Job Satisfaction: a quality indicator in nursing human resource management*

SATISFAÇÃO NO TRABALHO: INDICADOR DE QUALIDADE NO GERENCIAMENTO DE RECURSOS HUMANOS EM ENFERMAGEM

SATISFACCIÓN EN EL TRABAJO: INDICADOR DE CALIDAD EN EL GERENCIAMIENTO DE RECURSOS HUMANOS EN ENFERMERÍA

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ABSTRACT
This descriptive study addresses the job satisfaction of nurse managers and clinical nurses working at the Hematology and Hemotherapy Services of a public hospital in São Paulo. The study objectives were to identify the factors that caused job satisfaction among nurse managers and clinical nurses, and support the results in the development of indicators to evaluate the quality of nursing human resource management. The components of the study were: autonomy, interaction, professional status, job requirements, organizational norms and remuneration. Participants were 44 nurses. Data were collected using a Job Satisfaction Index (JSI) questionnaire. In conclusion, this study permitted the identification of the clinical nurse group, which was the most satisfied, with a JSI of 10.5; the managerial group scored 10.0. Regarding the satisfaction levels in regards to the current activity, 88.9% of the nurse managers reported feeling satisfied, as did 90.9% of clinical nurses. For both groups, autonomy was the component with the highest level of professional satisfaction.

DESCRIPTORS
Job satisfaction
Management
Nursing, staff, hospital
Professional autonomy

RESUMO
Estudo descritivo que aborda a satisfação no trabalho de enfermeiros gerentes e assistenciais nos Serviços de Hematologia e Hemoterapia de um hospital público da cidade de São Paulo. Objetivou identificar fatores geradores de satisfação no trabalho de enfermeiros gerentes e assistenciais e subsidiar os resultados para a construção de indicadores para avaliação da qualidade do gerenciamento de recursos humanos em Enfermagem. Os componentes do trabalho foram: autonomia, interação, status profissional, requisitos do trabalho, normas organizacionais e remuneração. Participaram do estudo 44 enfermeiros. O instrumento de coleta foi o questionário Índice de Satisfação Profissional (ISP). Concluindo, este estudo permitiu identificar que o grupo assistencial foi o mais satisfeito, com ISP 10,5; o gerencial totalizou 10,0. Quanto à satisfação com a atividade atual, 88,9% dos enfermeiros gerentes disseram estar satisfeitos, assim como 90,9% dos assistenciais. Para os dois grupos, a autonomia foi o componente de maior nível de satisfação profissional.

DESCRIPTORES
Satisfação no trabalho
Gerência
Recursos humanos de enfermagem no hospital
Autonomia profissional

RESUMEN
Estudio descrittivo que aborda la satisfaención laboral de enfermeros gerentes y asistenciales en Servicios de Hematología y Hemoterapia de hospital público de São Paulo-Brasil. Objetivó identificar factores generadores de satisfacción en el trabajo de enfermeros gerentes y asistenciales y que los resultados respalden la construcción de indicadores para evaluación de calidad del gerenciamiento de recursos humanos en Enfermería. Los componentes del trabajo fueron: autonomía, interacción, status profesional, requisitos del puesto, normas organizacionales y remuneración. Participaron 44 enfermeros. El instrumento de recolección fue el cuestionario Índice de Satisfacción Profesional (ISP). Concluyendo, este estudio permitió identificar que el grupo asistencial fue el más satisfecho, con ISP 10,5; el gerencial alcanzó 10,0. En cuanto a la satisfacción con la actividad actual, 88,9% de los enfermeros gerentes dijeron estar satisfechos, así como 90,9% de los asistenciales. Para ambos grupos, la autonomía fue el componente de mayor nivel de satisfacción personal.

DESCRIPTORES
Satisfacción en el trabajo
Gerencia
Personal de enfermería en hospital
Autonomía profesional

* Taken from the thesis “Satisfação no trabalho: indicador de qualidade no gerenciamento de Recursos Humanos em Enfermagem”, University of São Paulo School of Nursing, 2010. ¹ M.Sc. in Nursing Management Fundamentals and Practices, University of São Paulo School of Nursing. MBA in Strategic Business Administration, EDUCON/USP. São Paulo State Hemotherapy Nurse. São Paulo, SP, Brazil. verathania@hotmail.com ² Full Professor, Professional Orientation Department, University of São Paulo School of Nursing. São Paulo, SP, Brazil. pkurcg@usp.br
INTRODUCTION

The importance of the job satisfaction construct for the organizational behavior area has motivated experts to assess and to try and answer inquiries involving this theme.

Various experts have developed different theories to explain what makes people adopt attitudes, think, act and seek their objectives or targets with a view to achieving satisfaction(1).

Nowadays, competitiveness among institutions increasingly stands out in the international context, making institutions adopt a process focus to redirect them to outcomes. In this context, employees are often challenged to perform tasks they were not trained for, going through constant adaptations.

These changes, even involving paradigms, turn into challenges that can influence the execution of daily tasks, which can make some feel satisfied and others dissatisfied(2).

Herzberg’s Two Factor Theory(3) was the first theory proposed that explained job satisfaction and appointed two groups of factors responsible for job performance: job satisfaction factors, which are motivators, like work itself, performance, promotion and acknowledgement for the work performed; and hygienic factors like supervision, interpersonal relations at work, organization policy and wages which, when precarious, cause dissatisfaction at work.

Regarding job satisfaction, research involving nurses appoints that these professionals seem to be more satisfied with intrinsic aspects of their work, like acknowledgement and responsibility, than with extrinsic aspects like wages...

Job satisfaction is hard to measure, due to the range of aspects involved, and is still considered an attitude variable that reflects how the individual feels towards work in general and its various aspects(4).

Brayfield and Rothe published the eldest job satisfaction measurement instrument and aims to assess general job satisfaction. In Nursing, the primary study on professional satisfaction was published in the 1950’s(5).

In Brazil, in the 1970’s and 1980’s, some instruments were constructed and subject to factor validation. All of them used factorial analysis and demonstrated the multidimensional nature of the construct.

According to pertinent literature, studies about job satisfaction have greatly evolved in the last 20 years. In Brazil, in Nursing, among other job satisfaction experts already cited in this researcher, various authors evidence that the range of concepts with different foci makes it difficult to establish a sole concept for this theme(6).

Various reports have identified different types of professional satisfaction measurement instruments, some of which were specifically developed for Nursing: Job Satisfaction Index; Job Descriptive Index; Job Satisfaction Tool; Job Diagnostic Survey; Job Characteristics Inventory; Price and Mueller’s Satisfaction Instrument; Nursing Job Satisfaction Scale; McCloskey/Mueller Satisfaction Scale; Perceptions of the Nurses’ Workplace Questionnaire; Satisfaction with the Clinical Ladder Scale; Work Quality Index; Job Satisfaction Questionnaire(7).

Despite the lack of a consensus about what instrument to use and in what environments, an instrument is considered appropriate if it can be used in a range of places and cultures and permits comparisons(8). In that context, the changes occurred in companies’ industrial, political, social and economic scenario over time have created new expectations that started to permeate organizational interests.

Organizations started to perceive the importance of integrated work between human resources and other company areas and the need to enrich traditional HR activities like training and development; remuneration; function description and analysis, as these constitute the vital policies in the formulation and practice of quality-centered strategies, reflecting in the entire organization(9).

Today, successful strategies aim to value human resources, which represent their main equity. They are also gaining awareness about the need to invest in training and quality of life at work, as the need to take part in the globalized world in a beneficial way demands healthy, motivated and qualified employees.

Management constitutes an important political instrument, incorporating an articular and interactive nature, that is, management action is determined by and determines the health service organization process, and is fundamental to put in practice social and specifically health policies(10).

Information technology permitted fast information access and offered knowledge which, in combination with practice, permits monitoring measurement instruments, known as quality indicators, which have been widely used in human resource management at health services and other institutions.

In view of this new reality, workers have gone through great changes in work relations, as expectation about workers’ profile have gained evidence, entailing the need for continuous training and recycling, with a view to enhancing their preparation to contribute more efficiently to the global view and correspond to client and employers’ demands.
Indicators are understood as numerical data or information that aim to quantify inputs (resources or raw material), outputs (products) and process and product performance of the organization as a whole. They are used to monitor and improve outcomes over time\(^{[6]}\).

Constructing quality indicators for health service assessment demands support reference frameworks found in the different elements that constitute institutional structures, work processes and care delivery results. Indicators reveal to be fundamental health service assessment instruments, because they are a measurement unit of a related activity, or a quantitative measure that can be used as a guide to monitor and assess care quality and service activities\(^{[7]}\). Thus, this study aimed to: identify the factor that generate job satisfaction among nurse managers and clinical nurses and support results through the construction of Nursing human resource management quality indicators.

**METHOD**

A descriptive study was accomplished at the Hematology and Hemotherapy services of a public hospital, affiliated with the São Paulo City Health Secretary, with the support of a Foundation. This hospital is responsible for high-complexity care delivery to health insurance and Unified Health System clients, contributing to teaching, research and health service delivery to the community.

Approval for the study was obtained from the Institutional Review Board at the University of São Paulo School of Nursing under No 421/2004, the Scientific Committee of Fundação Pró-Sangue Hemocentro de São Paulo under No 11/2008 and the Brazilian Research Ethics Committee under No FR-247858, in compliance with National Health Council Resolution No 196/96\(^{[8]}\). The research that originated this paper refers to Process No 11/2008, without any external funding.

The respondents participated voluntarily and anonymously. Freedom to participate in the research or not, or to cease participating at any time was maintained without any type of loss or sanction deriving from this action.

Each participant received the Informed Consent Term, according to the institutional bond, before data collection, as well as explanations about the importance of its completion and return. The fact that study results could be disseminated in scientific events and/or publications was also mentioned.

The researcher declared her availability to clarify the respondents’ doubts during the research period and provided telephone and e-mail contact information.

Data collection started after the project had received approval from the Institutional Review Boards at the institutions involved. The research personally collected the data between February and April 2009.

For data collection, the researcher personally contacted the participating nurses and provided the orientations and clarification needed.

Study participants included 44 nurses, 10 of whom were nurse managers and 39 clinical nurses. Data were collected between February and April 2009. The questionnaire model used was elaborated in 1972 by Paula L. Stamps, in the USA, who measured the Index of Work Satisfaction (IWS) among intensive care nurses, considering a number of work components (remuneration, professional status, autonomy, organizational policies, work requisites and interaction with the nurse-nurse and nurse-physician subdivisions). In 1999, this model was adapted and validated for the Portuguese language\(^{[5]}\).

For this study, the translated model\(^{[5]}\) was used, with due adaptations for the management model, in order to comply with the study aims. The questionnaire was divided in two parts. Part A comprised 15 paired questions, in which the respondents expressed the degree of importance of each satisfaction component. Part B included 44 questions, in which the respondents manifested the level of satisfaction through a seven-point Likert scale, indicating their degree of agreement or disagreement. The ponderation between both parts represents the Professional Satisfaction Index (PSI)\(^{[2]}\).

The following definitions were adopted for the PSI components: Autonomy – the degree of independence, initiative and freedom, both permitted and necessary, in daily work activities; Interaction – opportunities for formal and informal social and professional contact during work hours; Professional status – perceived importance or significance of one’s work, from the worker’s and other people’s perspective; Work requisites – tasks or activities that need to be performed as a regular part of work; Organizational standards – administrative standards and procedures proposed by the Hospital/Institution and nursing service administration and Remuneration – payment in money and additional benefits received for the work performed\(^{[3]}\). The collected data were organized, categorized, coded and put into a Microsoft Office® Excel 2007 worksheet, and afterwards treated using Statistical Package For The Social Sciences® version 16.0. Sociodemographic and professional data were treated through descriptive statistics and the analysis was based on professional groups.

To determine the PSI, an absolute frequency matrix was created that evidences the most selected components and the importance each participant attributed to that component. Next, the relative frequency was calculated by dividing absolute figures by the number of participants. Percentages were converted into standard deviations, resulting in the Z-matrix. Z-scores cannot be negative, so a +2.5 correction factor was applied to the mean Z-scores. Through the adjustment of the Z-matrix, each component receives a value called the weighting co-
efficient, which measures the level of importance that is attributed.

Regarding the attitude scale score, the component items were grouped and response frequency matrixes were created to analyze response patterns. To determine the total scale score, positive scores were inverted. Next, the response frequency distribution matrixes were established per component, in which the figure the component produces is called the Total Component Score. These values were divided by the total number of components, resulting in the mean scale component scores and, thus, the classification of the current satisfaction level.

The total satisfaction levels were determined by the total sum of the six components, which ranges from 44 to 308. To calculate the mean scale score, the mean scores were added up and then divided by the number of components, which can range from one to seven. The final Professional Satisfaction Index (PSI) resulted from the sum of the adjusted scores for the six components and divided by the number of components. Cronbach’s Alpha was calculated for each component, considering an inverse score for questions that are considered positive.

**RESULTS AND DISCUSSION**

Socio-demographic data analysis appointed the predominance of the female gender: 100% among managers and 97.1% among clinical nurses. Nurse managers’ ages ranged from 39 to 57 years. Among clinical nurses, ages ranged from 25 to 56 years. Time since graduation for both groups ranged from three to 34 years. Regarding a graduate degree, in the manager group, 66.7% hold a specialization degree, against 85.7% in the clinical group. Nursing specialization programs in Hematology and Hemotherapy are recent and not very well known. Only 2.9% of clinical nurses take a graduate program in this specific area.

The data indicate two branches: one refers to the nature of Hematology/Hemotherapy work, which demands specific knowledge and training, and the other refers to participants’ trend to take courses related to the area in which they started their professional activities. It was also observed that none of the nurse managers had taken a specific graduate program in Hematology or Hemotherapy, probably because they had been working at the institution longer.

Regarding satisfaction with their current work as managers, eight out of ten participants answered the question. Eight (88.9%) affirmed satisfaction with their current activity, one (11.1%) affirmed not being satisfied and one did not provide this information. In the clinical group, with 34 participants, 30 (90.9%) affirmed satisfaction with their current activity, three (9.1%) affirmed they were not satisfied and one did not provide this information. In both groups, the majority demonstrated satisfaction with the activity they performed.

<table>
<thead>
<tr>
<th>Group</th>
<th>Component</th>
<th>Weighted Coefficient</th>
<th>Mean score</th>
<th>Adjusted score</th>
<th>PSI*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Management</strong></td>
<td>Autonomy</td>
<td>3.383</td>
<td>4.514</td>
<td>15.271</td>
<td>10.073</td>
</tr>
<tr>
<td></td>
<td>Interaction</td>
<td>2.240</td>
<td>5.033</td>
<td>11.275</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work requisites</td>
<td>2.344</td>
<td>4.167</td>
<td>9.767</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional status</td>
<td>1.617</td>
<td>5.286</td>
<td>8.547</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remuneration</td>
<td>3.487</td>
<td>2.352</td>
<td>8.201</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational</td>
<td>1.929</td>
<td>3.825</td>
<td>7.379</td>
<td></td>
</tr>
<tr>
<td></td>
<td>standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Clinical</strong></td>
<td>Autonomy</td>
<td>3.506</td>
<td>4.357</td>
<td>15.274</td>
<td>10.553</td>
</tr>
<tr>
<td></td>
<td>Interaction</td>
<td>2.518</td>
<td>4.337</td>
<td>10.921</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work requisites</td>
<td>1.812</td>
<td>4.722</td>
<td>8.557</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional status</td>
<td>1.706</td>
<td>5.667</td>
<td>9.667</td>
<td></td>
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<tr>
<td></td>
<td>Remuneration</td>
<td>3.329</td>
<td>2.963</td>
<td>9.864</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational</td>
<td>2.129</td>
<td>4.243</td>
<td>9.034</td>
<td></td>
</tr>
<tr>
<td></td>
<td>standards</td>
<td></td>
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</tr>
</tbody>
</table>

*Global Professional Satisfaction Index (PSI), considering all components

As for the professional satisfaction components (Table 1), regarding autonomy, in this study, a majority in both groups was satisfied with this component. Thus, it can be inferred that these professionals have appropriated themselves of greater independence in their actions, through knowledge, in line with the author’s assertion who appoints and questions nurses’ lack of autonomy, revealing that these professionals will not be satisfied while they cannot practice their profession, using independent knowledge and judgments to the benefit of the patients. Although participants indicated high satisfaction levels in terms of autonomy, they could improve their professional performance if they had further recycling and improvement opportunities, as they are affiliated with a public hospital.

In the same line of thought, autonomy means individual accountability for work or control over professional decisions. It is known that satisfaction is a factor that enhances motivation and professional productivity, stimulating dedication to work and to service quality, which also refers to autonomy. In this respect, nurses use their knowledge and sensitivity when performing this autonomy, contributing to more competent nursing. In the pres-
ent study, the participant groups scored **autonomy** as the most important job satisfaction component.

Both groups assessed **remuneration**, considering satisfaction as perceived wages. The management group scored it as the first item, with an importance level of 3.4, and the clinical group as the second item (3.3). Wage expectations can be inferred, as the place of study is a public institution, whose wage correction policy has been stuck for years. According to the participants’ classification, the data reveal that remuneration is a factor that produces professional dissatisfaction, but is not the main determinant factor of professional satisfaction.

**Interaction**, referring to the nurse-nurse relation, assessed according to Cronbach’s Alpha, which measured item consistency in the questionnaire, showed a consistency level of 0.5 for the management group and 0.6 for the clinical group. Regarding nurse-physician interaction, consistency levels were high (0.8) for both groups. This was the item with the highest consistency level. For this study, Cronbach’s Alpha was considered as 0.5, according to Table 2.

**Table 2** – Internal Consistency Coefficient (Cronbach’s Alpha) for PSI components in the management and clinical nursing groups at the Hematology and Hemotherapy services - São Paulo, February till April 2009

<table>
<thead>
<tr>
<th>Component</th>
<th>Management</th>
<th>Clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>0.547</td>
<td>0.651</td>
</tr>
<tr>
<td>Interaction (General)*</td>
<td>0.831</td>
<td>0.830</td>
</tr>
<tr>
<td>Nurse-Nurse</td>
<td>0.591</td>
<td>0.671</td>
</tr>
<tr>
<td>Nurse-Physician</td>
<td>0.872</td>
<td>0.852</td>
</tr>
<tr>
<td>Professional status**</td>
<td>0.480</td>
<td>0.327</td>
</tr>
<tr>
<td>Work requisites</td>
<td>0.723</td>
<td>0.455</td>
</tr>
<tr>
<td>Organizational standards</td>
<td>0.600</td>
<td>0.311</td>
</tr>
<tr>
<td>Remuneration</td>
<td>0.714</td>
<td>0.750</td>
</tr>
</tbody>
</table>

* Question 10 was excluded to avoid negative Cronbach’s Alpha
** Questions 2 and 41 were excluded to avoid negative Cronbach’s Alpha

Interpersonal relations, one of the components analyzed in this study, were considered as a professional satisfaction element for both groups. In research[14], this component has also been evidenced a source of satisfaction among nurses.

As for **professional status**, in the paired questions, the absolute frequencies both groups attributed to this component were very expressive and satisfactory, corresponding to 0.8 for both groups. It is highlighted that, for this analysis, only professionals who answered parts A and B of the questionnaire were considered.

Regarding **work requisites**, the two groups displayed diverging results for the level of importance they attributed to this PSI component, perceived in the Adjusted Score (Table 1). For the management group, the score was 9.7, against 8.5 for the clinical group. Although the scores were near, for the clinical group, the level of importance attributed to this component obtained the lowest score on the scale. Thus, it is concluded that the management group was satisfied with the work requisites, while the clinical group was less satisfied. This finding is supported in most studies on this component, in which routinization, bureaucratization, inflexibility at work, quantity/burden and care model are causal factors of dissatisfaction[5,14-16]. As **work requisites** are directly related with nursing work conditions and nurses are exposed to occupational risks, stress, among others, the influence of these factors on the clinical group is more enhanced.

Concerning **organizational standards**, the management group revealed the lowest satisfaction level for this component, according to the Adjusted Score of 7.3, while the clinical group scored the same component as 9.0. Both groups demonstrated satisfaction with this component, although the management group showed the lowest satisfaction level for this component, according to Table 1.

Cronbach’s Alpha corresponded to 0.3 for the clinical group, revealing the lowest consistency level for this group (Table 2).

According to the Weighted Coefficient, this component obtains the second lowest level of importance for the management group, with 1.9, and the third least importance level for the clinical group, with 2.1.

Based on these results, both groups classified the level of importance attributed to **organizational standards** as moderate. Adopting the same approach, other studies indicated that hospital management does not pay due attention to the nursing staff, keeping distant from the problems and difficulties nursing faces, resulting in dissatisfaction[16]. The nurses acknowledge the activities they developed at work as important, but demonstrated their dissatisfaction with the work conditions[16].

Thus, an individual who feels gratified for work tends to create a positive relation and identify with the organization. It is through this feeling that individuals feel they are actual members of the organization[17].

It can be inferred that the present study participants may experience the reality presented in different studies as, affiliated with public institutions, health services have faced management and Human Resource management difficulties, resulting in dissatisfaction among their collaborators.

Finally, the analysis of the assessed six professional satisfaction components’ importance revealed the **autonomy** component as the most important item to enhance satisfaction among professionals[5,15,18]. These findings support the present study results, as the two participant groups also scored the autonomy component as the most important job satisfaction item (Chart 1).
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Rev Esc Enferm USP 2012; 46(1):146-52
www.ee.usp.br/reeusp/

<table>
<thead>
<tr>
<th>LEAST IMPORTANT</th>
<th>MOST IMPORTANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGEMENT GROUP</td>
<td></td>
</tr>
<tr>
<td>CLINICAL GROUP</td>
<td></td>
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</tbody>
</table>

**CONCLUSION**

In view of the proposed objectives, and based on data analysis and treatment, the results permitted the following conclusions:

Regarding the professional satisfaction level, the management group showed greater satisfaction with the **autonomy** component, followed by **interaction**, **work requisites**, **professional status**, **remuneration** and **organizational standards**. The clinical group also revealed greater satisfaction with the **autonomy** component, followed by **interaction**, **remuneration**, **professional status**, **organizational standards** and **work requisites**.

In the management group, the satisfaction levels, from the **least** to the **most** satisfactory, were: **organizational standards**, **remuneration**, **professional status**, **work requisites**, **interaction** and **autonomy**.

In the clinical group, satisfaction levels, from the **least** to the **most** satisfactory, were: **work requisites**, **organizational standards**, **professional status**, **remuneration**, **interaction** and **autonomy**.

In this study, the fact that the **autonomy** component stands out as the main source of professional satisfaction for both groups, while **organizational standards** and **work requisites** offered the lowest level of professional satisfaction for the management and clinical groups, respectively, permits reflections on what aspects hospital institution managers have prioritized. Their dedication to the elaboration of standards and routines with a view to organizing and standardizing the work process and Human Resource management has appeared as a negative factor in the assessment of nurses’ satisfaction with their professional practice. With a view to health policies that can adequately attend to institutional aims and targets, elements should be added that attend to the demands and needs of those professionals who put institutional aims and targets in practice.

In conclusion, this study evidenced different dimensions of the **work satisfaction** construct, contributing to the construction of nursing Human Resource management indicators, based on the factors that generate satisfaction, identifying the satisfaction level nurse management and clinical nursing groups manifested at the Hematology and Hemotherapy services of the research institutions.

**REFERENCES**


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