

## **NURSES' COACHING LEADERSHIP RELATED TO PRACTICE ENVIRONMENT WITHIN PRIMARY HEALTH CARE**

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### **ABSTRACT**

**Objective:** to correlate the nurses' self-perception and the perception of nursing aides regarding coaching leadership and the practice environment within Primary Health Care.

**Method:** cross-sectional and correlational study addressing 150 nursing workers: 75 nurses and 75 nursing aides of 13 Basic Health Units located in the south of São Paulo, SP, Brazil. The Brazilian version of the Practice Environment Scale, *Questionário de Autopercepção do Enfermeiro no Exercício da Liderança* [Questionnaire on Self-Perception of Nurses of Exercise of Leadership], and *Questionário de Percepção de Técnicos e Auxiliares de Enfermagem no Exercício da Liderança* [Questionnaire on Perception of Nurse Technicians and LPNs of Exercise of Leadership] were applied between January and May 2019. Univariate and Multivariate Analyses, and the Pearson's Correlation test ( $p < 0.05$ ) were used, besides Rosenthal effect size.

**Results:** two significant correlations were found among the nurses between the instruments' domains: communication and nursing foundations for quality care ( $r = 0.265$ ;  $p = 0.022$ ) and communication and collegial nurse-physician relationships ( $r = 0.263$ ;  $p = 0.023$ ). The following stand out among the nursing aides: communication and nursing foundations for quality care ( $r = 0.416$ ) and the total score obtained in the Questionnaire on Perception of Nurse Technicians and LPNs of Exercise of Leadership and collegial nurse-physician relationships ( $r = 0.409$ ).

**Conclusion:** for the nurses, communication contributed to a better perception of quality care and good relationships with physicians. For the nursing aides, all the domains of coaching leadership collaborate for environments that favor their practice within PHC.

**DESCRIPTORS:** Leadership. Nursing. Health facility environment. Primary health care. Working environment.

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# LIDERANÇA COACHING DOS ENFERMEIROS RELACIONADA COM AMBIENTE DA PRÁTICA PROFISSIONAL NA ATENÇÃO PRIMÁRIA À SAÚDE

## RESUMO

**Objetivo:** correlacionar autopercepção dos enfermeiros e percepção dos auxiliares de enfermagem sobre liderança *coaching* dos enfermeiros com o ambiente da prática profissional na Atenção Primária à Saúde.

**Método:** estudo transversal e correlacional com 150 profissionais de enfermagem, sendo: 75 enfermeiros e 75 auxiliares de enfermagem de 13 Unidades Básicas de Saúde localizadas na Zona Sul de São Paulo, SP, Brasil. Foram aplicados *Practice Environment Scale* - versão brasileira, Questionário de Autopercepção do Enfermeiro no Exercício da Liderança e Questionário de Percepção de Técnicos e Auxiliares de Enfermagem no Exercício da Liderança, no período de janeiro a maio de 2019. Foram utilizados Análise de Variância Univariada e Multivariada, Teste de Correlação de Pearson ( $p < 0,05$ ) e tamanho do efeito de Rosenthal.

**Resultados:** entre os enfermeiros, duas correlações significantes entre os domínios dos instrumentos foram observadas: comunicação e fundamentos de enfermagem voltados para a qualidade do cuidado ( $r=0,265$ ;  $p=0,022$ ) e comunicação com relações colegiais entre enfermeiros e médicos ( $r=0,263$ ;  $p=0,023$ ). Nos auxiliares de enfermagem, destacam-se comunicação e fundamentos de enfermagem voltados para a qualidade do cuidado ( $r=0,416$ ) e valor total do Questionário de Percepção de Técnicos e Auxiliares de Enfermagem no Exercício da Liderança e relações colegiais entre médicos e enfermeiros ( $r=0,409$ ).

**Conclusão:** para os enfermeiros, comunicação contribuiu para melhor percepção da qualidade do cuidado e boas relações com médicos. Nos auxiliares, todos os domínios da liderança *coaching* colaboraram para percepções positivas do ambiente. A liderança *coaching* parece contribuir para que ambientes mais favoráveis à prática profissional sejam estabelecidos na atenção primária à saúde.

**DESCRITORES:** Liderança. Enfermagem. Ambiente de instituições de saúde. Atenção primária à saúde. Ambiente de trabalho.

# LIDERAZGO COACHING DE LOS ENFERMEROS RELACIONADO CON EL AMBIENTE DE LA PRÁCTICA PROFESIONAL EN LA ATENCIÓN PRIMARIA A LA SALUD

**Objetivo:** correlacionar la autopercepción de los enfermeros y la percepción de los auxiliares de enfermería sobre el liderazgo *coaching* de los enfermeros con el ambiente de la práctica profesional, en la Atención Primaria a la Salud.

**Método:** estudio transversal y correlacional con 150 profesionales de enfermería, siendo: 75 enfermeros y 75 auxiliares de enfermería de 13 Unidades Básicas de Salud, localizadas en la Zona Sur de Sao Paulo, SP, Brasil. Fueron aplicados la *Practice Environment Scale* (versión brasileña), el Cuestionario de Autopercepción del Enfermero en el Ejercicio del Liderazgo y el Cuestionario de Percepción de Técnicos y Auxiliares de Enfermería en el Ejercicio del Liderazgo, en el período de enero a mayo de 2019. Fueron utilizados los Análisis de Variancia Univariada y Multivariada, el Test de Correlación de Pearson ( $p < 0,05$ ) y el tamaño del efecto de Rosenthal.

**Resultados:** entre los enfermeros, dos correlaciones significativas entre los dominios de los instrumentos fueron observadas: comunicación y fundamentos de enfermería dirigidos a la calidad del cuidado ( $r=0,265$ ;  $p=0,022$ ) y comunicación con relaciones colegiales entre enfermeros y médicos ( $r=0,263$ ;  $p=0,023$ ). En los auxiliares de enfermería, se destacan la comunicación y los fundamentos de enfermería dirigidos para la calidad del cuidado ( $r=0,416$ ), el valor total del Cuestionario de Percepción de Técnicos y Auxiliares de Enfermería en el Ejercicio del Liderazgo y las relaciones colegiales entre médicos y enfermeros ( $r=0,409$ ).

**Conclusión:** para los enfermeros, la comunicación contribuyó para obtener una mejor percepción de la calidad del cuidado y de las buenas relaciones con los médicos. En los auxiliares, todos los dominios del liderazgo *coaching* colaboraron para las percepciones positivas del ambiente. El liderazgo *coaching* parece contribuir para que ambientes más favorables a la práctica profesional sean establecidos, en la atención primaria a la salud.

**DESCRIPTORES:** Liderazgo. Enfermería. Ambiente de Instituciones de Salud. Atención Primaria de Salud. Ambiente de Trabajo

## INTRODUCTION

In Brazil, Primary Health Care (PHC) has evolved with changes implemented in the Brazilian health care models. The creation of the Unified Health System (SUS) in 1988 led to discussions concerning the biomedical model, which promoted the proposal of an alternative model of care focused on quality and priority health needs<sup>1</sup>.

The organization of work processes in this practice environment is supposed to be aligned to achieve better results. Hence, health workers, especially nurses, are supposed to have different types of knowledge to develop political, technical, management, and leadership actions<sup>2</sup>.

Nurses' leadership is essential in the PHC context to implement a dynamic environment<sup>3</sup>. Therefore, contemporary leadership models are needed to meet current needs and achieve better nursing management results. Some studies have reported these results, especially regarding patient safety and job satisfaction<sup>4-5</sup>. Among leadership models, the literature reports transactional leadership<sup>6</sup>, transformational leadership<sup>7</sup>, authentic leadership<sup>8</sup>, and coaching leadership, among others<sup>9-10</sup>.

In this study, we chose coaching leadership because this model supports subordinates to reach their maximum potential, using their strengths as a tool to strive for the best results. Its adoption has grown over time given the transformation in the job market, which led people to improve their performances, resulting in positive outcomes for the institutions<sup>9-10</sup>.

The essence of the coaching process is the development of competencies to achieve goals and objectives, providing the support required by subordinates to receive training and develop themselves<sup>11</sup>. Its dimensions comprise: communication, giving and receiving feedback, delegating power, exerting influence, and supporting the team to achieve goals.<sup>11-12</sup>

Within the coaching style, a leader is supposed to establish a relationship of trust with his/her team, positively influencing subordinates. Hence, this contemporary leadership model is a fundamental alternative in the nurses' training process<sup>13</sup>.

Associated with coaching leadership, it is important to contextualize the nursing practice environment, which is defined as a multifactorial environment that influences the workplace. Aspects such as climate and culture, organizational structure, decision-making, and leadership are included in these factors and corroborate to its establishment<sup>14</sup>.

Favorable environments result in better outcomes for workers, health institutions, and patients. Favorable workplace characteristics promote greater satisfaction, while unfavorable characteristics may compromise the quality of care delivery, impacting the lives of workers and the entire institutional structure, including management and leadership<sup>15</sup>.

Within the PHC scope of nursing practice, the professionals work independently and in teams, with actions directed to individual care, and at the same time, organize work processes, focusing on the needs of families and the collectivity. Different work processes associated with care delivery and managerial and leadership demand from nurses a great deal of effort and responsibility<sup>16</sup>.

Literature reviews<sup>17-18</sup> identified the need for further research addressing coaching leadership within PHC, but no association was found between this model and nursing practice.

Based on this context, this study's hypothesis is that coaching leadership provides nurses with a better environment for nursing practice within PHC. Therefore, the objective is to correlate the nurses' self-perception and the perception of nursing aides regarding coaching leadership in the PHC practice.

## METHOD

This cross-sectional and correlational study was conducted in 13 Basic Health Units (BHU) located in the south of São Paulo, SP, Brazil. All the UBS are composed by Family Health Strategy (FHS) teams: 87 FHS teams, 30 oral health teams, and 6 Family Health Support Centers (NASF) totaling 1,128 workers covering a population of approximately 387,408 inhabitants: 288,332 registered users and 83,209 families, equivalent to 74% of the territory. Overall, approximately 2,412,132 procedures are performed annually.

A total of 150 nursing professionals participated in the study: 75 nurses and 75 nursing aides. The population of the 13 BHU comprises 87 teams: each FHS includes 1 nurse and 2 nursing aides. The population comprised 82 nurses (5 were on leave) and 82 nursing aides. The sample size calculation considered a confidence level ( $Z$ ) of 95% and a margin error ( $\epsilon$ ) of 5%, resulting in 75 workers in each group.

Eligibility criteria were: nurses not being technically responsible for the unit and not having knowledge about the coaching leadership style. One of the researchers selected one nurse from each FHS and the nursing aides by drawing lots.

The study's variables were "nursing practice environment", divided into 24 items assigned to five domains, and "coaching leadership", divided into 20 items distributed among four domains. The validated Brazilian version of the Practice Environment Scale (PES) was used to measure the "nursing practice environment" variable through 24 items distributed into five domains: Nursing participation in hospital affairs; Nursing foundations for quality care; Nursing manager leadership, ability, and support; Adequate staffing and resources; and collegial nurse-physician relationships<sup>8,12</sup>. Regarding the domain "Nursing participation in hospital affairs", the participants were asked to adapt it to the PHC context. The original term was kept in this study. According to the instrument's author, it can be applied in the PHC context, even though few studies address this topic.

The participants rated their agreement regarding whether a given characteristic is present in their daily work on a four-point Likert scale: totally agree (4), partially agree (3), partially disagree, and totally disagree (1); hence, the higher the score, the greater the participants' perception that the environment presents characteristics conducive to the nursing practice. Each subscale's score was the average of the scores obtained in each item<sup>15,19</sup>.

Regarding the PES scoring, scores equal to 2.5 are considered neutral. Scores above 2.5 indicate an environment favorable to professional practice, i.e., the participants agree that the characteristics described are present in the environment where they perform their practice. Institutions with scores above 2.5 in none or only one subscale are considered unfavorable to the nursing practice; with scores above 2.5 in two or three subscales are considered to have a mixed environment; while those with scores above 2.5 in four or five subscales are considered to be conducive to nursing practice<sup>8</sup>. PES was adapted and validated to assess hospital settings; however, as recommended by another study<sup>20</sup>, we applied it to the PHC context.

To assess the "coaching leadership" variable, data were collected using the *Questionário de Autopercepção do Enfermeiro no Exercício da Liderança (QUAPEEL)* [Questionnaire on Self-Perception of Nurses of Exercise of Leadership] and *Questionário de Percepção do Técnico e Auxiliar de Enfermagem no Exercício da Liderança (QUEPTAEEL)* [Questionnaire on Perception of Nurse Technicians and LPNs of Exercise of Leadership]<sup>11</sup>.

Both questionnaires contain structured questions and are composed of three parts. The first addresses the participants' socio-demographic data: sex, gender, time since graduation, experience in the institution, work shift, time since graduation in the nursing program (for nurses), and degree and time since graduation in the field (for aides). The second part comprises open-ended questions addressing knowledge on the concept of leadership and whether the nurses see themselves as leaders and nursing aides recognize nurses as leaders<sup>11</sup>.

The third part comprises 20 items distributed into four domains: "communication" (items 1 to 5), "give and receive feedback" (items 6 to 10), "delegate power and exert influence" (items 11 to 15), and "support the team in reaching results" (items 16 to 20). Each item is rated on a five-point Likert scale, and the total score ranges from 20 to 100 points. The closer to 100, the higher the degree of coaching leadership implemented by nurses<sup>5</sup>. The instruments were developed and validated in Brazilian university hospitals among nursing workers<sup>11,21</sup>.

Data were collected from January to May 2019. One of the authors visited the health units on the days and times previously scheduled with the units' respective managers. The nurses present in the unit at the time were approached and received clarification of the study's objectives. Each nurse is responsible for two nursing aides. One of the aides was randomly chosen, adopting the same procedures for the group of nurses. The QUAPEEL was applied among the nurses, and the QUEPTAEEL was applied to the nursing aides, followed by the PES. The instruments were applied in each unit's premises according to the participants' availability - the questionnaires required from 8 to 15 minutes to be completed.

The descriptive analysis included percentage, mean, median, and standard deviation. Next, the Multivariate Analysis of Variance (MANOVA) was performed with the Pillai Multivariate Screening Test to compare the groups' scores. According to the Central Limit Theorem, both groups (nurses and nursing aides) presented a sufficient sample size to use parametric tests. After obtaining a statistically significant p-value, a post hoc analysis was performed using Univariate Analysis of Variance (ANOVA) tests to investigate whether there was any difference between the groups concerning each domain.

The Pearson's correlation test was applied to see whether there were any correlations. The Effect Size was verified using Rosenthal's "r" coefficient<sup>22</sup> obtained by converting the F-statistic, classified as small when between 0.1 and 0.29; moderate, between 0.3 and 0.5; and large when above 0.5. The "r" value was used to give the p-value more robustness. Statistical significance was set at 5% ( $p \leq 0.05$ ), and the SPSS Statistics, version 25.0 (IBM Corp., Armonk, NY, USA) was used to perform the tests. The study was approved by the Institutional Review Board.

## RESULTS

A total of 150 nursing workers participated in the study, 75 nurses and 75 nursing aides. Most aides were women (86.67%; n=65), 36% (n=27) were currently studying, and only 16% (n=12) were attending a nursing graduate program.

Regarding the group of nurses, most workers were women (80%; n=60); approximately 94.67% (n=71) had a specialization: 87.32% (n=62) in the field of collective/family health, followed by management, 14.08% (n=10). There were also specializations in other nursing fields such as urgency and emergency, obstetrics, stomatherapy, cardiology, teaching, auditing, intensive care, and mental health.

Most nurses graduated from private universities, 73.33% (n=55), and only 8% (n=6) had a Master's degree.

The socio-demographic variables show that the sample is characterized by two distinct groups, though with homogeneous characteristics; very close means were obtained for all the variables, as shown in Table 1.

**Table 1** – Descriptive values of the socio-demographic variables concerning the nurses and nursing aides groups. São Paulo, SP, Brazil, 2019. (n=150)

Variable	Group	Mean	SD*	Median	Minimum	Maximum
Age (years)	Aides	37.52	7.64	37.00	19.00	57.00
	Nurses	37.31	6.94	38.00	27.00	59.00
Time since graduation (years)	Aides	10.41	5.26	10.00	1.00	24.00
	Nurses	11.89	6.38	11.00	3.00	34.00
Experience (years)	Aides	5.81	4.57	4.00	0.50	20.00
	Nurses	5.91	4.47	5.00	0.50	18.00

\*SD: standard deviation.

Table 2 and 3 respectively present the domains' central tendency measures and dispersion measures, and the total scores obtained by the group of nurses (NG) and group of aides (AG) in the instruments addressing practice environment (PES) and coaching leadership (QUEPTAEEL/QUAPEEL).

Note that both the groups obtained scores above 2.5 in all the PES subscales, showing that the PHC environment is considered favorable to nursing practice (Table 2).

No statistical significance differences were found between the groups and effect size was small. Note that both groups provided very close answers, which is also explained by the small effect size.

Regarding the coaching process, the four domains (communication, giving and receiving feedback, delegating power and exerting influence, and supporting the team in reaching results) were used to compare the two groups (Table 3).

The results reveal a statistically significant difference between the groups in the subscales 2,3, and 4 and the total score obtained in the QUEPTAEEL/QUAPEEL. In addition, it shows greater variance in the answers provided by the subordinates assessing the nurses' leadership than among the nurses conducting a self-assessment. Effect size is also considered small in Table 3; hence, it is possible that if the sample were larger, a more significant effect size would result.

**Table 2 – Groups' total scores and scores obtained in each subscale of Practice Environment Scale. São Paulo, SP, Brazil, 2019. (n=150)**

PES Domains	Group	Mean	SD <sup>§</sup>	Median	Min <sup>†</sup>	Max <sup>‡</sup>	p <sup>*</sup>	E.S. <sup>  </sup>
Nursing Participation in hospital affairs <sup>††</sup>	AG <sup>¶</sup>	3.13	0.65	3.00	1.40	4.00	0.585	0.045 <sup>  </sup>
	NG <sup>**</sup>	3.07	0.60	3.00	1.40	4.00		
Nursing foundations for quality care <sup>††</sup>	AG <sup>¶</sup>	3.06	0.60	3.00	1.57	4.00	0.584	0.045 <sup>  </sup>
	NG <sup>**</sup>	3.01	0.54	3.00	1.43	4.00		
Nursing manager leadership, ability, and support <sup>††</sup>	AG <sup>¶</sup>	3.07	0.68	3.20	1.00	4.00	0.311	0.083 <sup>  </sup>
	NG <sup>**</sup>	3.19	0.70	3.40	1.00	4.00		
Adequate staffing and resources <sup>††</sup>	AG <sup>¶</sup>	2.71	0.79	2.75	1.00	4.00	0.095	0.137 <sup>  </sup>
	NG <sup>**</sup>	2.51	0.64	2.50	1.00	4.00		
Collegial nurse-physician relationships <sup>††</sup>	AG <sup>¶</sup>	3.21	0.67	3.33	1.33	4.00	0.557	0.048 <sup>  </sup>
	NG <sup>**</sup>	3.27	0.61	3.33	1.33	4.00		
Total <sup>††</sup>	AG <sup>¶</sup>	3.04	0.57	3.04	1.50	4.00	0.755	0.026 <sup>  </sup>
	NG <sup>**</sup>	3.01	0.50	2.96	1.38	3.96		

\*p: p-value statistically significant at 5% (p≤0.05); †Min: minimum; ‡Max: maximum; §SD: standard deviation; ||E.S.: Effect size (Rosenthal); ¶AG: Aides group; \*\*NG: nurses group; ††ANOVA.

**Table 3 – Comparative analysis of the scores obtained by each group in the Questionnaire on Self-Perception of Nurses of Exercise of Leadership/Questionnaire on Perception of Nurse Technicians and LPNs of Exercise of Leadership. São Paulo, SP, Brazil, 2019. (n=150)**

Domains	Group	Mean	SD <sup>§</sup>	Median	Min <sup>†</sup>	Max <sup>‡</sup>	p <sup>*</sup>	E.S. <sup>  </sup>
Communication <sup>††</sup>	AG <sup>¶</sup>	22.00	3.87	23.00	8.00	25.00	0.563	0.048 <sup>  </sup>
	NG <sup>**</sup>	22.28	1.57	22.00	18.00	25.00		
Give and receive feedback <sup>††</sup>	AG <sup>¶</sup>	21.01	3.81	22.00	9.00	25.00	0.020 <sup>*</sup>	0.190 <sup>  </sup>
	NG <sup>**</sup>	22.25	2.50	22.00	11.00	25.00		
Delegate power and exert influence <sup>††</sup>	AG <sup>¶</sup>	20.61	4.07	21.00	8.00	25.00	0.015 <sup>*</sup>	0.198 <sup>  </sup>
	NG <sup>**</sup>	21.93	2.23	22.00	14.00	25.00		
Support the team in reaching results <sup>††</sup>	AG <sup>¶</sup>	21.04	4.22	22.00	9.00	25.00	0.009 <sup>*</sup>	0.213 <sup>  </sup>
	NG <sup>**</sup>	22.51	2.26	23.00	13.00	25.00		
Total <sup>††</sup>	AG <sup>¶</sup>	84.67	13.90	86.00	42.00	100.00	0.018 <sup>*</sup>	0.193 <sup>  </sup>
	NG <sup>**</sup>	88.97	6.99	90.00	67.00	99.00		

\*p: p-value statistically significant at 5% (p≤0.05); †Min: minimum; ‡Max: maximum; §SD: standard deviation; ||E.S.: Effect size (Rosenthal); ¶AG: Aides group; \*\*NG: nurses group; ††ANOVA.

Table 4 presents the correlation between the total score and the scores obtained in the PES subscales and QUEPTAEEL. The Pearson's Correlation test was used to calculate the correlation coefficient and p-value.

Table 5 presents the correlation between the total score and the scores obtained by the nurses in each subscale of the PES and QUAPEEL. The Pearson's correlation test was used to calculate the correlation coefficient and p-value.

**Table 4** – Analysis of the correlation between total score and subscales scores obtained by the nursing aides in the Practice Environment Scale and Questionnaire on Perception of Nurse Technicians and LPNs of Exercise of Leadership. São Paulo, SP, Brazil, 2019. (n=75)

PES <sup>†</sup>	Questionnaire on Perception of Nurse Technicians and LPNs of Exercise of Leadership				Total
	Communication	Give and receive feedback	Delegate power and exert influence	Support the team in reaching results	
Nursing participation in hospital affairs	Coef	0.375* [0.160, 0.571]	0.219* [-0.007, 0.459]	0.252* [0.019, 0.481]	0.340* [0.123, 0.543]
	P	0.001 <sup>†</sup>	0.059	0.029 <sup>†</sup>	0.003 <sup>†</sup>
Nursing foundations for quality care	Coef	0.416* [0.203, 0.597]	0.263* [0.051, 0.462]	0.362* [0.132, 0.558]	0.392* [0.165, 0.588]
	P	<0.001 <sup>†</sup>	0.023 <sup>†</sup>	0.001 <sup>†</sup>	<0.001 <sup>†</sup>
Nursing manager leadership, ability, and support	Coef	0.319* [0.087, 0.526]	0.200* [-0.024, 0.446]	0.119* [-0.133, 0.388]	0.274* [0.040, 0.500]
	P	0.005 <sup>†</sup>	0.086	0.309	0.017 <sup>†</sup>
Adequate staffing and resources	Coef	0.280* [0.043, 0.469]	0.103* [-0.100, 0.296]	0.294* [0.065, 0.483]	0.250* [0.039, 0.432]
	P	0.015 <sup>†</sup>	0.380	0.010 <sup>†</sup>	0.031 <sup>†</sup>
Collegial nurse-physician relationships	Coef	0.385* [0.134, 0.631]	0.242* [0.020, 0.453]	0.379* [0.150, 0.584]	0.409* [0.193, 0.603]
	P	0.001 <sup>†</sup>	0.037 <sup>†</sup>	0.001 <sup>†</sup>	<0.001 <sup>†</sup>
Total	Coef	0.419* [0.221, 0.591]	0.243* [0.037, 0.465]	0.325* [0.110, 0.543]	0.389* [0.188, 0.583]
	P	<0.001 <sup>†</sup>	0.036 <sup>†</sup>	0.004 <sup>†</sup>	0.001 <sup>†</sup>

\*Coef: Pearson's coefficient correlation; <sup>†</sup>P: p-value statistically significant at 5% (p≤0.05); <sup>†</sup>PES: Practice Environment Scale – Brazilian version.

**Table 5 – Analysis of the correlation between the scores obtained by the group of nurses in the Practice Environment Scale and Questionnaire on Self-Perception of Nurses of Exercise of Leadership. São Paulo, SP, Brazil, 2019. (n=75)**

PES†	Questionnaire on Self-Perception of Nurses of Exercise of Leadership				Total
	Communication	Give and receive feedback	Delegate power and exert influence	Support the team in reaching results	
Nursing participation in hospital affairs	Coef	0.099 <sup>‡</sup> [-0.147, 0.351]	0.110 <sup>*</sup> [-0.090, 0.323]	0.020 <sup>*</sup> [-0.199, 0.262]	0.076 <sup>*</sup> [-0.146, 0.305]
	P	0.398	0.346	0.868	0.519
Nursing foundations for quality care	Coef	0.265 <sup>*</sup> [0.053, 0.474]	0.084 <sup>*</sup> [-0.116, 0.302]	0.139 <sup>*</sup> [-0.049, 0.330]	0.132 <sup>*</sup> [-0.049, 0.325]
	P	0.022 <sup>†</sup>	0.472	0.233	0.259
Nursing manager leadership, ability, and support	Coef	0.210 <sup>*</sup> [0.018, 0.388]	0.116 <sup>*</sup> [-0.097, 0.324]	0.021 <sup>*</sup> [-0.160, 0.245]	0.131 <sup>*</sup> [-0.056, 0.314]
	P	0.070	0.322	0.855	0.264
Adequate staffing and resources	Coef	-0.014 <sup>*</sup> [-0.245, 0.213]	0.064 <sup>*</sup> [-0.137, 0.248]	0.130 <sup>*</sup> [-0.126, 0.360]	0.047 <sup>*</sup> [-0.174, 0.273]
	P	0.907	0.583	0.265	0.691
Collegial nurse-physician relationships	Coef	0.263 <sup>*</sup> [0.082, 0.450]	0.179 <sup>*</sup> [-0.057, 0.424]	0.036 <sup>*</sup> [-0.161, 0.291]	0.174 <sup>*</sup> [-0.038, 0.396]
	P	0.023 <sup>†</sup>	0.125	0.760	0.136
Total	Coef	0.208 <sup>*</sup> [-0.134, 0.238]	0.130 <sup>*</sup> [-0.093, 0.350]	0.088 <sup>*</sup> [-0.113, 0.289]	0.136 <sup>*</sup> [-0.073, 0.342]
	P	0.074	0.268	0.450	0.246

†Coef: Pearson's coefficient; †P: p-value statistically significant at 5% (p≤0.05); ‡PES: Practice Environment Scale – Brazilian version.

There was a difference between the two groups (nurses and aides) in the number of positive correlations and a greater variability of responses was found in the leadership questionnaire.

## DISCUSSION

The PES revealed that the environment of the BHU included in this study is favorable; the means both groups obtained were above 2.5. The same analysis methodology was used in another Brazilian study<sup>16</sup> conducted in different BHU. Even though another instrument was used, the authors concluded that the environment of the BHU they assessed was partially favorable.

A comparison between this and another study that used the PES to classify five hospitals in the interior of São Paulo<sup>23</sup> revealed that the results found here surpassed even those obtained in private and accredited hospitals, suggesting that the PHC environment can be very attractive for nursing professionals.

No significant differences were found in the comparison between AG and NG regarding the PES subscales, i.e., both groups perceived the environment to favor their practices. Most Brazilian studies using the PES were conducted in a hospital setting; hence, considering this environment, a Brazilian study performed in the Federal District reports significant differences in the perceptions of nurses and nursing technicians in the two subscales, suggesting that intensive care units do not equally favor the professional practice of all the members in the nursing staff<sup>24</sup>.

An environment that is conducive to the development of nursing activities contributes to improving patient safety, quality care, and job satisfaction besides decreasing emotional exhaustion and the workers' intention to quit their jobs. Therefore, assessing the environment is essential for implementing strategies at any health care level<sup>25</sup>. A study conducted in Valência, Spain, reports that the application of the PES in Primary Healthcare Units encouraged a better understanding of the characterization of the practice environment, benefiting the nursing staff and improving the quality of care and the institution's organization<sup>26</sup>.

Note that, even though the subscale "Adequate staffing and resources" obtained positive scores, both the AG (2.71) and NG (2.51) obtained low means. This finding has been reported worldwide<sup>23-24,27-29</sup>, not only because the nursing team is understaffed<sup>30</sup>, which leads to work overload and consequently harm work processes<sup>1</sup>, but also because the nurses do not have opportunities to discuss the care delivered to patients with other nurses and not infrequently, there are no services supporting them in the perform the of tasks.

One study<sup>25</sup> assessing the characteristics of the environment revealed that the leaders' ability and support are essential for achieving improved results. For this reason, the assessment of the relationship between these characteristics and the domains of the leadership instrument showed that, from the technicians' perspective, nurses with more coach characteristics contributed to more positive perceptions of the environment.

The environment of PHC practice consists of a highly complex environment due to its demand, and thus, nurses play a fundamental role, especially when in a leadership position. However, coaching leadership is seldom addressed in the nursing field, and no studies were found relating it to the nursing practice.

Even though from the subordinates' perspective, the total scores obtained in the instrument assessing leadership obtained positive and significant correlations, the leaders should pay attention to the subscales that did show significant differences because they reveal opportunities to improve processes.

Regarding the nurses, this study shows that communication can collaborate to the quality of care and the relationship between nurses and physicians. Researchers note that communication is a fundamental tool in relationships and strengthens the implementation of actions<sup>31</sup>. Collective activities,

groups, and home visits are actions in which good communication can result in dynamic teams, better care practices, and improved alignment in the relationship among the members of interdisciplinary teams<sup>32</sup>. Therefore, communication is essential for those working in PHC because its main focus is care delivery and disease prevention.

Leadership based on communication may represent the leader's ability to influence subordinates so that everyone works more effectively to achieve objectives and establish more horizontal relationships, ensuring greater exchange between stakeholders, autonomy, and participation in discussions and the organizational context<sup>33</sup>.

Contrary to the findings reported in this study, which revealed that coaching leadership contributes to the PHC environment, studies performed in public and private critical units and a university hospital did not report this relationship<sup>32-33</sup>. A potential explanation for this finding is the fact that, even though all the nurses reported a more positive assessment of their leadership than the nursing aides, a result also reported by other researchers<sup>34</sup>, these do not seem to influence the positive perception of both groups when assessing the PES subscale "Nursing manager leadership, ability, and support".

Regarding the SUS underfunding, it is worth noting that the practice environment is harmed when resource transfers to the health units are compromised. Even though Brazil faces funding problems, the results show that this issue was not so significant to make the environment unfavorable. Hence, in general, these units are probably being well managed.

In addition to specific skills, leadership should be based on management knowledge<sup>18</sup>. Despite the positive results, this study also presents nurses with opportunities for improvement, especially regarding giving and receiving feedback, delegating power and exerting influence, and supporting the team in reaching results.

Feedback is linked to the coach leader empowerment, whether through direct control, influence, or responsibility<sup>12</sup>, so that it is a way to communicate to subordinates the positive aspects and opportunities for improvement. It is also a process that can improve performance and results.

A more participatory relationship is established when leaders delegate power and influence subordinates. A leader should involve subordinates in decision-making, so they feel part of the team and organization<sup>35</sup>. A study conducted in a hospital setting shows that aides perceived that nurses did not share power, a behavior that favors hierarchy and distances subordinates. Decision-making should be shared within PHC because the work must be synchronized<sup>36</sup>.

This study's limitations include the fact that the units' environment could not be individually analyzed; only the mean of the 13 units was obtained. This type of analysis hinders individualized strategies. Additionally, the few studies in the field, especially within PHC, prevent understanding and comparing the results.

This study incorporates leadership practices in a context that is seldom addressed, contributing to future research so that this competence is increasingly understood. Additionally, a more contemporaneous leadership model (coaching) was revealed to contribute to more favorable environments in the PHC, consequently improved results.

The coaching tool can be an effective resource within PHC to promote the development of nurses and empower the team, though further research is needed to justify its implementation.

## CONCLUSION

This study assessed the self-perception of nurse leaders and the perceptions of subordinates regarding leadership and the practice environment. The environment was considered favorable both by the nurses and nursing aides. Both groups perceived the coaching leadership, but the nurses assessed it better than the aides. The main correlations were between communication and nursing foundations for quality care; the total score obtained in the Questionnaire on Self-Perception of Nurses of Exercise of Leadership; and collegial nurse-physician relationships. These results suggest that there are improved practice environments within PHC.

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## NOTES

### ORIGIN OF THE ARTICLE

Article extracted from the thesis - *Liderança do Enfermeiro na Atenção Primária à saúde e sua Relação com o Ambiente da Prática Profissional em Enfermagem*, presented to the Programa de Pós-Graduação em Enfermagem, Universidade Federal de São Paulo, in 2020.

### CONTRIBUTION OF AUTHORITY

Study design: Mattos JCOM, Balsanelli AP.

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Discussion of the results: Mattos JCOM, Balsanelli AP.

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### APPROVAL OF ETHICS COMMITTEE IN RESEARCH

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