Application of Psychometric Scales for Identifying and Resolving Conflicts in Nursing

Aplicação de Escalas Psicométricas para Identificação e Resolução de Conflitos na Enfermagem

Aplicación de Escalas Psicométricas para la Identificación y Resolución de Conflictos en Enfermería

RESUMO

Objetivo: Aplicar as Escala de Conflitos Intragrupos (ECIG) e a de Estratégias de Resolução de Conflitos (EERC) com profissionais de enfermagem de unidades hospitalares. **Método:** Estudo metodológico com abordagem quantitativa, envolvendo 191 profissionais de enfermagem de um hospital paulista. Aplicaram-se a ECIG adaptada e a EERC, submetidas à análise de consistência interna (Alpha de Cronbach) e análise fatorial exploratória. Os dados foram analisados no SPSS 20.0, com testes estatísticos como Qui-quadrado e ANOVA. **Resultados:** Os conflitos foram predominantemente classificados como "pouco/moderados", com maior frequência em tarefas (decisões, planejamento) que em relações interpessoais. A EERC revelou predomínio de estratégias colaborativas (e.g., mediação, ajuda mútua), embora com resquícios competitivos. A análise fatorial identificou cinco fatores, com validade aceitável para competição (α=0,746) e colaboração (α=0,651), mas limitações nos demais (amenização, acomodação). **Conclusão:** As escalas demonstraram potencial para uso no contexto nacional, destacando a necessidade de capacitação em gestão de conflitos e ajustes organizacionais.

DESCRITORES: Enfermagem; Equipe de Enfermagem; Administração de Recursos Humanos em Saúde; Negociação; Administração Hospitalar.

ABSTRACT

Objective: To apply the Intragroup Conflict Scale (ECIG) and the Conflict Resolution Strategies Scale (EERC) to nursing professionals in hospital units. **Method:** A methodological study with a quantitative approach, involving 191 nursing professionals from a hospital in São Paulo. The adapted ECIG and the EERC were applied and subjected to internal consistency analysis (Cronbach's Alpha) and exploratory factor analysis. Data were analyzed using SPSS 20.0, with statistical tests such as Chi-square and ANOVA. **Results:** Conflicts were predominantly classified as "low/moderate," occurring more frequently in tasks (decisions, planning) than in interpersonal relationships. The EERC revealed a predominance of collaborative strategies (e.g., mediation, mutual help), although with some competitive remnants. Factor analysis identified five factors, with acceptable validity for competition (α=0.746) and collaboration (α=0.651), but limitations in the others (mitigation, accommodation). **Conclusion:** The scales demonstrated potential for use in the national context, highlighting the need for training in conflict management and organizational adjustments.

DESCRIPTORS: Nursing; Nursing Team; Health HumanResources Management; Negotiation; Hospital Administration.

RESUMEN

Objetivo: Aplicar la Escala de Conflictos Intragrupales (ECIG) y la Escala de Estrategias de Resolución de Conflictos (EERC) a profesionales de enfermería en unidades hospitalarias. **Método:** Estudio metodológico con enfoque cuantitativo, con 191 profesionales de enfermería de un hospital de São Paulo. Se aplicaron la ECIG adaptada y la EERC, sometidas a análisis de consistencia interna (alfa de Cronbach) y análisis factorial exploratorio. Los datos se analizaron con el programa SPSS 20.0, con pruebas estadísticas como Chi-cuadrado y ANOVA. **Resultados:** Los conflictos se clasificaron predominantemente como "bajos/moderados", con mayor frecuencia en tareas (decisiones, planificación) que en relaciones interpersonales. La EERC reveló un predominio de estrategias colaborativas (p. ej., mediación, ayuda mutua), aunque con algunos remanentes competitivos. El análisis factorial identificó cinco factores, con validez aceptable para la competencia (α = 0,746) y la colaboración (α = 0,651), pero limitaciones en los demás (mitigación, adaptación). **Conclusión:** Las escalas demostraron potencial para su uso en el contexto nacional, destacando la necesidad de capacitación en gestión de conflictos y ajustes organizacionales.

DESCRIPTORS: Enfermería; Equipo de Enfermería; Gestión de Recursos Humanos en Salud; Negociación; Administración Hospitalaria.

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INTRODUCTION

Conflicts are inherent phenomena in human relations and, therefore, inevitable in organizational environments, especially in health services, which are marked by complex and dynamic interactions [1] . Although often associated with negative effects, they can take on a constructive character by driving institutional change, organizational

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innovation, and the improvement of interpersonal relationships [1] . When properly managed, conflicts favor the strengthening of teamwork, the improvement of the organizational climate, and the qualification of care processes [2] .

In general, conflicts are defined as perceived incompatibilities between individuals, groups, or institutions, resulting from differences in objectives, values, perceptions, or interests [3] . Its occurrence is intensified by subjective interpretations, in which one of the parties identifies threats to their interests [4] . In the workplace, recurring causes include communication failures, undefined roles, overload of duties, interpersonal misunderstandings, ineffective organizational structures, and rigid hierarchies [5,6] . In some situations, the absence of clear job descriptions, undefined roles, negligence, and absenteeism on the part of professionals can contribute to the emergence of conflicts [7] .

In nursing, conflicts become more complex due to work overload, communication failures, and authoritarian or toxic leadership styles, which are recognized as important triggers of tension within teams [8–11] . These factors compromise interpersonal relationships, reduce job satisfaction, and intensify occupational stress [9-11] . In addition, the diversity of roles, organizational demands, and multiple interests involved in care increase the occurrence of conflicts in professional practice [2] .

The hospital environment intensifies the complexity of conflicts by requiring continuous coordination between different professionals, under institutional, emotional, and care pressures. In this scenario, nurses assume a strategic role in mediating multiprofessional relationships and managing daily conflicts, an essential skill for promoting healthy work environments focused on quality care [12] . Conflicts, which are frequent in this context, arise from differences in values, roles, expectations, and organizational factors, such as work overload and communication failures, manifesting themselves both intraprofessionally and interprofessionally [5,6,7] . When poorly managed, they compromise team cohesion, professional well-being, and quality of care; when properly addressed, they can foster the development of relational skills, strengthen collaborative practices, and drive institutional evolution [5] . The scarcity of validated instruments to measure these phenomena in hospital nursing reinforces the need for scales adapted to the Brazilian reality, capable of supporting work management and continuing education in health [13,14] .

Thus, this study aims to apply the Intragroup Conflict Scale (ECIG) and the Conflict Resolution Strategies Scale (EERC) with nursing professionals in hospital units.

METHODOLOGY

This is a methodological study, exploratory in nature and quantitative in approach, developed during 2018 in a large, highly complex, private, philanthropic general hospital located in São Paulo.

The data collection instrument consisted of four parts: (1) invitation to participate and Informed Consent Form (ICF); (2) sociodemographic and professional training questionnaire; (3) adapted version of the ECIG, with items reformulated for greater clarity and assertiveness; and (4) Conflict Resolution Strategies Scale (CRSS), constructed based on the reference by Marquis and Huston [12]and consisting of 18 items distributed across six strategies. Both instruments were pre-tested with nursing professionals, who reported no difficulties in understanding them.

The instrument was completed individually during the work shift in an environment that ensured the confidentiality and autonomy of the participant. The sample consisted of 191 nursing professionals (54 nurses and 137 assistants and technicians), selected by intentional sampling, based on the inclusion criteria: having at least three months of experience in the role and agreeing to participate by signing the TCLE.

The data were analyzed using SPSS software version 20.0. Descriptive analyses included absolute and relative frequencies for categorical variables and measures of central tendency and dispersion for numerical variables. Inferential analyses involved the Chi-square test, Fisher's exact test, Pearson's correlation, Student's t-test, analysis of variance (ANOVA), and, in cases of violation of assumptions, nonparametric tests (Mann-Whitney and Kruskal-Wallis). The comparison between means in paired groups was performed with the t-test for dependent samples.

The internal consistency of the ECIG and EERC was assessed using Cronbach's alpha coefficient. The EERC was also subjected to exploratory factor analysis with Varimax orthogonal rotation, using the following criteria: eigenvalues greater than "one," communality, and minimum factor loading of 0.5. Bartlett's sphericity test and the Kaiser-Meyer-Olkin (KMO) index were applied to assess the adequacy of the correlation matrix. The scale scores were rescaled from "0" to "100", and the EERC items had their values reversed to facilitate interpretation; the higher the score, the greater the use of the conflict resolution strategy.

The study was approved by the Research Ethics Committees of the Federal University of São Paulo (UNIFESP) and the hospital where it was conducted, under consolidat-

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ed opinion No. 1,060,067 (CAAE: 42445515.9.3001.5461).

RESULTS

This study evaluates the psychometric properties of two fundamental instruments for analyzing conflicts in hospital nursing teams: the ECIG and the EERC, developed based on theoretical references in nursing management. The results are organized into three main axes: 1 - Distribution of responses per item on the scales, highlighting the professionals' perception of the frequency and intensity of conflicts, as well as the most commonly used strategies for their resolution (Table 1); 2 - Internal consistency indicators (Cronbach's Alpha), which assessed the reliability of the instruments; and 3 - Exploratory factor analysis, responsible for identifying the latent structure of the constructs and validating the dimensionality of the scales.

Table 1 - Distribution of responses from nursing professionals in hospital inpatient units, by items of the adapted ECIG.

Adapted ECIG – items	Occurs in your current work team					Total n(%)
	None n(%)	A little n(%)	Moderate n(%)	Very n(%)	Extremely n(%)	
1. The work team faces disagreements about work decisions.	23(12,0)	100(52,4)	55(28,8)	12(6,3)	1(0,5)	191(100,0)
2. There is personal friction between team members.	50(26,2)	82(42,9)	40(20,9)	17(8,9)	2(1,0)	191(100,0)
3. There is a difference of opinion in the group about task planning.	23(12,0)	85(44,5)	50(26,2)	31(16,2)	2(1,0)	191(100,0)
4. There is emotional tension in interpersonal relationships among team members.	46(24,1)	78(40,8)	36(18,8)	25(13,1)	6(3,1)	191(100,0)
5. Personal disagreement is evident among team members.	65(34,0)	77(40,3)	30(15,7)	15(7,9)	4(2,1)	191(100,0)
6. There is anger among team members.	119(62,3)	43(22,5)	18(9,4)	8(4,2)	3(1,6)	191(100,0)
7. There is a difference of opinion within the work team about how tasks should be performed.	27(14,1)	89(46,6)	51(26,7)	21(11,0)	3(1,6)	191(100,0)
8. There is conflict among team members during task distribution.	48(25,1)	69(36,1)	47(24,6)	24(12,6)	3(1,6)	191(100,0)
9. The work group spends time resolving interpersonal conflicts among its members.	77(40,3)	82(42,9)	24(12,6)	6(3,1)	2(1,0)	191(100,0)
10. There is disagreement within the work team about how to perform tasks.	61(31,9)	90(47,1)	24(12,6)	15(7,9)	1(0,5)	191(100,0)
11. There is animosity among the members of the work team.	104(54,5)	51(26,7)	22(11,5)	13(6,8)	1(0,5)	191(100,0)

Overall, the results indicate a predominance of conflicts classified as "low" or "moderate," suggesting that professionals recognize the existence of everyday conflicts, even if they do not consider them intense.

Task conflicts, such as disagreements about work decisions (item 1: 52.4% "low"; 28.8% "moderate"), planning (item 3: 44.5% "low"; 26.2% "moderate") and task execution (item 10: 47.1% "low"; 12.6% "moderate"), were the most frequently reported. This indicates that technical and organizational disagreements are part of the teams' daily routine and may reflect communication failures or undefined roles.

Interpersonal relationship conflicts, although less intense, were also present. Items on personal friction (item 2) and emotional tension (item 4) had more than 60% of responses in the "none" and "a little" categories, indicating a low perceived occurrence, but still worthy of attention. Item 6 ("anger among team members")

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stands out, with 62.3% of respondents indicating "none," signaling that, despite the existence of conflicts, they do not usually evolve into intense emotional manifestations.

The predominance of responses in the "little" and "moderate" categories indicates that professionals recognize the existence of conflicts, but also reveals their normalization in everyday life, which can weaken working relationships and the quality of care when there is no adequate mediation.

Table 2 shows the distribution of nursing professionals' responses to the EERC items, highlighting the most and least adopted strategies for dealing with conflicts in the hospital environment.

Table 2 - Distribution of responses from nursing professionals in hospital inpatient units, according to EERC items.

EERC items	Response					Total n(%)
	Strongly agree n(%)	Agree n(%)	Neither agree nor disagree n(%)	Disagree n(%)	Strongly disagree n(%)	
1. When there is a need to cover a colleague's sick leave, I give up an extra day off to help with the unit's work schedule and arrange a new date for my day off.	101(52,9)	62(32,5)	9(4,7)	14(7,3)	5(2,6)	191(100,0)
2. When I witness a colleague's mistake, I immediately try to solve the problem and inform my manager, expecting recognition for my efforts.	26(13,6)	47(24,6)	14(7,3)	46(24,1)	58(30,4)	191(100,0)
3. When management posts the leave request form for the following month, I don't usually request any days off, as I adapt to the needs of my colleagues.	9(4,7)	40(20,9)	16(8,4)	68(35,6)	58(30,4)	191(100,0)
4. When I see two colleagues arguing, I talk to them so that it does not affect the team's work.	95(49,7)	61(31,9)	17(8,9)	10(5,2)	8(4,2)	191(100,0)
5. When I make a mistake during my shift, I know that my manager will resolve the issue.	22(11,5)	46(24,1)	3(1,6)	51(26,7)	69(36,1)	191(100,0)
6. I am available to help cover the work schedule when a colleague is absent.	65(34,0)	94(49,2)	7(3,7)	21(11,0)	4(2,1)	191(100,0)
7. When assistance is needed to open a new department at the institution, I agree to be reassigned on that day to help the local team, as I understand that management trusts my work.	88(46,1)	66(34,6)	10(5,2)	17(8,9)	10(5,2)	191(100,0)
8. When I receive compliments from patients, I tell my colleagues and boss, and try to show off my qualities.	21(11,0)	31(16,2)	42(22,0)	27(14,1)	70(36,6)	191(100,0)
9. When vacation requests are made available, I wait for my colleagues to make their choices, and then I decide on a date during the months with the lowest demand or that have not been chosen.	16(8,4)	53(27,7)	23(12,0)	57(29,8)	42(22,0)	191(100,0)
10. When a colleague gets upset because they didn't get the time off they wanted, I try to calm them down.	67(35,1)	78(40,8)	25(13,1)	14(7,3)	7(3,7)	191(100,0)
11. When a patient complains about a colleague, I advise them to speak to their manager or contact customer service.	14(7,3)	47(24,6)	16(8,4)	51(26,7)	63(33,0)	191(100,0)
12. When there is a need to reverse work hours (morning to afternoon or afternoon to morning), I try to cooperate whenever possible.	80(41,9)	62(32,5)	15(7,9)	20(10,5)	14(7,3)	191(100,0)
13. When my boss asks for my help with specific tasks, I only feel at ease after completing them.	133(69,6)	52(27,2)	4(2,1)	1(0,5)	1(0,5)	191(100,0)
14. When handing over my shift, I try to highlight the activities I have carried out, attempting to show my strengths to the team and management.	30(15,7)	65(34,0)	26(13,6)	25(13,1)	45(23,6)	191(100,0)
15. When I find out that a colleague will not be coming to work, I expect management to solve the problem.	85(44,5)	61(31,9)	13(6,8)	21(11,0)	11(5,8)	191(100,0)
16. When coworkers start complaining about the institution where they work, I remind them of the benefits offered to employees.	95(49,7)	55(28,8)	22(11,5)	12(6,3)	7(3,7)	191(100,0)
17. When I argue with a coworker during my shift, I stop talking to them so as not to increase the discord.	31(16,2)	50(26,2)	13(6,8)	33(17,3)	64(33,5)	191(100,0)
18. When a colleague from one unit is transferred to another unit, I am willing to help her with whatever she needs.	182(95,3)	8(4,2)	0(0,0)	0(0,0)	1(0,5)	191(100,0)

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Analysis of the distribution of responses to the EERC items showed a predominance of collaborative attitudes among nursing professionals. There were high levels of agreement on items related to mutual assistance and commitment to teamwork, such as helping relocated colleagues (item 18– 99.5% agreement), completing tasks requested by management (item 13– 96.8%), and willingness to cover absences in the work schedule (items 1 and 6– 85.4% and 83.2%, respectively). These data reveal a strong appreciation for co-responsibility, cooperation, and maintaining continuity of care. On the other hand, items suggesting strategies focused on seeking individual recognition, passive or evasive attitudes showed higher levels of disagreement, such as reporting compliments to demonstrate qualities (item 8– 50.7% disagreement), waiting for management to resolve failures (item 5– 62.8%), and avoiding contact with colleagues after conflicts (item 17– 50.8%). These results indicate less acceptance of competition or avoidance strategies. Items focused on mediation and emotional regulation, such as calming down angry colleagues (item 10– 75.9%) and intervening in discussions to preserve the work environment (item 4– 81.6%), also obtained high adherence.

Table 3 presents the EERC items eliminated during exploratory factor analysis.

Table 3 – Eliminated items and their respective factor loadings and communalities.

Item eliminated	Factor loading	Communalities
16. When coworkers start complaining about the institution where they work, I remind them of the benefits offered to employees.	0.412	0.280
13.When my boss asks for my help with specific tasks, I only feel at ease after completing them.	0.460	0.482
5. When I make a mistake during my shift, I know that my manager will take care of it.	0.552	0.490
15. When I find out that a colleague will not be coming to work, I expect my manager to resolve the problem.	0.488	0.735
17. When I argue with a coworker during my shift, I stop talking to them so as not to increase the discord.	-0.564	0.469

The results in Table 3 show that five items were excluded from the final version of the EERC because they did not meet the established psychometric criteria. Among them, items 16 and 13 stand out, with communalities of 0.280 and 0.482, respectively, indicating low representativeness in the factor model. Item 17, despite having a negative factor loading (-0.564), was also eliminated because it did not contribute consistently to the factor structure. The removal of these items resulted in a solution with five factors that explained 63.8% of the total variance of the data, increasing the robustness of the scale and its suitability for the context of application. These adjustments reflect the methodological concern with the structural validity of the instrument, which is fundamental for its future use in clinical and managerial contexts.

Table 4 presents the results of the exploratory factor analysis applied to the EERC, after excluding items with insufficient factor loadings and communalities. VARIMAX orthogonal rotation was used to better interpret the extracted factors. The resulting model grouped the remaining items into five factors, accounting for 63.8% of the total explained variance. The KMO index (0.73) and Bartlett's sphericity test ($p < 0.001$) indicated the adequacy of the correlation matrix for analysis.

Table 4 – Presentation of factor loadings rotated by VARIMAX transformation.

	Factors					Communalities
	1	2	3	4	5	
14. When handing over my shift, I try to highlight the activities I have carried out, attempting to show my strengths to the team and management.	0,818	0,052	0,091	0,083	0,054	0,690
8. When I receive compliments from patients, I tell my colleagues and boss, and try to show off my qualities.	0,714	-0,008	0,196	0,320	-0,231	0,705
2. When I witness a colleague's failure, I immediately try to solve the problem and inform my manager, expecting recognition for my efforts.	0,644	0,053	0,209	0,290	-0,012	0,545
11. When a patient complains about a colleague, I advise them to speak to their manager or contact customer service.	0,630	0,135	-0,201	-0,223	0,295	0,593
1. When there is a need to cover a colleague's sick leave, I give up an extra day off to help with the unit's work schedule and arrange a new date for my day off.	-0,057	0,821	0,056	-0,042	-0,046	0,685

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6. I am available to help cover the work schedule when a colleague is absent.	0,139	0,708	0,189	0,274	0,001	0,632
7. When there is a need for assistance in opening a new sector in the institution, I agree to be reassigned on that day to help the local team, as I understand that management trusts my work.	0,110	0,690	0,129	0,101	0,155	0,540
4. When I see two colleagues arguing, I talk to them so that it does not affect the team's work.	0,087	0,196	0,820	-0,047	-0,042	0,722
10. When a colleague gets upset because they didn't get the time off they wanted, I try to calm them down.	0,116	0,165	0,729	0,104	0,050	0,586
3. When management posts the leave request form for the following month, I don't usually request any days off, as I adapt to the needs of my colleagues.	0,100	0,080	-0,057	0,807	0,034	0,673
9. When vacation requests are made available, I wait for my colleagues to make their choices, and then I decide on a date among the months with the lowest demand or that have not been chosen.	0,183	0,168	0,157	0,684	0,160	0,580
18. When a colleague from one unit is transferred to another unit, I am willing to help her with whatever she needs.	0,006	0,093	-0,023	0,103	0,837	0,721
12. When there is a need to reverse work schedules (morning to afternoon or afternoon to morning), I try to cooperate whenever possible.	0,054	-0,058	0,537	0,128	0,561	0,626
Eigenvalue1	2,1	1,8	1,7	1,5	1,2	
Percentage of variance	16,1	13,8	13,1	11,5	9,4	
Percentage of cumulative variance	16,1	29,9	43,0	54,5	63,8	

N=191 KMO = 0.73

Bartlett's sphericity test ($p<0.001$)

[1] The eigenvalues are already in orthogonal form, i.e., a VARIMAX rotation was performed on the original dimensions.

The extracted factors revealed clusters consistent with different conflict resolution strategies adopted by nursing professionals. Factor 1, which concentrated items 2, 8, 11, and 14, represents the competition strategy, characterized by the search for personal recognition, visibility, and self-affirmation. Factor 2, composed of items 1, 6, and 7, suggests a pattern of collaboration, associated with practical support for the team and management. Factor 3, formed by items 4 and 10, reflects an approach of appeasement, focused on mediation and the appeasement of interpersonal conflicts. Factor 4, which includes items 3 and 9, points to a strategy of accommodation, with attitudes of renunciation for the benefit of the collective. In turn, Factor 5, with items 12 and 18, forms a second core of collaboration, focused on flexibility and readiness in response to team demands. Although the groupings reveal theoretical consistency, factors 3, 4, and 5 have only two items each, which compromises their psychometric robustness and limits their isolated application in subsequent analyses.

The results of the factor analysis (Table 4) can be interpreted based on the factor loadings, which represent the degree of correlation between each item and the extracted factors, functioning analogously to a Pearson correlation coefficient [13] . Based on these results, it is possible to describe the five factors as follows:

Factor 1 - Competition: includes items "14. When handing over my shift, I try to highlight the activities I have carried out, trying to show my strengths to the team and management," "8. When I receive praise from patients, I tell my colleagues and my boss, and try to show my qualities," "2. When I witness a colleague's mistake, I immediately try to solve the problem and inform my manager, hoping for recognition for my efforts," and "11. When a patient complains about a colleague, I advise them to seek out management or contact customer service."

Factor 2 - Collaboration 1: includes the items "1. When there is a need to cover a colleague's sick leave, I give up an extra day off to help with the unit's work schedule and arrange a new date for my day off," "6. I make myself available to help cover the work schedule when a colleague is absent," and "7. When there is a need for assistance in opening a new sector in the Institution, I agree to be reassigned on that day to help the local team, as I understand that management trusts my work."

Factor 3 - Mitigation: consisting of the items "4. When I see that two colleagues are arguing, I talk to them so that it does not affect the team's work" and "10. When a colleague gets upset because they did not get the day off they wanted, I try to calm them down."

Factor 4 - Accommodation: comprises the items "3. When management posts the request form for time off for the next month, I don't usually ask for any days off, as I adapt to the needs of my colleagues" and "9. When vacation requests are made available, I wait for my colleagues to make their choices, and then I decide on a date among the months with the least demand or that were not chosen."

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Factor 5 - Collaboration 2: covers the items "12. When there is a need to reverse work schedules (morning to afternoon or afternoon to morning), I try to collaborate whenever possible" and "18. When a colleague from one unit is transferred to another unit, I am ready to help her with whatever she needs."

Factors 3, 4, and 5, consisting of only two items each, showed weak internal consistency [15] . This limitation can be seen in more detail in Table 5 below.

Table 5 – Presentation of the corrected item-total correlation, overall Cronbach's alpha if the item is excluded for the four factors formed via factor analysis. N=191.

EERC	Step 1	
	Item-Total Correlation	Cronbach's alpha if the item is excluded
Competition (Overall Cronbach's Alpha=0.694)		
2. When I witness a colleague's failure, I immediately try to solve the problem and inform my manager, expecting recognition for my efforts.	0.500	0.614
8. When I receive praise from a patient, I tell my colleagues and my boss, and try to showcase my qualities.	0.554	0.580
11. When a patient complains about a colleague, I advise them to speak to management or contact customer service.	0.271	0.746
14.When handing over my shift, I try to highlight the activities I have carried out, attempting to show my strengths to the team and management.	0.604	0.544
Collaboration 1 (Overall Cronbach's Alpha = 0.651)		
1. When there is a need to cover a colleague's sick leave, I give up an extra day off to help with the unit's work schedule and arrange a new date for my day off.	0.454	0.564
6. I make myself available to help cover the work schedule when a colleague is absent.	0.519	0.479
7. When there is a need for assistance in opening a new sector in the institution, I agree to be reassigned on that day to help the local team, as I understand that management trusts my work.	0.419	0.621
Mitigation (Overall Cronbach's Alpha = 0.620)		
4. When I see two colleagues arguing, I talk to them so that it does not affect the team's work.	0.449	-
10. When a colleague gets upset because they didn't get the time off they wanted, I try to calm them down.	0.449	-
Accommodation (Cronbach's Alpha Overall=0.514)		
3. When management posts the request form for time off for the following month, I don't usually request any days off, as I adapt to the needs of my colleagues.	0.347	-
9. When the vacation request form is made available, I wait for my colleagues to make their choices, and then I decide on a date among the months with the least demand or that were not chosen.	0.347	-
Collaboration 2 (Cronbach's Alpha Overall=0.220)		
12. When there is a need to reverse work hours (morning to afternoon or afternoon to morning), I try to cooperate whenever possible.	0.239	-
18. When a colleague from one unit is transferred to another unit, I offer to help her with whatever she needs.	0.239	-

According to the data presented in Table 5, it was observed that, in the competition factor, the exclusion of item *"11. When a patient complains about a colleague, I advise them to seek out management or speak to customer service"* resulted in a significant increase in the internal consistency of the factor, raising the Cronbach's alpha value from 0.694 (classified as poor) to 0.746 (acceptable). This result indicates that this item has a low correlation with the others in the factor, compromising its homogeneity. For the other factors, all items contributed positively to their respective alphas, even though the values obtained were not satisfactory. The internal consistencies of the collaboration 1 (Alpha = 0.651) and mitigation (Alpha = 0.620) factors were classified as poor, while

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the accommodation (Alpha = 0.514) and collaboration 2 (Alpha = 0.220) factors showed consistency considered unacceptable.

Furthermore, except for the first two factors (competition and collaboration 1), the others are composed of only two items, which limits their psychometric robustness. Given these findings, subsequent analyses considered only the first two factors of the scale: competition and collaboration [15]. According to the data presented in Table 5, it was observed that, in the competition factor, the exclusion of item *"11. When a patient complains about a colleague, I advise them to seek out management or express their concerns to customer service"* resulted in a significant increase in the internal consistency of the factor, raising the Cronbach's alpha value from 0.694 (classified as poor) to 0.746 (acceptable).

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DISCUSSION

The results of this study showed the predominance of intragroup conflicts classified as "low" or "moderate" among hospital nursing professionals, as measured by the adapted Intragroup Conflict Scale (ECIG). This finding suggests that, although conflicts are recognized as part of the daily routine of teams, they rarely reach high levels of intensity. Conflict, as a phenomenon inherent to human relations, is characterized as a dynamic and multifactorial process in which individuals or groups experience negative emotional reactions when faced with challenging situations [16] .

The prevalence of task-related conflicts, such as disagreements about decisions, planning, and execution of activities, reinforces the influence of organizational factors, such as communication failures and undefined roles, corroborating the literature that points to these variables as triggers of tension in healthcare environments [1,6] . When poorly managed, such conflicts can evolve into interpersonal animosity, affecting team cohesion and the quality of customer service [9,17] . On the other hand, relationship conflicts, such as personal friction and emotional tensions, were less frequent, indicating that teams can develop informal mechanisms for emotional regulation, even if they require specific interventions to prevent disruptive behaviors from becoming normalized.

Work overload, coupled with competitiveness and pressure for results in highly complex hospital settings, emerges as a critical factor in the emergence of conflicts [18] . In this scenario, poor communication stands out as one of the main sources of misunderstandings, which can lead to errors in care and compromise patient safety [9,19] . Intraprofessional and interprofessional communication is a fundamental strategy for mitigating the effects of conflicts in healthcare environments. It is up to the unit's management to establish institutional communication systems and protocols that promote clarity of information, reducing ambiguities, noise, and biases in the communication process [7] .

The EERC highlighted the predominance of collaborative strategies among nursing professionals, expressed in practices such as mutual assistance, flexibility in work schedules, and active mediation of discussions. The choice of approaches to dealing with conflicts is influenced by individual and organizational variables, such as age, professional experience, and institutional culture [20-21] , aligning with the theoretical framework that highlights co-responsibility and cooperation as fundamental to a healthy organizational climate [12].

These findings are corroborated by a systematic review of 22 articles, which identified accommodation and collaboration as the most frequent strategies in conflict management by nurses, followed by compromise. The selection of these strategies is modulated by factors such as professional training and organizational context. The literature reinforces that effective communication, negotiation, and proactive approaches are essential not only for resolving conflicts but also for preventing them, promoting more harmonious work environments. Such evidence highlights the need for training adapted to the realities of teams, aiming to improve both professional satisfaction and the quality of care [2] .

However, the persistence of competitive strategies, such as the pursuit of individual recognition, reveals the complexity of interpersonal dynamics in hierarchical contexts, where competition can weaken team cohesion and create stressful work environments [3, 22] . When conflicts arise, they must be resolved quickly and appropriately in order to minimize their negative effects, promote positive team dynamics, and improve the

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quality of patient care [7] .

The factor analysis of the EERC identified five factors (*competition*, *collaboration*, *appeasement*, *accommodation*, and *collaboration*), but highlighted psychometric limitations in the latter three due to the small number of items and inadequate internal consistency [15] . This result points to the need to refine the instrument by including items that capture specific cultural nuances of Brazilian nursing. Although the factors *competition* (α = 0.746) and *collaboration* (α = 0.651) show acceptable reliability for use in research, caution is recommended, and further studies are needed to validate the proposed factor structure.

The predominance of collaborative strategies reinforces the feasibility of investing in training programs focused on nonviolent communication and mediation techniques, especially for nurse leaders, who act as team coordinators [9] . Although the ECIG and EERC scales show potential in the Brazilian hospital context, adjustments are needed to broaden their applicability, such as the inclusion of items that assess conflicts related to work processes [23] .

Furthermore, the low self-reported intensity of conflicts may mask chronic unresolved situations, requiring proactive approaches to monitor and mitigate the accumulation of stress among professionals. These measures are crucial to avoid negative impacts on the health of professionals and the quality of care [10] .

Understanding the causes of conflicts and planning effective management strategies is essential to promote healthy work environments [24,2] , since poorly managed conflicts compromise both the quality of care and the well-being of the team. To this end, it is essential to combine organizational interventions (such as clearly defining roles and reducing overload) with nonviolent communication strategies, aiming to foster collaboration and humanized care.

CONCLUSION

The study showed a predominance of low to moderate intensity intragroup conflicts in hospital nursing, mainly related to tasks, with greater adoption of collaborative and mediating strategies for their resolution. The ECIG and EERC scales proved useful as diagnostic tools for identifying conflicts and supporting work management, despite psychometric limitations in some factors. As contributions to practice, the findings support continuing education, leadership strengthening, and the development of communication and conflict mediation skills. Limitations include the cross-sectional design, the fact that it was conducted in a single hospital, and the need for improvement and expanded validation of the instruments, which restricts the generalization of the results.

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