

# Coping strategies and authentic leadership: nurses' work in 2021 during the covid-19 pandemic<sup>a</sup>

Estratégias de coping e liderança autêntica: atuação do enfermeiro em 2021 durante a pandemia de covid-19 Estrategias de afrontamiento y liderazgo auténtico: trabajo las enfermeras em 2021 durante la pandemia de covid-19

#### ABSTRACT

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**Objective:** to identify the correlation between Authentic Leadership dimensions and coping strategies used by nurses during the pandemic. **Methods:** this is a qualitative study, with a descriptive approach, carried out with 34 nurses working in four hospitals in Curitiba. Data were collected from July to September 2021 online, using the Lazarus and Folkman Coping Strategies Inventory and the Authentic Leadership Questionnaire. Data analysis was carried out through the domain scores of each instrument according to Brazilian validation. **Results:** it is noted that the Balanced Processing and Self-Awareness Dimensions present a moderate positive correlation with the Accepting Responsibility, Seeking Social Support, Problem-Solving and Positive Reappraisal variables, with the latter variable presenting a moderate positive correlation and coping strategy variables. **Conclusion and implications for practice:** the study demonstrates that the identified correlations encourage the team in circumstances of exhaustion, promoting a balanced cognitive behavior in the conduct of services. It is observed that the correlation between coping strategies and Authentic Leadership in the nursing area allows for the team's engagement, credibility and self-development.

Keywords: Psychological Adaptation; COVID-19; Nursing; Leadership; Pandemic.

#### RESUMO

**Objetivo:** identificar a correlação entre as dimensões da Liderança Autêntica e as estratégias de *coping* utilizadas pelo enfermeiro durante a pandemia. **Métodos:** trata-se de estudo quantitativo, de abordagem descritiva, realizado com 34 enfermeiros atuantes em quatro hospitais de Curitiba. Os dados foram coletados no período de julho a setembro de 2021 de maneira *online*, utilizando o Inventário de Estratégias de *Coping* de Folkman e Lazarus e o *Authentic Leadership Questionnaire*. A análise de dados se deu através dos escores dos domínios de cada instrumento, conforme validação brasileira. **Resultados:** nota-se que as dimensões Processamento Equilibrado e Autoconsciência apresentam correlação positiva moderada com as variáveis Aceitação da Responsabilidade, Suporte Social, Resolução de Problemas e Reavaliação Positiva, sendo que essa última variável apresenta correlação positiva moderada com a dimensão Perspectiva Moral, e a dimensão Transparência Relacional apresenta correlação infima com as variáveis de estratégia de *coping*. **Conclusão e implicações para a prática:** o estudo demonstra que as correlações identificadas estimulam a equipe em circunstâncias de esgotamento, promovendo um comportamento cognitivo equilibrado na condução dos serviços. Observa-se que a correlação entre as estratégias de *coping* e a Liderança Autêntica na área de enfermagem permitem o engajamento, credibilidade e autodesenvolvimento da equipe.

Palavras-chave: Adaptação Psicológica; COVID-19; Enfermagem; Liderança; Pandemia.

#### RESUMEN

**Objetivo:** identificar la correlación entre las dimensiones del Liderazgo Auténtico y las estrategias de afrontamiento utilizadas por las enfermeras durante la pandemia. **Métodos:** se trata de un estudio cualitativo, con enfoque descriptivo, realizado con 34 enfermeras que laboran en cuatro hospitales de Curitiba. Los datos se recopilaron de julio a septiembre de 2021 en línea, utilizando el Inventario de Estrategias de Afrontamiento de Folkman y Lazarus y el *Authentic Leadership Questionnaire*. El análisis de los datos se realizó a través de las puntuaciones de dominio de cada instrumento de acuerdo con la validación brasileña. **Resultados:** se observa que las dimensiones Procesamiento Equilibrado y Autoconciencia presentan una correlación positiva moderada con las variables de Aceptación de Responsabilidad, Apoyo Social, Resolución de Problemas y Reevaluación Positiva, presentando esta última variable una correlación positiva moderada con la dimensión Transparencia Relacional con las variables estrategia de afrontamiento. **Conclusión e implicaciones para la práctica:** el estudio demuestra que las correlaciones identificadas estimulan al equipo en circunstancias de agotamiento, promoviendo un comportamiento cognitivo equilibrado en la realización de los servicios. Se observa que la correlación entre las estrategias de afrontamiento y el Liderazgo Auténtico en el área de enfermería permite el compromiso, la credibilidad y el autodesarrollo del equipo.

Palabras clave: Adaptación Psicológica; COVID-19; Enfermería; Liderazgo; Pandemia.

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### INTRODUCTION

In December 2019, the world was surprised by the announcement of SARS-CoV-2 (coronavirus), a new highly contagious pathogen that develops the Severe Acute Respiratory Syndrome called COVID-19.<sup>1</sup> World authorities quickly recognized that it was a pandemic, which would require efforts to combat it.

The increase in confirmed cases of COVID-19 and deaths has collapsed hospital institutions due to lack of structure, supplies and personnel, generating physical and psychological fatigue in them.<sup>2</sup> With regard to nurses, the challenges in direct patient care and nursing team leadership were notable due to uncertainties and epidemiological severity and insecurity in hospital institutions.<sup>3</sup>

Nurses' work process involves, among others, care and management dimensions as well as the articulation between these two aspects at different levels of complexity.<sup>4</sup> The care perspective is characterized by the execution of comprehensive care actions for patients, with the managerial dimension responsible for carrying out actions aimed at organizing the environment and coordinating the collective nursing work flow.<sup>5</sup>

Throughout the pandemic and considering the limitations faced by nurses, the dichotomy between care and management was present, but it was up to this professional to value both dimensions, aiming to enhance their knowledge for the preparation of strategic plans to combat COVID-19, in order to face the threats that have affected health organizations and assisted populations since the beginning of the pandemic, in 2020.<sup>6</sup>

During the pandemic, nurses face high levels of stress,<sup>7</sup> and this exposure has been the subject of research in the health sciences, bringing studies on coping strategies, which demonstrate the capacity for emotional and cognitive control as influences of the human-environment that leads individuals to take on different behaviors to face the tensions of everyday life.<sup>8</sup>

The pandemic also brought challenges to nurses' leadership, who sought to maintain a positive work climate, capable of promoting valuing people, generating reliability, engagement and resilience among the team, these being the Authentic Leadership (AL) assumptions.<sup>9-15</sup>

AL is a pattern of leader behavior that promotes positive action in an ethical and principled environment and is free from indoctrination.<sup>16</sup> It is composed of four dimensions which are Relational Transparency, Internalized Moral Perspective, Balanced Processing and Self-Awareness.

Thus, coping strategies and AL are related themes, but little explored in the literature jointly. No studies were found in the area of nursing that show such a correlation. Therefore, the objective of this study is to correlate the coping strategies with AL dimensions used by nurses during the COVID-19 pandemic crisis during 2021.

### METHOD

This is descriptive research with a quantitative approach, linked to the Research Project entitled "*Gerenciamento de crise: estratégias de enfrentamento da pandemia da COVID-19 nos serviços de saúde*", approved by REC/SD UFPR 4.693.343, REC HT/SES PR 4.760.914 and REC/SMS-Curitiba 4.746.384.

The study site was four hospitals located in the city of Curitiba, Paraná, Brazil, which acted as a regional reference for the fight against COVID-19. The population of nurses was 844, and the sample size calculation was probabilistic with the simple random sampling method with outcome in proportions. The expected frequency of the event of interest in the population was considered 50%, which is the worst scenario for simple random sampling. Therefore, taking into account an error of 5% and a confidence level of 95%, the intended sample was 264 nurses.

Nurses from one of the co-participating institutions, active in care or management during the COVID-19 pandemic, who agreed to participate in the research by signing the Informed Consent Form (ICF) were included. Potential participants who did not complete the online research form were excluded.

Data collection took place exclusively online, from July to September 2021, through a personalized platform developed for the research. The data collection form consisted of three parts: 1) ICF, to obtain consent for participation through a digital signature, or decline, in which case the platform did not allow the continuation of completion; 2) Participant profile; 3) Data collection instruments: Authentic Leader Questionnaire (ALQ) and Folkman and Lazarus' Ways of Coping.

In this study, the coping model was adopted, which focuses on individuals and their behavior based on cognitive and situational determinants.<sup>13</sup> Folkman and Lazarus' Ways of Coping<sup>12</sup> was used, consisting of 66 closed-ended questions, which include thoughts and actions. The instrument brings eight classifying variables, reorganized and maintained according to the Brazilian reality,<sup>12</sup> and the variables that compose it are Confrontive Coping, Distancing, Self-Controlling, Seeking Social Support, Accepting Responsibility, Escape-Avoidance, Planful Problem-Solving and Positive Reappraisal.

Such variables present the following validated domains in the Brazilian reality:<sup>12</sup> Confrontive Coping - 7, 17, 28, 34, 40, 47; Distancing - 6, 10, 13, 16, 21, 41, 44; Self-Controlling - 14, 15, 35, 43, 54; Seeking Social Support - 8, 18, 22, 31, 42, 45; Accepting Responsibility - 9, 25, 29, 48, 51, 52, 62; Escape-Avoidance - 58, 59; Planful Problem-Solving - 1, 26, 46, 49; and Positive Reappraisal - 20, 23, 30, 36, 38, 39, 56, 60, 63.

For the investigation of AL, ALQ was used, which was developed in the United States by Bruce J. Avolio and Willian L. Gardner, in 2007, and validated by Fred O. Walumbwa et al., in 2008.<sup>11</sup> The version "*Avaliando o meu Jeito de Liderar*" was applied, consisting of 16 questions. The instrument was fully applied, however, in the analysis, 2, 5, 7, 8, 10 and 14 domains were excluded, as recommended by the validity of the Portuguese version.<sup>11</sup> Thus, the data presented refer to the following domains: Relational Transparency – items 1 to 3; Internalized Moral Perspective – items 4 and 5; Balanced Processing – 6 to 8; and Self-Awareness – 9 to  $11.^{11}$ 

In order to use ALQ in the present investigation, the researcher requested authorization to use it from the copyright holder by filling out a specific form, which is available on the website: www. mindgarden.com.

Scores were obtained for each domain of each instrument according to the grouping of items as described above. Subsequently, data were descriptively analyzed as mean, median, standard deviation, 25% and 75% percentiles. Participant characteristics were analyzed descriptively with simple (n) and relative (%) frequencies. To assess the correlations between the instruments' domains, the Shapiro-Wilk normality test was performed to determine the parametric and non-parametric approach.

Spearman's correlation coefficient was used, given that all scores did not have a normal distribution (p<0.05). For a better visualization of these analyses, scatter and heatmap graphics were produced. All tests were considered significant when p<0.05 and the analyzes were performed in the R 4.1.1 environment.<sup>17</sup>

### RESULTS

The research had the participation of 34 nurses, who fully completed the two research instruments. Considering the target audience of 844 and the intended sample of 264 (95% confidence level and 5% margin of error), the obtained sample of 34 has a power of 80% and a margin of error of 10.7%. The respondent nurses exposed their experience throughout the COVID-19 pandemic when filling out the instruments, thus meeting the requirements for the research.

The sample profile was 82.35% for female professionals and 17.65% for males, with 50% of professionals aged between 30 and 40 years, followed by 35.29% for the age group of 18 to 30 years old, and 11.76% of this sample is in the age group of 41 to 50 years old.

As for experience, it is observed that 38.24% have 6 to 10 years of professional practice, 29.41% work in the area between 11 and 20 years, and 23.53% carry out the nursing activity between five and 10 years. Of these, 70.59% are nurses. Among the respondents, 47.06% have been in their current job for between one and five years; 26.47% have been in their current job for less than one year; 14.71% have been in their current job for 6 to 10 years; and 11.76% have been in their current job for 9 years.

The results obtained by ALQ and Folkman and Lazarus' Ways of Coping are presented in Figure 1 and Chart 1.



**Figure 1.** Authentic Leadership dimensions and Folkman and Lazarus coping strategy variables.<sup>18</sup> **Source**: the authors (2022).

	AUTHENTIC LEADE	RSHIP DIMENSIONS	
RELATIONAL TRANSPARENCY	INTERNALIZED MORAL PERSPECTIVE	BALANCED PROCESSING	SELF-AWARENESS
Oftenly	Oftenly	Many Times, Almost Always	Oftenly
"I encourage everyone to say what they think" (51.22%).	"I demonstrate beliefs consistent with actions" (51.22%).	"I analyze relevant information before making a decision" (56.1%).	"I demonstrate that I understand ho certain actions affect other people' (58.54%).
"I speak frankly" (46.34%).	"I ask that you make decisions based on your core values" (48.78%).	"I listen carefully to different ideas/points of view before reaching a conclusion" (51.22%).	"I know when it's time to reasses: my position on important issues" (51.22%).
	"I make difficult decisions based on high standards of ethical conduct" (46.34%).	Oftenly	Many Times, Almost Always
		"I encourage the proposition of ideas that challenge my opinions" (43.90%).	"I try to listen to feedback (return) f improve relationships with others' (46.34%).
	FOLKMAN AND LAZARUS' C	OPING STRATEGY VARIABLES	
CONFRONTIVE COPING	DISTANCING	SELF-CONTROLLING	SEEKING SOCIAL SUPPORT
I Did Not Use This Strategy	I Did Not Use This Strategy	I Did Not Use This Strategy	I Used It a Lot
"I tried to run away from people in general" (64.71%).	"I tried to run away from people in general" (64.71%)	"I didn't let others know the true situation" (44.12%).	"I talked to someone about how was feeling" (32.35%).
I Used It a Little	l Used It a Little	l Used It a Little	"I know when it's time to reasses my position on important issues" (51.22%).
"I tried to find the responsible person to change their minds" (47.06%).	"I tried to find the responsible person to change their minds" (47.06%).	"I tried not to do anything in a hurry or follow my first impulse" (38.24%).	I Used in Large Amount
		I Used It a Lot	"I talked to other people about the problem, looking for more information about the situation" (38.24%).
		"I tried to find the bright side of the situation" (38.24%).	
ACCEPTING RESPONSIBILITY	ESCAPE-AVOIDANCE	PLANFUL PROBLEM-SOLVING	POSITIVE REAPPRAISAL
I Did Not Use This Strategy	I Used It a Lot	I Used It a Lot	I Used in Large Amount
"I understood that the problem was caused by me" (41.18%).	"They were going to happen as they were going to happen" (29.41%).	"I focused on what should be done next, on the next step" (58.82%).	"I changed or grew as a person in positive way" (52.94%).
I Used It a Little	I Used in Large Amount	"I knew what had to be done, so I doubled my efforts to do what was necessary" (38.24%).	"I left the experience better than I expected" (44.12%).
"I apologized or did something to restore the damage" (38.24%).	"I wished the situation would end or somehow disappear" (26.47%).	I Used in Large Amount	"I prayed" (44.12%).
I Used in Large Amount		"I refused to back down and fought for what I wanted" (44.12%).	"I rediscovered what is importar in life" (38.24%).
"I mentally analyzed what to do and what to say" (29.41%).			I Used It a Lot
			"I modified aspects of the situation so that everything worked out in the end" (38.25%).

# Chart 1. Authentic Leadership<sup>15</sup> dimensions and Folkman and Lazarus'<sup>18</sup> coping strategy variables

The figure above shows boxplot graphs, where it is possible to verify data distribution in relation to AL dimensions and Folkman and Lazarus' coping strategy variables. Thus, in AL dimensions, there is a greater discrepancy for Self-Awareness, followed by Balanced Processing and Internalized Moral Perspective, which reveals that the results are too low among the sample. The Relational Transparency dimension reveals that the data are asymmetrically positive, being closer to the median and the first quartile, where the results are distributed between the 75% of the lowest values and the 25% of the highest values of the sample. Regarding Lazarus and Folkman's coping strategy variables, we highlight a positive asymmetric distribution, with no discrepancy between the data. In the Accepting Reality, Seeking Social Support and Self-Controlling variables, there is a strong positive asymmetry, demonstrating that the data are closer to the first quartile, justifying the indicated result.

In the chart above, it is highlighted that among the AL dimensions, Self-Awareness demonstrates that nurse leaders take on behaviors that generate opportunities for self-assessment and behavior change. Balanced Processing reveals nurse leaders' ability to listen to the team, motivating them to participate in their decision-making. Confrontive Coping, Distancing, Seeking Social Support and Planful Problem-Solving variables stand out in Folkman strategy and Lazarus' coping variables. These variables reveal that nurse leaders are willing to modify the experienced situation, but they understand that adequate planning is necessary so that changing their behavior can contribute to reducing the stressor.

Based on the data obtained from ALQ and Folkman and Lazarus' Ways of Coping, the correlation between AL dimensions and Folkman and Lazarus' coping strategy variables was determined according to nurses' experience answering the survey during the COVID-19 pandemic. Thus, Figure 2 shows the heatmap that illustrates this correlation.

It is noted that, in general, the correlations between AL dimensions and Folkman and Lazarus' coping strategy variables were low positive to moderate positive. In the Relational Transparency dimension, it is highlighted that there is a low positive correlation with Planful Problem-Solving (0.11) and Seeking Social Support (0.17), which may be linked to emotional instability faced by nurses during the pandemic. Also noteworthy is the moderate positive correlation between Self-Awareness and Seeking Social Support (0.30), Planful Problem-Solving (0.30) and Accepting Responsibility (0.31). In the Balanced Processing dimension, the moderate positive correlation stands out with Seeking Social Support (0.37), Positive Reappraisal (0.35), Planful Problem-Solving (0.33) and Accepting Reality (0.41) coping strategies, which is the strongest correlation among all. None of AL dimensions was correlated with the Escape-Avoidance variable, demonstrating that nurses, when using AL style in the face of a high level of stress, do not act ignoring what must be done. As shown in Chart 2.

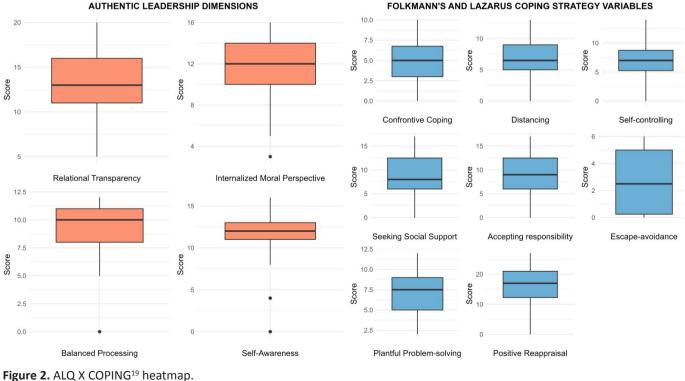


Figure 2. ALQ X COPING<sup>19</sup> heatmap Source: the authors (2022).

Escola Anna Nery 27 2023

RELATIONAL TRANSPARENCY <sup>15</sup>	INTERNALIZED MORAL PERSPECTIVE <sup>15</sup>	BALANCED PROCESSING <sup>15</sup>	SELF-AWARENESS <sup>15</sup>
Lower correlation with coping strategy variables:	Discrete correlation with coping strategy variables:	There was a growing correlation with coping strategy variables:	There is a predominance of moderate positive correlation with coping strategy variables:
No correlation - Confrontive Coping (0.00).	Low positive - Confrontive Coping (0.11); Accepting Reality (0.21); Positive Reappraisal (0.23); and Seeking Social Support (0.24).	Moderate positive - Seeking Social Support (0.37); Positive Reappraisal (0.35); Planful Problem-Solving (0.33); and Accepting Reality (0.41).	Moderate positive - Seeking Social Support (0.30); Planful Problem-Solving (0.30); and Accepting Responsibility (0.31).
Low negative - Distancing (-0.21) and Escape-Avoidance (-0.14).	Low negative with Self-Controlling (-0.19).	Low positive - Confrontive Coping (0.28); and Distancing (0.15).	low positive - Positive Reappraisal (0.25); and Distancing (0.11).
Moderate negative -	Small negative with Distancing = (-0.09).	Negative positive only for Escape-Avoidance (0.03).	Intimate positive - Confrontive Coping (0.07); and Self-Controlling (0.08).
Self-Controlling (037).	Small positive with Escape-Avoidance ((0.01).		Low negative - Escape- Avoidance (-0.14).
Small positive - Positive Reappraisal (0.02); and Accepting Reality (0.04).			
Low positive - Planful Problem-Solving (0.11); and Seeking Social Support (0.17).			

**Chart 2.** Correlation of AI <sup>15</sup> Folkman and Lazarus' Ways of Coping<sup>18</sup> variables dimensions

Source: the authors (2022)

# DISCUSSION

The context of the pandemic and the reality experienced in hospitals in Brazil and in the world demonstrated a fragility in several aspects of professional performance. This study aimed to address these challenges faced by nurses working both in care and management in reference hospitals to combat COVID-19, sensitive to this reality, making them less accessible and available to participate in research. However, it was considered that the sample obtained, despite having less statistical power and a greater margin of error than ideal, is relevant and brought important results to be discussed.

Analyzes based on data from ALQ revealed that the nurses who acted in the fight against the COVID-19 pandemic, presented behavior that resembles AL style, which is appropriate for directing nursing teams, since it is deals with a profession based on human care through interpersonal relationships.20

Nurses' behavior in relation to those they lead in the pandemic shows that their attitudes are clear, reinforcing the importance of interpersonal relationships that were very present throughout the health crisis, which allowed for greater solidity among professionals in the face of the struggle for the class and improvement of work.16

Nurse leaders sought a safe and autonomous environment, respecting ethical values in the relationship with the team, encouraging communication and collaborative attitudes even in stressful circumstances, in order to provide better patient care in the fight against COVID-19, as their convictions ethics and morals reveal their nature, allowing actions based on current legislation and commitment to society.20

Nurses' analytical conduct during the pandemic context makes him an articulate professional, with the ability to develop work based on correct, scientific information that supports their attitudes, aiming to make decisions that guide them to the best path to follow throughout the pandemic.

It was verified that nurse leaders acted authentically in the institutions studied and their attitudes towards the challenges imposed by the fight against COVID-19, explains the assertive behavior, providing the team with a relationship of trust, since thoughtless actions could bring irreversible damage in the context general, especially when experiencing a critical period such as the pandemic.21

Regarding their coping related to the level of stress they were subjected to, given the health crisis, it can be identified, from Folkman and Lazarus' Ways of Coping, that nurses see their exhaustion as a possibility to reinvent themselves, because they act with maturity, without leaving their sensitivity nullified, but preserving cognitive behavior directed to the necessary actions to what must be done in favor of the other, team or patient.13

Nurses demonstrated the ability to face fears and situations of discouragement or exhaustion during the situation to combat COVID-19, since they acted with insight, assessing reality, assuming their frustrations, not compromising their relationship with their peers or patient/family.<sup>22,23</sup>

The pandemic demanded Self-Controlling and Seeking Social Support from nurses, evidencing mutual support, as research data indicate that nurses preferred to share their emotions with co-workers instead of looking for a professional to help them face the fatigue resulting from the situation in which they were inserted.

In addition, it is observed through the research that there was a concern on the part of nurses regarding their care for their family and friends, when they choose not to alarm them about their direct role in assisting patients with a positive diagnosis for COVID-19.

When observing that 47.06% of research participants felt guilty, it appears that Accepting Reality was present in the pandemic context, which may be related to some of the circumstances whose performance throughout the pandemic was decisive, but such guilt may be related to the vulnerability of nurses in the face of their exhaustion, since controlling the harmful effects of COVID-19 on the human body was independent of their professional conduct.<sup>3</sup>

Accepting reality was something that required nurses to be concerned with assessing the situation imposed before forwarding it to others, if patients were affected by COVID-19, such as the family and the team, committing to consciously reveal the facts that were presented in that context and that could interfere in their and others' daily life.<sup>21</sup>

Nurses needed to reframe the facts that impacted their role so that it generated in themselves and in others the necessary transformation to face the pandemic scenario, and create opportunities with each challenge. Their responsibility made them engage and influence their team not to give up on what they had proposed.

Some nurses, however, opted for a misleading view, believing that the pandemic would pass somehow, without the need to change plans and review attitudes, showing escape and avoidance for the pandemic context.<sup>24</sup>

It was understood from the study that nurses acted with insight, being resolute, even in the face of the stress due to the pandemic, generating confidence in the team, peers, patients and family members. Nurses' creativity facilitated their journey in the face of adversity.

Nurses who worked on the front lines in the fight against COVID-19 reached complete professional exhaustion and turned the tribulation into a reason to develop positively, adding their knowledge to new challenges, showing awareness of the risks to which they were exposed, because, after all, anxiety, fear and stress have accompanied them since the beginning of the pandemic.<sup>25</sup>

Finally, through the instruments used, it was found that there is a moderate positive correlation in three of the four AL dimensions, and only in dimension Relational Transparency was it identified that there is a low positive correlation between the variables, as shown in Chart 3.

The Relational Transparency dimension refers to the presentation of the self to others,<sup>15</sup> and in the study, there was a low positive correlation between this dimension and Seeking Social Support and Planful Problem-Solving. Such correlation brought the opportunity to strengthen nurse leaders' role during the pandemic, as an environment of trust was created,<sup>15</sup> leading to rational planning for the best result of the strategy.<sup>26</sup>

Th Internalized Moral Perspective dimension is driven by leaders' ethical and moral values, controlling decisions without using external influences harmful to the team.<sup>15</sup> The study showed the moderate positive correlation of this dimension with Planful Problem-Solving, which requires individuals to have an attitude to change the stressor assertively.<sup>26</sup> This correlation allows nurse leaders to behave congruently with their principles.

The Balanced Processing dimension brought the moderate positive correlation with Seeking Social Support. This relationship allows nurse leaders to act analytically in the face of the scenario presented, involving the team and listening to their opinions to better face the circumstances.<sup>15</sup> This possibility led nurse leaders to collectively see answers to face COVID-19.

The Self-Awareness dimension leads individuals to have a self-awareness of the way they act in leading their subordinates.<sup>15</sup> In the present study, a moderate positive correlation was observed with Accepting Responsibility, which mitigates the impacts of a stressful situation. In the context studied, it is clear that there was greater nurse leaders' sensitivity to the impacts of their decisions during the pandemic.

#### Chart 3. Synthesis of Authentic Leadership X Coping Strategies correlation dimensions.

COPING STRATEGIES	CORRELATION	
Seeking Social Support		
Planful Problem-Solving	Low positive	
Planful Problem-Solving		
A	Moderate positive	
Accepting Responsibility		
	Seeking Social Support Planful Problem-Solving	

Source: the authors (2022).

### CONCLUSIONS AND IMPLICATIONS FOR PRACTICE

During the investigation period, there were some restrictions regarding the participation of nurses given the pandemic moment, and even with data collection taking place online, it was necessary to increase efforts regarding the research link dissemination, respecting ethical precepts in order to have as many participants as possible.

Thus, there was a limitation presented regarding the population sample. However, even with lower statistical power (80%) and greater margin of error (10.7%) than the ideal in relation to the intended sample (264) compared to the target audience (844), the sample obtained (34) is relevant and brought results that contributed to the analysis and discussion of results, considering the proposed objective.

The study reveals that AL style is suitable for nurse leaders to act in moments of intense stress. The pandemic was a phenomenon that brought the opportunity for nurses to assume an articulating role in leadership before society, co-workers and other health team members, acting with authenticity.

Leading a team in the face of stressful scenarios requires mastery of strategies that help nurse leaders to solve problems, share responsibilities and seek support when necessary.

In this study, it is observed that the correlation between AL dimensions and the variables of coping strategies by Folkman and Lazarus was low positive and moderate positive, favoring nurses to have a cognitive behavior capable of assuming commitments, in an engaged and rethink care and administrative models in critical circumstances.

Engagement is determined by individuals' emotional state, and during the pandemic, nurses were strongly dedicated to both care and leadership of the service in order to contribute to the best result in favor of their patients' care.

A trend in the performance of nurses during the pandemic was to act with a high degree of energy, seeking a psychological adaptation, which motivated their team at various times through attitudes of concentration and vigor, generating balance between their peers and subordinates.

The research suggests continuing the investigation, since the field of work of nurses is vast, and it is recommended to deepen the topic of coping strategies and AL in the various specialties of nursing, providing opportunities to expand, multiply and strengthen such knowledge in this area.

# **AUTHOR'S CONTRIBUTIONS**

Study design. Cleide Straub da Silva Bicalho. Karla Crozeta Figueiredo. Rebeca Iwankiw Lessa Beltra. Thaiane Almeida Silva Pol. Gabrielle Porfirio Souza

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Data analysis. Cleide Straub da Silva Bicalho. Karla Crozeta Figueiredo

Interpretation of results. Cleide Straub da Silva Bicalho. Karla Crozeta Figueiredo Writing and critical review of the manuscript. Cleide Straub da Silva Bicalho. Karla Crozeta Figueiredo. Rebeca Iwankiw Lessa Beltra. Thaiane Almeida Silva Pol. Gabrielle Porfirio Souza

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