disparities and inequalities among nurses, reduce the dissatisfaction with salary and benefits of contract-based nurses and strengthen the adequacy and stability of hospital nurse workforce in years to come (Shang et al., 2014).

Nurses were also found to be dissatisfied with their task requirements, interactions and complained about not having enough autonomy. Training and recruiting more nurses,

clarifying, and rationalizing nurses' tasks and workload could be an effective way to improve nurses' satisfaction in the future. Hospital managers need to consider significantly the workplace incivility and employ proven methods for avoiding or resolving conflict among the medical staff (Hutchinson, Vickers, Jackson, & Wilkes, 2006). Working in a team of colleagues who support each other and work collectively to improve patients' care can contribute significantly to each member's satisfaction (Masood & Afsar, 2017). Our results also suggest that nurses need more independence in their decision making at work. Hospital managers need to develop an awareness of this and create a working environment that promotes nurses' autonomy and facilitates more balanced, healthier relationships between physicians and nurses.

IV. CONCLUSION

This study investigated the level of job satisfaction and its components among nurses in Jiangsu province, China. Our results indicate that after another round of national health system reform, despite some thin glimmers of hope, the overall level of job satisfaction of nurses is still low. Since dissatisfaction with one's job can lead to increased absenteeism, turnover, and workers shortage, recommendations have been made to improve nurses' satisfaction at the eve of another round of national health system transformations. Although there are some limitations to this study, results can contribute to the understanding of the current situation and serve as a signpost for improving the well-being of nurses. Nurses' professional well-being is not only beneficial for themselves, but for organizations, patients as well as communities. Ultimately, with the outbreak of the COVID-19, it has become more apparent that medical workers, especially nurses are essential to the survival of humanity (Thorne, 2020). But at the same time, it is strange to continue to talk about their lack of satisfaction and to realize that it is a profession whose image is increasingly degraded because of the sometimes-unsuitable working conditions. All believe that the heroism of nurses demonstrated during this health crisis will restore the image of this profession, which will enable them to flourish better and encourage them to continue giving the best of themselves.

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