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HARDINESS PERSONALITY AND COPING BETWEEN NURSING PROFESSIONALS OF SURGICAL CENTERS

PERSONALIDADE HARDINESS E COPING ENTRE PROFISSIONAIS DE ENFERMAGEM DO CENTRO CIRÚRGICO

PERSONALIDAD HARDINESS Y COPING ENTRE PROFESIONALES DE ENFERMERÍA DEL CENTRO QUIRÚRGICO

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ABSTRACT

Objective: to evaluate the presence of hardiness personality and Coping among nursing professionals of surgical centers. **Method:** quantitative, cross-sectional, correlational, descriptive study developed with 66 nursing professionals of the surgical center of three hospitals. For data collection, we used the Hardiness scale, the Occupational Coping Scale and Spearman coefficient analysis by domain between the Hardiness personality scale and Coping. **Results:** most were female, married, nursing technicians, public servant nurses. When evaluating the intensity of hardiness personality, no individual presented this characteristic, but the studied population presented a coping process. **Conclusion:** it was found that there was no hardiness personality; however, individuals with coping characteristics of a resistant personality, who tried to modify the stress perception, were identified. **Descriptors:** Occupational Health; Psychological Stress; Working Environment.

RESUMO

Objetivo: avaliar a presença de personalidade *Hardiness* e enfrentamento *Coping* entre profissionais de enfermagem de Centros Cirúrgicos. **Método:** estudo quantitativo, transversal, correlacional, descritivo, desenvolvido com 66 profissionais da equipe de enfermagem do centro cirúrgico de três instituições hospitalares. Para a coleta de dados, utilizou-se a escala de *Hardiness*, a Escala de *Coping* Ocupacional e análise do coeficiente de Spearman por domínio entre a escala de personalidade de *Hardiness* e *Coping*. **Resultados:** a maioria era do sexo feminino, casados, técnicos de enfermagem, concursados. Ao avaliar a intensidade da personalidade *Hardiness*, nenhum indivíduo apresentou essa característica, mas a população estudada apresentou um processo de *Coping*. **Conclusão:** constata-se que não houve personalidade *hardiness*, no entanto, identificou-se indivíduos com características *Coping* de personalidade resistente, que tentam modificar a percepção do estresse. **Descritores:** Saúde do Trabalhador; Estresse Psicológico; Ambiente de Trabalho.

RESUMEN

Objetivo: evaluar la presencia de personalidad *Hardiness* y enfrentamiento *Coping* entre profesionales de enfermería de Centros Quirúrgicos. **Método:** estudio cuantitativo, transversal, correlacional, descriptivo, desarrollado con 66 profesionales del equipo de enfermería del centro quirúrgico de tres instituciones hospitalarias. Para la recolección de datos, se utilizó la escala de *Hardiness*, la Escala de *Coping* Ocupacional y el análisis del coeficiente de Spearman por dominio entre la escala de personalidad de *Hardiness* y *Coping*. **Resultados:** la mayoría era del sexo femenino, casados, técnicos de enfermería, concursados. Al evaluar la intensidad de la personalidad *Hardiness*, ningún individuo presentó esa característica, pero la población estudiada presentó un proceso de *Coping*. **Conclusión:** se constata que no hubo personalidad *hardiness*, sin embargo, se identificaron individuos con características *Coping* de personalidad resistente, que intentan modificar la percepción del estrés. **Descriptores:** Salud Laboral; Estrés Psicológico; Ambiente de Trabajo.

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INTRODUCTION

The world has undergone numerous transformations in the various sectors of society, a behavior that has also reflected in the occupational health environment and consequently in nursing. These technological advances experienced by workers favor the development of occupational stress with implications for nursing care, patient safety and consequently for the health of professionals.¹

In line with this background, in the last decades there has been a great increase in researches developed on occupational stress, both at national and international levels.²⁻³ In this sense, there are definitions regarding stress in the occupational context; however, this process is understood to be a set of psychological disorders and psychic sufferings associated with the experience of the work environment that presents physical and psychic demands for the individual, in which, depending the degree of exposure or the severity of this condition, professionals may become ill, causing damage to the employee and employer due to the absenteeism that this illness causes.²

Nursing has been recognized as a profession for more than 50 years and has been considered as one of the most stressful ones. The issue of stress in nursing has been widely studied in different contexts of care, but it still deserves highlight considering the peculiarities present in this professional activity, the regional differences that impact on the assistance model adopted and the management resources in the work strategy.¹ In this context, the work in the Surgical Center (SC) has different characteristics from the other hospital sectors, which may contribute to stress among health workers, especially nursing workers, who provide care to the surgical patient, besides support to the other members of the surgical team.⁴

The characteristics evidenced in this sector are high workloads, inadequate proportion of patients for each qualified professional, rotating shifts, low remuneration, manipulation of toxic substances and presence of risk factors pertinent to the environment, leading to a situation known as work overload and intense stress.⁵

The stress generated by the work in this unit affects the worker physically and emotionally, interfering in their work relations and in their work activities.⁶

Coping and Hardiness may help workers to face these conditions to which they are

submitted. Coping is any individual attempt to adapt to adverse circumstances considered as stressful, whether or not there is success in coping.⁷ Coping strategies are used so that adversities are experienced more adequately in an attempt to deal with stress situations.¹ On the other hand, Hardiness is an individual personality that is understood as the presence of characteristics that allow resistance to stressors.⁸ These characteristics are evaluated in three dimensions: commitment, control and challenge.⁹

In this aspect, the coping of stress caused by the occupational environment manifests itself differently among workers.⁸ Thus, it is necessary to develop studies to know the personality traits that each individual develops in the work environment, especially in the surgical environment.

OBJECTIVE

- To evaluate the presence of hardiness personality and coping among nursing professionals at surgical centers.

METHOD

This is a quantitative, cross-sectional, correlational, descriptive study with nursing assistants and technicians and nurses working in SC and Anesthetic Recovery Room of three hospitals in a city of Paraná. The inclusion criteria adopted were having worked in that unit for more than one year and the signing of the Informed Consent Form. The exclusion criterion was workers who were on vacation or leave during the data collection period or who did not answer the scales completely.

The study population was composed by 88 professionals, according to information from the human resources sector of the three institutions; however, the sample of this research was composed by 69 professionals who accepted to participate. Therefore, 78.4% of acceptance was obtained and 21.6% of the professionals did not participate in the survey due to leave, vacations or refusal.

The data collection took place between January and May 2014. For the data collection, three instruments were used.

The first questionnaire consists of sociodemographic questions (age, sex, marital status, professional training, type of employment bond, whether they had a double working day and practice of physical activity).

The second instrument was the Hardiness Scale (HS), an adapted version of the Bartone *et al* scale that was translated and validated into the Portuguese language.¹¹ The instrument is composed of 30 items, which are

subdivided into three domains: commitment, ability to feel involved or engaged in the activities of one’s own life, items 1, 6, 7, 11, 16, 17, 22, 27, 28 and 30; control: anticipation of changes, items 2, 3, 8, 9, 12, 15, 18, 20, 25 and 29; and challenge: search for motivation for personal development, items 4, 5, 10, 13, 14, 19, 21, 23, 24 and 26. It is a Likert scale with a value ranging from 0 to 3, with zero (0) for "not all true", one (1) for "a little true", two (2) for "quite true" and three (3) for "completely true". For the analysis of the data of this instrument, it is obtained an average for each domain, which is the sum of scores assigned to each item of the same domain and divided by the total number of items of the domain. Each domain has 10 items, 5 of which are inverted. The domains will be divided into "high" and "low", according to the average calculation. The "hardy" individual is considered to be one who presents high averages in the three domains.⁷⁻⁸

The third instrument used the Occupational Coping Scale (OCS), translated, adapted to the Brazilian reality and submitted to psychometric evaluation¹². It is aimed to measure coping in the occupational environment. It consists of a five-point Likert scale, ranging from one (1) I never do it, two (2) I rarely do it, three (3) I sometimes do it, four (4) I often do it and five (5) I do it all. This instrument has 29 items addressing the way people deal with work environment problems, distributed in three classification factors: control factor, composed of 11 items (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11), consists of proactive cognitive actions and reevaluations; dodge factor, which has nine items (12, 13, 14, 15, 16, 17, 18, 19, 20) relating to actions and reevaluations that suggest escape or a mode of avoidance; symptom management factor, which includes nine items (21, 22, 23, 24, 25, 26, 27, 28, 29) and refers to strategies used to manage stressful situations, such as relaxation or physical activities.¹¹

The results are obtained by the scores of each classifying factor of OCS, which are performed by the average of the items that compose them. Thus, the factor that presents the highest average will be considered the prevalent for each professional evaluated.¹¹

The data were transcribed in the Excel program (Office 2007) and analyzed statistically with the Statistical Package for Social Science (SPSS) version 1.8, using descriptive statistics and correlation analysis.

Quantitative data were expressed in measures of central tendency and dispersion and categorical data in the form of absolute and relative frequencies. The Spearman coefficient analysis was expressed by domain between the Hardiness and Coping personality scale.

This research adopted the ethical parameters established by the Directives and Norms Regulating Research involving Human beings (Resolution 466/12), thus obtaining a favorable opinion from the ethics and research committee of the State University of Londrina under the approval number 20051113.5.0000.5231.

RESULTS

In order to evaluate the internal consistency of the instruments, the Cronbach Alpha test was used, in which the OCS and the HS scales presented, respectively, 0.770 and 0.652, thus considered reliable to be used in this population.⁸

Table 1 shows that the majority of the interviewees were female, married, nursing technicians, public servant nurses, who stated not having another employment relationship and practicing physical activity. The average income of the professionals was R\$ 2,640; the mean age was 46.22 years, the minimum age was 31 years and the maximum age was 55 years; and the length of working time is 17 years.

Table 1. Sociodemographic and occupational characterization of nursing professionals. Londrina (PR), Brazil, 2016 (n=69).

Variable	n	%
Sex		
Female	56	81.2
Male	13	18.8
Marital status		
Married	33	47.8
Single	24	34.8
Widowed	3	4.3
Others	9	13
Professional qualification		
Nursing assistant	12	17.4
Nursing Technician	48	69.6
Nurse	9	13
Type of employment relationship		
Public servant	35	50.7
Curriculum	24	34.8
Selective process	10	14.5
Do you have another job?		
No	49	69.6
Yes	20	29.4
Do you practice physical activity?		
No	40	58
Yes	29	42

When assessing the intensity of the Hardiness personality among the respondents, no individual presented high averages in the three domains, considering that for the professional to present hardiness characteristics these should obtain high averages in the three domains (commitment, control and challenge). However, the studied population presented a Coping process, so it was observed that among the three domains evaluated, the challenge was the one that showed a higher average (1,762) and a standard deviation of 0.3455, that is, of the

domains evaluated, the challenge was the most present in this population, with the highest mean dispersion in the coefficient of variation (Table 2).

Analyzing the OCS, it is considered that the higher the score identified in the professional, the better the coping with stress coming from the occupational environment. The control was the most evidenced domain and, when observing the coefficient of variation, the management was the one that presented the greatest heterogeneity, as shown in Table 2.

Table 2. Descriptive measures per domain of the Hardiness and Coping Personality Scale. Londrina (PR), Brazil, 2016. (n=69).

Variable	Mean	SD*	Minimum	Maximum
HS				
Commitment	1.539	0.3143	0.7	2.1
Control	1.639	0.2911	0.9	2.3
Challenge	1.762	0.3455	0.9	2.4
OCS				
Control	3.773	0.5989	2.5	5
Dodge	2.854	0.6071	1.6	4.2
Management of symptoms	2.67	0.7017	1.1	4.3

*Standard deviation

In relation to the Spearman test, as presented in Table 3, it is observed that the variables present low intensity, not having a

significant relation between them. This evidences that there is no harmony between the two instruments used in this study.

Table 3. Spearman coefficient analysis per domain between the Hardiness and Coping personality scale. Londrina (PR), Brazil, 2016. (n=69).

Variable	Commitment		Control		Dodge	
	r*	p**	r*	p**	r*	p**
Control	-0.013	0.919	-0.030	0.819	0.033	0.802
Dodge	0.082	0.532	0.079	0.543	0.023	0.860
Management of symptoms	-0.011	0.933	-0.030	0.817	0.220	0.088

* Spearman Coefficient

** Crossing of the variables

DISCUSSION

The results evidenced in this study identified that there was a greater participation of females, corroborating with other studies.⁷ These characteristics are well evidenced in the nursing area, since this is a historical factor of the profession itself.

The incorporation of males among the nursing team is important because of numerous procedures and attributions that require greater strength and physical conditioning by the professional, which could minimize the problems related to the musculoskeletal system and even occupational overload.¹²

However, it is observed is a homogenization of female and male work among the nursing team, in which men and women perform the same activities without distinction between the sexes.¹²

Authors have stated that, when comparing men and women, the woman is more vulnerable to the development of stress and is more likely to have a poor quality of life.¹³ Another characteristic is that currently women have, besides work, domestic attributions and family activities, and these tasks are associated as a source of stress, with bad repercussions in productivity and in their quality of life.¹⁴

Therefore, the double working day is a strong influence on the development of occupational stress, especially if this practice is related to the non-practice of physical activity.¹⁵ In this study, it is noted that 69.6% of nursing professionals do not have a double working day, however, when analyzing the practice of physical activity, only 42% have developed this habit.

However, when analyzing the Hardiness personality among the participants of this study, it was evidenced that the challenge was the domain that presented major proportions. This is different from another study with the same characteristics of this research, in which the commitment and challenge were the domains with greater representativeness and 12% of the participants showed high averages in the three domains, namely control, commitment and challenge.¹⁶

Study developed with medical interns identified that 23.21% of the participants presented characteristics of the Hardiness personality, with high scores in the three domains.⁸

Therefore, the association between the two instruments used in this study through the Spearman test revealed low intensity, showing

no significant relationships between them. This enables us to infer that the stress among this population is a reflection of the work process, and not an inherent characteristic of the individuals. The analyzes between personal characteristics evaluated and the level of stress did not present any correlation.

When assessing the intensity of the Hardiness personality among respondents, no individual presented this characteristic, considering that they should obtain high averages in the three domains (commitment, control and challenge). However, we could verify the presence of Coping in the studied population, that is, participants presented resistant personality and try to modify the perception of stress.

From the evaluation of Coping, we identified that the control was the variable that obtained the highest proportions in the study population. This is similar to a study that verified the associations between stress, coping and presentism in nurses working in direct care to critical and potentially critical patients, in which the control was the factor that obtained the highest average and was considered prevalent, with 87.6% in the study population.⁷

Control is characterized by the tendency to act and feel as if it were not influenced by the contingents of life, without meaning an expectation of the complete determination of events and results, implying in individual perception, and having the definite influence of thought, imagination, knowledge, ability and choice.¹⁷

Thus, control enhances stress resistance by adding the perception that the events experienced are a natural result of acts and consequences, not as unexpected and oppressive experiences. Control leads actions that turn events into something consistent, responsible for the development of responses to stress, leading to an effort to influence the outcome of events.¹⁷

In this sense, we observe some factors that favor the development of the stress in the work place, especially the delay of the professionals, inadequate remuneration and demands to perform immediate procedures.¹⁸ Also, dissatisfactions related to the lack of professional recognition, long working days, which diminish the time for leisure activities and family life, are observed.¹²

In this sense, the SC is a high risk environment and favors errors by the work team, since the work process in this scenario encompasses complex activities and a multidisciplinary team that must develop the

ability to work individually, in team and, mainly, under pressure and stress related to the labor process.¹⁹

The SC is a sector that provides elements focused on surgical practices aiming to extend comprehensive care to the patient throughout the perioperative period. Therefore, the nursing team plays a key role in the performance of this care.²⁰

Work-related stress results from several situations. Inasmuch the work environment contains excessive demands and the professional does not have adequate resources to face certain situations, the worker perceives this environment as threatening, and the interaction with their functions and the work environment undermine their personal and professional fulfillment needs.²¹

CONCLUSION

The evidence showed that there was no identification of hardiness personality in the studied population, that is, there was no individual personality with the presence of characteristics that allow the resistance to stressors. But we have found considerable averages of the domains commitment and challenge by identifying a team with coping characteristics of resilient personality that attempt to modify the perception of stress. Even though there was no hardy in this population, the Coping process was installed.

In view of this, it is necessary to implement control measures on occupation health within hospital institutions. These actions will enable reduction of stress and, consequently, improvement in the characteristics of the occupational environment.

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