MEDIA PENELITIAN DAN
PENGEMBANGAN KESEHATAN
Vol 35 No 1, Maret 2025

e-ISSN: 2338-3445
p-ISSN: 0853-9987

ACTION RESEARCH: INFLUENCE NEUROLINGUISTIC PROGRAMMING (NLP) ON RESILIENCE AND STRESS OF CENTRAL SURGERY INSTALLATION NURSES

Action Research: Pengaruh Neuro-Linguistic Programming (NLP) Terhadap Resiliensi dan Stres Perawat Instalasi Bedah Sentral

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ABSTRAK

Perawat yang bekerja di instalasi bedah sentral kerap mengalami beban kerja yang tinggi termasuk fisik dan emosional serta paparan radiasi berbahaya yang dapat menyebabkan stress kerja dan kejenuhan. Neuro-Linguistic Programming (NLP) adalah pendekatan yang berfokus pada mengubah pola pikir dan perilaku untuk meningkatkan kemampuan coping stress dengan memodifikasi respons individu ketika stress. Penelitian ini bertujuan untuk menganalisis pengaruh Neuro-Linguistic Programming (NLP) terhadap resiliensi dan stres perawat instalasi bedah sentral di Rumah Sakit Umum Diponegoro Dua Satu Klaten. Penelitian ini menggunakan metode kualitatif dengan jenis penelitian tindakan partisipan (action research). Penelitian ini melibatkan kolaborasi antara peneliti, instruktur NLP, dan 32 perawat yang dilaksanakan dalam dua siklus, dengan setiap siklus mencakup perencanaan, tindakan, observasi, dan refleksi. 6 perawat melalui kuesioner, wawancara, dan observasi, kemudian dianalisis untuk mengevaluasi efektivitas pelatihan NLP. Hasil penelitian ini bahwa NLP dapat meningkatkan resiliensi perawat dengan mengembangkan strategi coping yang efektif, keterampilan komunikasi, dan manajemen stress. Teknik reframing dan visualisasi positif membantu perawat melihat tantangan sebagai peluang, sementara teknik pacing dan leading meningkatkan hubungan dengan rekan kerja dan pasien. Implikasi dari penelitian ini menunjukkan bahwa penerapan NLP dapat meningkatkan kepuasan kerja dan kualitas pelayanan sekaligus menurunkan tingkat turn-over perawat. Dengan demikian, pelatihan NLP diharapkan menjadi investasi strategis untuk kesejahteraan mental perawat dan meningkatkan efisiensi layanan kesehatan di lingkungan yang penuh tekanan seperti Instalasi Bedah Pusat.

Kata kunci: *neuro-linguistic programming (NLP)*, perawat, resiliensi, stres

ABSTRACT

Nurses who work in Central Surgical Installations often experience high workloads, including physical and emotional, and exposure to dangerous radiation, which can cause work stress and burnout. Neuro-Linguistic Programming (NLP) is an approach that focuses on changing thought patterns and behavior to improve stress-coping abilities by modifying individual responses when stressed. This research aims to analyze the influence of Neuro-Linguistic Programming (NLP) Against the Resilience and Stress of Central Surgical Installation Nurses at Diponegoro Dua Satu Klaten General Hospital. This research uses qualitative methods with participant action research (action research). This research involved collaboration between researchers, NLP instructors, and 32 nurses, which is carried out in two cycles, with each cycle including planning, action, observation, and reflection. 6 nurses' data was collected through questionnaires, interviews, and observations, and then analyzed to evaluate the effectiveness of NLP training. The results of this research showed that NLP can increase female resilience by

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
p-ISSN: 0853-9987

developing effective coping strategies, communication skills, and stress management. Technique reframing and positive visualization help nurses see challenges as opportunities, while techniques such as pacing and leading improve relationships with colleagues and patients. The implications of this research showed that the application of NLP can increase job satisfaction and service quality while reducing the nurse turnover rate. Thus, NLP training is expected to be a strategic investment for the mental well-being of nurses and increase the efficiency of health services in stressful environments such as Central Surgical Installations.

Keywords: *neuro-linguistic programming (NLP), nurses, resilience, stress*

INTRODUCTION

Nursing is a job with a high level of stress because it requires high energy expenditure in various aspects [1]. The operating room is a department with high risk, technicality, and responsibility. Nurses in central surgical installations (IBS) are required to carry out a high workload. Nurses experience job stress, which can come from tasks, collaboration or interaction, technology, and patient care related to time pressure. Apart from that, IBS nurses are required to understand sophisticated and modern surgical instruments with more complex and specialized skills so that IBS nurses are more likely to experience higher work stress [2]. They work long hours while performing complex operations, combination or consecutive operations. This requires them to always be in a state of high concentration, checking surgical equipment repeatedly to ensure patient safety. IBS nurses also have direct contact with patient blood or body fluids, needles, scalpels, and anesthetic gases. So, they are vulnerable to exposure to dangerous biological and chemical substances or accidental accidents. This can increase job stress and lead to burnout, chronic fatigue syndrome, reduced job satisfaction, and even intentions to resign [3].

Occupational stress is a dangerous emotional and physical response when job demands do not match the worker's resources, abilities, and needs. Occupational stress has a significant impact on organizational costs in terms of absenteeism, attrition rates, injury claims, infection rates, errors in patient care, and reduced productivity. Reduced productivity leads to increased staff conflict, recruitment and retention problems, absenteeism, burnout, litigation, and job dissatisfaction [1]. Occupational stress has an impact on reducing the health and well-being of nurses, such as psychosomatic disorders, mental health, alcoholism, drug abuse, absenteeism, absenteeism, injuries at work, and reduced ability to provide quality care. This situation leads to burnout or boredom, a chronic stress characterized by extreme fatigue, detachment from work, and loss of sense of personal achievement. Occupational stress has a significant impact on patient safety risks and has been linked to patient errors [4]. Nurses who experience various levels of occupational stress when unable to meet job demands will negatively affect their performance and lead to job dissatisfaction [5].

Resilience is an individual's ability to adapt to stressful, challenging, and destructive life events to maintain balance against the negative impacts of stress [6]. Resilience is an individual's resource for moving forward in a productive direction from traumatic or stressful experiences. Resilience in nurses is a quality needed to overcome the negative impact of difficulties in the work environment and challenges through the development of personal strengths. Resilience serves as protection against work stress and is an important component of the well-being and physical and mental health of nurses [7]. Resilience in nurses is achieved through knowledge, skills, and clinical experience, which leads to nurses' self-confidence and flexibility in dealing with complex work environments. Increasing resilience also helps nurses to reduce moral conflicts [8]. There is a positive relationship between resilience, job satisfaction, job retention, general well-being, and social support [9].

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
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Neuro-Linguistic Programming / NLP is a pseudoscientific approach to exploring the human mind. The neurological patterns of the human mind can be changed based on various environmental conditions. This sensory information can be converted into thought processes. The thought process activates the neurological system, which influences physiology, emotions, and behavior [10]. Linguistics is the study of language used to express feelings and attitudes. The senses include kinesthetic, visual, auditory, olfactory, and taste. These senses help the human mind to filter various sentiments such as attitudes, memories, values, and beliefs. A combination of Senses and sentiment can be used to change behavior patterns depending on various emotional factors. 'Neurons' and 'linguistics' are combined to produce programming patterns of the human mind [11]. NLP focuses on an individual's reaction to stressful events and provides practical strategies to improve an individual's coping and adaptation capacity. NLP deals with the subjective structure of human experience, and it determines how a person can organize what to see, hear, and feel, as well as how to purify a person's external world through their senses [12].

NLP can improve aspects of resilience such as optimism and self-efficacy through presuppositions, submodality, swiss patterns, dan perceptual positions [13]. Resilience serves as protection against occupational stress and is an important component of the well-being and physical and mental health of nurses. So, resilience is a dynamic process of positive adaptation to the diversity of work stress [14]. However, studies discussing stress and burnout in IBS nurses still need to be completed. So, in this study, researchers assessed the effect of NLP on resilience and stress coping in central surgical installation nurses at RSU Diponegoro Dua Satu Klaten. Therefore, this research aims to determine the effectiveness of NLP and determine the appropriate NLP training modules for increasing resilience and coping with stress faced by nurses in hospitals.

METHODS

Study Design

This research used a qualitative research approach using action research. This research involved collaboration between researchers, NLP instructors, and nurses at RSU Diponegoro Dua Satu Klaten. In this research, researchers not only observed but also actively participated in the training process of Neuro-Linguistic Programming (NLP) to increase resilience and reduce stress in nurses. Active participation involved the comprehensive planning of training sessions, where researchers and instructors collaboratively designed and implemented relevant NLP techniques such as :

1. The development of effective coping strategies where there is a reframing technique, namely NLP, helps nurses change the way they view stressful situations, namely a reframing technique that allows them to see challenges as opportunities to learn and develop. In addition, there are positive visualization techniques where nurses are taught to imagine the desired results and reduce anxiety about challenging tasks.
2. Improved communication skills: In this NLP training, nurses learn pacing and leading techniques, which help them build better relationships with colleagues and patients, thereby reducing conflict and increasing teamwork. This training also teaches anchor techniques to access positive emotional states in stressful situations, helping them stay calm and focused.
3. Stress management is taught. State management, namely NLP, teaches nurses how to better manage their emotional states through techniques such as positive self-talk and breathing management. Material on goal setting is also provided, including how to set clear and realistic goals, which helps nurses stay motivated and focused even when facing challenges.

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
p-ISSN: 0853-9987

4. Increased self-confidence, where NLP training teaches the swish pattern technique, which can help nurses replace negative mental images with positive ones, increasing their confidence in handling difficult situations. This training also includes role-playing sessions that allow nurses to practice responding to stressful situations in a safe environment, thereby increasing their self-confidence.

This research was conducted in two cycles, where each cycle involved planning, action, observation, and reflection phases. In the observation phase, researchers focused on systematically monitoring alterations in participants' behavior, stress responses, and their capacity to adapt a new challenges. The observations focused on assessing participants' emotional regulation, their coping mechanisms in response to stress, and their ability to adjust to demanding situations. Data obtained through questionnaires, interviews, and observations were analyzed to measure the effectiveness of NLP training in reducing stress levels and increasing resilience [15]. Each cycle comprised two days of training, followed by one month dedicated to reflection and observation to track and assess progress. This study is part of a research and development of Neuro-Linguistics Programming (NLP) for occupational stress and resilience among Nurses. This research has been ethically approved by the Health Research Ethics Committee Faculty of Medicine and Health Sciences Muhammadiyah Yogyakarta University No. 111/EC-KEPK FKIK UMY/II/2024. This research was conducted at RSU Diponegoro Dua Satu Klaten Star.

Population and Sample of the Study

From January to March 2024, a purposive sample of 32 nurses was selected for the quantitative aspect of the study. These respondents were chosen based on their direct involvement in the Central Surgical Installation (IBS) at RSU Diponegoro Dua Satu Klaten. The respondents were selected to represent a broader group of nurses in the surgical installation who experience high occupational stress due to the demands of their work. The inclusion of 32 respondents ensured that a sufficiently large sample size was obtained to perform a meaningful statistical analysis of the effectiveness of the NLP techniques in reducing stress and improving resilience across a larger group.

Simultaneously, a purposive sample of 6 nurses was selected for the qualitative aspect of the study from the Central Surgical Installation (IBS) at RSU Diponegoro Dua Satu Klaten. This selection was made due to the need to focus on a small, specialized group of nurses with high occupational stress. The sample was chosen based on the nurse's direct involvement in IBS and their active participation during the study period. The report from RSU Diponegoro Dua Satu Klaten highlighted the high levels of occupational stress and burnout among nurses in the surgical installation, especially with the increasing complexity of medical procedures and patient care. Furthermore, there was an urgent need to explore strategies for improving resilience and stress management in this high-pressure environment.

The study sample was selected based on the following criteria: active nurses working in Central Surgical Installation (IBS), not on leave during their work, and willing to participate in the intervention. The sample was diverse in terms of gender, age, and years of experience.

Instrument of the Study

To prepare the study tool, the research should identified. Relevant previous studies, such as previous studies from Lee and Li et al. were reviewed and analyzed to extract methods for managing stress and improving resilience among nurses, particularly those working in high-stress environments like the Central Surgical Installation (IBS) [2]. These methods included improving coping strategies, communication skills, and stress management techniques.

https://doi.org/10.34011/jmp2k.v35i1.2618

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The quantitative measurement in this study was carried out using two main instruments: Connor-Davidson Resilience Scale (CD-RISC) to measure the level of resilience used a Likert-type scale from 1 (strongly disagree) to 5 (very strongly agree) and the Expanded Nursing Stress Scale (ENSS) to measure the level of occupational stress the nurses that used a Likert-type scale with 5 response options: 1 for "Never Experienced Stress," 2 for "Sometimes Causes Stress," 3 for "Frequently Causes Stress," 4 for "Extremely Stressful," and 0 for "No Experience". A pre-test was conducted before the training sessions to assess the baseline occupational stress levels and resilience of the nurses. After 1 month of NLP training, a post-test was administered to measure any changes in the nurse's occupational stress level and resilience to identify significant differences between the conditions before and after intervention. The duration of one training session was 3 hours.

The study tool consisted of two sections, the first section focused on the demographic data of the sample including the nurses' role (surgeon, assistant, anesthetist), years of experience, gender, and age. The second section consisted of 25 questions that assessed the nurses' resilience and stress-coping mechanism, using Connor-Davidson Resilience Scale (CD-RISC). Retesting was conducted to ensure that the instrument used could measure the dimensions of stress and resilience according to the study's objectives, which focused on the influence of NLP techniques so that it remained relevant/not and whether it was stable when used in different contexts. Supported by using a Likert-type scale from 1 (strongly disagree) to 5 (very strongly agree) was transadapted by Listyandini, et al with a reliability score of 0.87 and 57 questions of Expanded Nursing Stress Scale (ENSS) to measure the levels of resilience and occupational stress in high-pressure work environments that used a Likert-type scale with 5 response options: 1 for "Never Experienced Stress," 2 for "Sometimes Causes Stress," 3 for "Frequently Causes Stress," 4 for "Extremely Stressful," and 0 for "No Experience."

The qualitative study was collected through in-depth interviews with 6 nurses who participated in the training sessions using Neuro-Linguistic Programming (NLP) techniques. The purpose of these interviewees was to evaluate their experiences during the training and to understand the effects of the NLP techniques on their occupational stress management and resilience. The interview questions were designed to explore the nurses' perceptions of any changes in their ability to manage stress, adapt to challenging situations, and their views on the effectiveness of the NLP techniques taught during the training.

Data Analysis

This study employed a mixed-methods approach within an action research framework: Planning, Acting, Observing, and Reflecting. This approach allowed for an iterative and participatory analysis, ensuring the findings were directly connected to the practical realities of the nurses' experiences.

Before the study was conducted, the researcher carried out a pre-cycle to identify issues at RSU Diponegoro Dua Satu Klaten. Data were collected by distributing questionnaires to all nurses across various hospital units from January 15-20, 2024. The questionnaires included 25 statements for the resilience scale (CD-RISC) and 57 statements for the occupational stress scale (ENSS). The results revealed the lowest CD-RISC scores and the highest ENSS scores among nurses in the Central Surgical Installation (IBS) with 32 participants.

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
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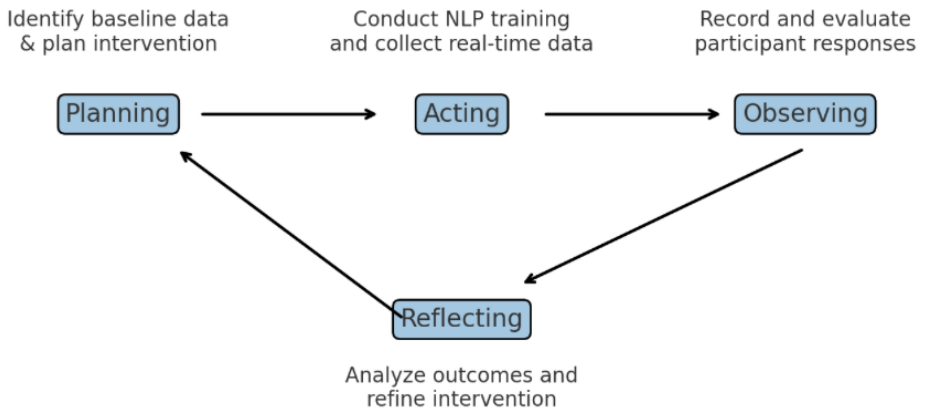

Figure 1. Data Analysis Process

Cycle 1 Analysis

1. Planning Phase
   During the planning phase (January 22-26, 2024), researchers established clear goals and objectives for the Neuro-Linguistic Programming (NLP) training, aiming to enhance nurse's resilience and improve their stress management abilities. A comprehensive strategy was developed, which included selecting appropriate NLP techniques and designing a structured training schedule. The training was carefully planned to ensure minimal disruption to the nurses' work duties. Additionally, necessary resources, such as training materials, qualified trainers, and logistical arrangements, were prepared. To evaluate the effectiveness of implementation, assessment tools, including questionnaires to measure resilience and occupational stress levels, were also developed to be administrated before and after the NLP training.
2. Acting Phase
   In the acting phase (February 3-4, 2024), a two-day NLP training session was conducted. During this session, participants engaged in practical applications of techniques such as anchoring, reframing, and visualization. Observations were documented in real-time to capture participants' engagement and immediate reactions to the intervention.
3. Observing Phase
   Concurrent with the acting phase, the observing phase (February 3-4, 2024) focused on collecting qualitative data. This included field notes and interviews to evaluate the participants' responses to the training. Initial post-intervention questionnaires were distributed to gauge immediate changes in occupational stress and resilience.
4. Reflecting Phase
   In the reflecting phase (February 5-7, 2024), qualitative data from interviews and field notes were analyzed to identify emerging themes regarding the participants' experiences with the intervention. Quantitative data were also reviewed to determine preliminary changes in stress and resilience levels and reflection-informed adjustments for cycle 2.

Cycle 2 Analysis

1. Planning Phase
   The planning phase for Cycle 2 (March 1-2, 2024) incorporated feedback from cycle 1 reflections. Adjustments were made to the NLP training to address specific stressors identified by participants.

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
p-ISSN: 0853-9987

2. Acting Phase
   A refined NLP training session was conducted during the acting phase (March 4-5, 2024), focusing on reinforcing previously taught techniques and introducing advanced methods such as switch patterning.
3. Observing Phase
   As in cycle 1, the observing phase (March 4-5, 2024) involved real-time data collection through field notes and video recordings. Participants were given follow-up post-intervention questionnaires to assess cumulative effects.
4. Reflecting Phase
   In the reflecting phase (March 6-10, 2024), qualitative data from interviews were analyzed using thematic analysis to explote the sustained impact of NLP training. Quantitative data were statistically evaluated to compare pre-and post-intervention results across both cycles, identifying significant trends in stress reduction and resilience improvement. A paired t-test was used based on the normality of the data the significance level was set at $p < 0.05$.

RESULT

This study stated that Action Research through NLP emphasizes practical changes applied directly to the context of work as a nurse at Klaten Hospital. It emphasized that NLP is effective in enhancing resilience and mitigating occupational stress within a high-pressure healthcare setting. As a profession that often faces critical situations and high pressure, nurses in this unit are at risk of experiencing stress that affects their performance and well-being. It is believed that increasing resilience can help nurses face these pressures more adaptively, thereby reducing stress levels. Below the table 3 and 4 illustrate the distribution of the study sample:

Table 3. Distribution of the study sample of Qualitative

Demographic Characteristic	Category	Number of Nurses
Gender	Male	2
	Female	4
Age	20-35 years old	4
	35-45 years old	1
	45-55 years old	1
Years of Experience	<1 year	3
	1-5 years	1
	5-10 years	1
	>10 years	1

Table 3 shows that female nurses dominate the sample more significantly than men. This reflects a general trend in nursing, which tends to have more women. There were only a few representatives from the middle (35-45 years) and old (45-55 years) age groups, each with 1 person (16.7%). This suggests that this study focused more on young nurses or that they were more available to participate. Most of the sample (50%) were nurses with work experience of less than 1 year. The representation of nurses with more extended work experience (1-5 years, 5-10 years, and more than 10 years) is the same, namely 16.7% each. This study focuses more on novice nurses, who may have different views or experiences compared to senior nurses. Meanwhile, the quantitative sample distribution can be seen in Table 4 below.

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
p-ISSN: 0853-9987

Table 4. Distribution of the study sample of Quantitative

Demographic Characteristic	Category	Number of Nurses
Gender	Male	9
	Female	23
Age	20-35 years old	17
	36-50 years old	15
Years of Experience	<1 year	4
	1-5 years	10
	5-10 years	13
	>10 years	5

Table 4 shows that female nurses dominated the sample with almost three times the number of males. This reflects a general pattern in the world of nursing, in which women generally dominate. Most of the sample was in the young age group (20-35 years), which included more than half of the nurses (53.1%). The middle age group (36-50 years) was also significantly represented (46.9%). There were no representatives of nurses over 50 years of age, which may indicate the focus of the study on nurses who were more productive or professionally active. Most of the sample consisted of nurses with medium work experience (5-10 years), which accounted for 40.6% of the sample. Nurses with 1-5 years of experience also had significant representation (31.3%). The representation of nurses with work experience of less than 1 year (12.5%) and more than 10 years (15.6%) is relatively minor, indicating that this research focuses more on nurses with moderate work experience. This distribution provides a relatively broad picture of representation, especially in terms of work experience and age, although the focus is more on nurses with medium work experience. The representation of male nurses, nurses with work experience <1 year, and nurses aged >50 years can be increased to balance the generalization of research results.

Training Neuro-Linguistic Programming (NLP) significantly increases resilience and reduces stress levels among nurses at the Central Surgical Installation of RSU Diponegoro Dua Satu. This training aims to provide skills and strategies that can help nurses manage stress and increase their ability to adapt to stressful situations. The results showed that the NLP intervention was effective in supporting nurses to develop a stronger and more positive mental attitude, which in turn contributed to increasing their resilience.

The last result showed that Neuro-Linguistic Programming (NLP) training has a significant positive impact on increasing resilience and reducing stress levels among nurses in the Central Surgery Installation at RSU Diponegoro Dua Satu. From the 32 participants for the quantitative data analysis, the analysis showed that the resilience variable was dominated by groups with a high level of resilience, namely 90.625% (29 participants), while 9.375% were in the medium resilience category, and none were in the low category. This indicates that NLP training is successful in supporting nurses in developing strong self-resilience to face work challenges. In the aspect of stress, the data showed similar results, with a significant reduction in stress levels after training. A total of 78.125% of participants were in the low-stress category, while 21.875% were in the moderate-stress category. There were no participants who fell into the severe stress category, which shows that NLP training is able to have an effective impact in reducing the burden of stress.

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
p-ISSN: 0853-9987

Table 2. Comparison of Pre- and Post- Test Scores

Variable		Pre-Intervention Mean (SD)	Post-Intervention Mean (SD)	p-value
Resilience (CD-RISC)		65.4 (8.2)	78.3 (7.9)	< 0.001
Occupational Levels (ENSS)	Stress	92.1 (12.5)	74.5 (10.8)	< 0.003

These results from table 2 indicate a significant improvement in resilience and a notable reduction in occupational stress levels following the NLP intervention. Next, the researcher classified the data according to the normative categories for the ENSS and CD-RISC scales. After categorizing the data based on the normative categories, the researcher established the minimum and maximum boundaries for both research variables. The purpose of setting these boundaries is to understand the classification of decision areas that have been determined. Below the table 3. Data classification on research variable :

Table 3. Data Classification On Research Variable (n=32)

Variable	Group	Decision Area	Total	Percentage
Resilience (CD-RISC)	Low	(X<58.333)	0	0%
	Currently	(58.333<X<91.667)	3	9.375%
	High	(X>91.667)	29	90.625%
Stress (ENSS)	Low	(X<76)	25	78.125%
	Currently	(76<X<152)	7	21.875%
	High	(X>152)	0	0

From the 32 participants, the distribution of scores for the resilience variable revealed that 0% were in the low category, 9.375% in the moderate category, and 90.625% in the high category. This indicates that the majority, 90.625% (29 participants), exhibited high resilience. A similar pattern was observed for the stress variable, where 78.125% of participants were categorized as having low stress, 21.875% in the moderate stress category, and 0% in the high-stress category after receiving NLP intervention. Therefore, based on the data analysis, it can be concluded that resilience predominantly falls within the high range, while occupational stress is predominantly in the low range (Table 3).

Commitment to Excellence: Coping with Stress Through Positive Attitude and Assertive Communication in IBS

Based on the results of interviews and data processing using the Miles Huberman technique [16], with 6 participants for the qualitative data analysis as a whole strongly desire to maintain their best performance despite facing stressful situations at the Central Surgical Installation (IBS) by maintaining a positive attitude towards colleagues and practicing assertive communication.

"Training communication with patients, how to convey messages, speaking intonation, body posture, emotional control in dealing with patients and operator doctors" (Respondent 4) - Control Dimensions

"Obstacles when working, for example, there is a type of surgery that has never been done before, so I feel more tense and feel unable or afraid of making a mistake, but after following NLP I can better handle and understand why I am having this operation. Understanding that he is capable, capable, and there is learning for himself" (Respondent 6) - Dimensions Trust in one instinct, tolerance of negative affect, and strengthening effects of stress.

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
p-ISSN: 0853-9987

"When you make a mistake at work, you must be able to interpret it so as not to repeat the same mistake and upgrade yourself" (Respondent 5) - Dimensions Personal competence, high standards, and tenacity.

Another related factor is conflict with doctors (Conflicts with Doctors). In the Neurosurgery Installation, collaboration between nurses and doctors is very important, but it is also prone to conflict in terms of communication and quick decision-making. ENSS items measuring conflict with doctors reflect this dynamic, where nurses often experience stress due to differences of opinion or unclear instructions from doctors, which can exacerbate tensions in the operating room [17].

"...but it's a small possibility, like not getting enough sleep."

"...But for example, there are a lot of operations, it's late at night, the last one is like that" (Respondent 1) – Dimensions Workload.

"….. At this time social media is also very influential, just say the wrong thing a little, and it can later reach social media and go viral. So we have to be clever in choosing words, especially to patients" (Respondent 3) – Dimensions Uncertainty concerning treatment patients and families

"... or facing DPJP doctors whose moods are sometimes not good, or facing other doctors who may have problems with the duration of the operation, there are problems and they continue to trigger emotions, so we can handle it with how we behave, how we give answers, or how we manage the situation so that it remains conducive to dealing with operating doctors whose stressors are also quite high" - (Respondent 4) – Dimensi Conflict with Doctors.

Therefore, based on the results of interviews and data processing using the Miles Huberman technique, respondents overall had problems with workload (workload), patient management (Uncertainty concerning treatment patients and families), and conflicts with doctors (Conflict with Doctors) at the Central Surgical Installation (IBS).

DISCUSSION

The Influence of NLP on the Resilience of IBS Nurses

NLP training at IBS at RSU Diponegoro 21 Klaten has shown positive results in increasing nurse resilience. By developing effective coping strategies, improving communication skills, and better managing stress, nurses become more adaptive and better able to face challenges in the work environment. This research shows that NLP is a promising approach for supporting nurses' well-being and performance in stressful environments. The training incorporated four key NLP techniques: swish pattern, reframing, emotional anchoring, and future pacing. These techniques were analyzed both quantitatively and qualitatively.

Quantitative analysis revealed significant improvements in resilience scores measured using the CD-RISC scale, with an average increase of 78.3 post-training ($p < 0.001$). Qualitative data from interviews with six selected participants highlighted the specific impacts of each technique. Anchoring helped participants to recall positive emotional states during stressful moments. Reframing enabled them to reinterpret challenges more constructively. Dissociation was effective in reducing the emotional intensity of negative experiences while rapport-building enhanced team communication and support.

These findings align with previous studies, which demonstrated the efficacy of NLP techniques in healthcare settings to improve resilience and stress management [3]. Similarly, Kumar & Panda highlighted the role of NLP in enhancing coping strategies and emotional regulation among healthcare workers. However, this study provides additional insights by integrating both quantitative and qualitative perspectives, emphasizing the practical application of NLP in a high-stress environment. In conclusion, NLP training is a promising approach to enhancing nurse resilience and reducing stress, offering both

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
p-ISSN: 0853-9987

individual and organizational benefits in challenging healthcare contexts. Further studies are encouraged to validate these findings in diverse settings and with larger sample sizes.

Several main dimensions demonstrate resilience in nurses in the Central Surgical Installation (IBS) through CD-RISC. The most relevant items relate to adaptability, mental toughness, and the ability to deal with work pressure. This is in accordance with the job demands of nurses in IBS, who often face emergencies and sudden changes in patient conditions [18]. In addition, previous research also shows that nurses who work in stressful units require strong goals and self-control to survive in a challenging environment, which is reflected in the CD-RISC dimensions. Trust in one instinct, tolerance of negative affect, strengthening effects of stress, personal competence, high standards, and tenacity, which measure nurses' ability to deal with difficult emotional situations and stay focused on their work goals [7]. The higher the level of resilience in nurses, the better nurses manage stress caused by intense workloads and physical and emotional demands [19].

Challenges and Stress of the Job of an IBS Nurse

Nurses at the Central Surgical Installation (IBS) RSU Diponegoro Dua Satu Klaten face various challenges and significant work stress. They work in very demanding conditions, where every second counts and every decision must be taken quickly and precisely. This time pressure means they must always be prepared and work efficiently, while busy work schedules and long shifts add to their physical and mental burden. In addition to time pressures, IBS nurses must master the use of a variety of sophisticated and complex medical technologies and equipment. Using this technology requires detailed understanding and ensuring its use is always correct and safe because mistakes can have fatal consequences. Continuous technological developments also demand continuous learning and training, which is an additional burden for nurses. IBS nurses also face high risks related to work accidents and exposure to hazardous substances. They are often exposed to chemicals, drugs, and other harmful substances that can harm their health, as well as the risk of contracting diseases from patients. These risks add to the pressure and stress they face every day.

According to Faremi et al., occupational stress is a dangerous emotional and physical response when job demands do not match the worker's resources, abilities, and needs [1]. In the context of IBS caregivers, this stress has a negative impact on their physical and mental health. Prolonged stress can lead to burnout, characterized by emotional exhaustion, depersonalization, and decreased personal accomplishment. This burnout makes nurses feel deep exhaustion and a loss of enthusiasm for their work, reducing the quality of care they provide to patients. In addition, prolonged stress can cause chronic physical fatigue, reduce the body's endurance, and increase the risk of disease. Due to excessive work pressure, nurses may experience sleep disturbances, headaches, and other physical health problems. High stress also impacts nurses' job satisfaction. They may feel less motivated and dissatisfied with their work, reducing productivity and performance. This decrease in job satisfaction can also increase employee turnover rates, which negatively impacts the continuity and quality of patient care.

Therefore, the overall resilience results show that nurses who score high on the items of adaptation, self-control, and sense of purpose are able to face the pressure of work in the Central Surgical Installation. Furthermore, the ENSS items that are appropriate to the conditions of nurses in the Central Surgical Installation include Workload (Workload), which was identified as the main source of stress for nurses in the Central Surgical Installation (IBS). A high workload consists not only of the number of patients to be treated but also of the complexity of the procedures performed and the need to remain focused in demanding situations [20]. If it continues, it will cause significant physical and mental fatigue, thereby increasing the risk of burnout in nurses. Additionally, there is

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
p-ISSN: 0853-9987

uncertainty in patient care (Uncertainty Concerning Treatment) also influences the stress often experienced by Central Surgery Installation (IBS) nurses. When nurses are faced with a situation where treatment decisions must be made quickly, this uncertainty can trigger high levels of anxiety and stress. This is related to uncertainty because conditions in the Central Surgical Installation often involve patients in critical condition, so nurses must be ready to make decisions under short time pressure [21].

Overall, IBS nurses at RSU Diponegoro 21 Klaten face various significant challenges that cause high stress, including time pressure, interactions with advanced technology, and the risk of accidents and exposure to dangerous substances. This stress is detrimental to nurses' physical and mental health, and they require organizational support, adequate training, and effective coping strategies to overcome it and improve their well-being and performance.

Occupational Stress and Burnout

Previous studies showed that nurses who work in high-stress conditions and stressful work environments tend to experience burnout, characterized by emotional exhaustion, detachment from work, and a reduced sense of personal accomplishment [3]. Burnout is a serious problem that can negatively impact nurses' quality of life and the quality of care they provide to patients [7]. In this research, Neuro-Linguistic Programming (NLP) has proven effective in helping nurses in the Central Surgical Installation (IBS) develop strong resilience. Resilience is the ability to adapt well in the face of stress and challenges. By increasing resilience, nurses can more effectively deal with work pressure and reduce the risk of burnout.

Effectiveness of NLP in Increasing Resilience and Coping with Stress

The results of this study indicate that NLP is effective in increasing the resilience and stress-coping abilities of IBS nurses. Through NLP training, nurses learn to change their thought patterns, use positive language, and increase self-confidence. This is in line with the findings study from Anjomshoa et al., that NLP can increase self-awareness, self-efficacy, and effective communication, all of which contribute to increased resilience [19].

Conceptual Framework of NLP and Resilience

Resilience is a dynamic process of positive adaptation to work stress. NLP provides tools and techniques to help individuals manage and change their reactions to stress, enabling nurses to maintain emotional balance and productivity in the workplace [14]. Shahrbabaki et al., found that there is a positive relationship between resilience, job satisfaction, and general well-being, which supports the findings of this study that NLP can improve nurses' well-being through increasing resilience [9].

Research Implications

Implementing neuro-linguistic Programming (NLP) as an intervention to increase resilience and manage stress among Central Surgical Installation (IBS) nurses has several important implications. First, by increasing nurse resilience through NLP, it can be hoped that turnover will decrease and staff retention will increase. This is important because the high stability of the nursing team will increase continuity in health services to patients. That way, patients will get more consistent and quality care.

Second, reducing stress and the risk of burnout through NLP applications can significantly increase nurses' job satisfaction. Nurses who can manage stress effectively will be more satisfied with their work and tend to have better mental health. High job satisfaction has a positive impact on motivation, productivity, and the quality of services provided to patients. This more positive and productive work environment creates conditions that support the well-being of both nurses and patients.

Overall, the application of NLP not only helps IBS nurses overcome the stressful challenges of their work but also has the potential to change broader organizational dynamics by improving staff retention, job satisfaction, and quality of care. This suggests

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
p-ISSN: 0853-9987

that investments in programs such as NLP have significant strategic value in improving efficiency and quality of care in critical healthcare environments such as IBS.

CONCLUSION

Training Neuro-Linguistic Programming (NLP) has a significant impact on increasing resilience and reducing stress among nurses at the Central Surgical Installation (IBS) of RSU Diponegoro Dua Satu Klaten. This training helps nurses develop more effective coping strategies, improve communication skills, and better manage stress. Techniques such as reframing and positive visualization enable nurses to change the way they view stressful situations, thereby seeing challenges as opportunities to learn and grow. Additionally, pacing and leading techniques help nurses build better relationships with coworkers and patients, ultimately reducing conflict and increasing teamwork. By increasing self-confidence through techniques such as swish patterns and role-playing, nurses can face difficult situations with more calm and focus so that the risk of burnout can be minimized.

NLP training has proven effective in reducing stress and increasing the resilience of nurses at IBS RSU Diponegoro Dua Satu Klaten. To ensure the sustainability of this positive impact, several supporting factors that need to be considered are continuous education and promotion of NLP training, regular evaluation of the performance of IBS nurses, as well as improving adequate facilities for nurses in their work environment. With this intervention, it is hoped that the nurse turnover rate will decrease, job satisfaction will increase, and the quality of health services will improve. The application of NLP in the IBS environment can be seen as a strategic investment for hospitals to create the mental well-being of nurses and increase the efficiency of health services.

REFERENCES

[1] F. A. Faremi, M. I. Olatubi, K. G. Adeniyi, and O. R. Salau, "Assessment of occupational related stress among nurses in two selected hospitals in a city southwestern Nigeria," *International Journal of Africa Nursing Sciences*, vol. 10, no. 1, pp. 68–73, 2019, doi: https://doi.org/10.1016/j.ijans.2019.01.008.

[2] E. Y. Lee, K. Kim, S. Ko, and E. K. Song, "Communication competence and resilience are modifiable factors for burnout of operating room nurses in South Korea," *BMC nursing*, vol. 21, no. 1, p. 203, 2022, doi: https://doi.org/10.1186/s12912-022-00985-0.

[3] N. Li, L. Zhang, X. Li, and Q. Lu, "The influence of operating room nurses' job stress on burnout and organizational commitment: The moderating effect of over-commitment," *Journal of Advanced Nursing*, vol. 77, no. 4, pp. 1772–1782, 2021, doi: https://doi.org/10.1111/jan.14725.

[4] S. S. Chesak, S. M. Cutshall, C. L. Bowe, K. M. Montanari, and A. Bhagra, "Stress management interventions for nurses: critical literature review," *Journal of holistic nursing*, vol. 37, no. 3, pp. 288–295, 2019, doi: https://doi.org/10.1177/0898010119842693.

[5] O. Ghazi Baker and B. Dhafer Alshehri, "The relationship between job stress and job satisfaction among Saudi nurses: A cross-sectional study," vol. 10, no. 3, pp. 292–305, 2020, doi: https://doi.org/10.14710/NMJN.V10I3.32767.

[6] F. Talebian, A. Hosseinnataj, and T. Yaghoubi, "The relationship between resilience and moral distress among Iranian critical care nurses: A cross-sectional correlational study," *Ethiopian Journal of Health Sciences*, vol. 32, no. 2, pp. 405–412, 2022, doi: https://doi.org/10.4314/ejhs.v32i2.21.

[7] Y. Guo, Y. Luo, L. Lam, W. Cross, V. Plummer, and J. Zhang, "Burnout and its association with resilience in nurses: A cross-sectional study," *Journal of clinical nursing*, vol. 27, no. 1–2, pp. 441–449, 2018, doi: https://doi.org/10.1111/jocn.13952.

[8] Y. Asadi, Z. Molazem, Z. Mohebbi, and P. Ghaemmaghami, "Investigating the relationship between resilience and professional ethics in nurses: a cross-sectional study

https://doi.org/10.34011/jmp2k.v35i1.2618

e-ISSN: 2338-3445
p-ISSN: 0853-9987

in southern Iran," *BMC nursing*, vol. 22, no. 1, p. 409, 2023, doi: https://doi.org/10.1186/s12912-023-01578-1.

[9] P. M. Shahrbabaki, P. Abolghaseminejad, L. A. Lari, S. Zeidabadinejad, and M. Dehghan, "The relationship between nurses' psychological resilience and job satisfaction during the COVID-19 pandemic: a descriptive-analytical cross-sectional study in Iran," *BMC nursing*, vol. 22, no. 1, p. 137, 2023, doi: https://doi.org/10.1186/s12912-023-01310-z.

[10] M. Javadi, Y. Saeid, J. MokhtariNoori, and M. Sirati, "The effect of neuro linguistic programing strategies training on nurses' emotional intelligence: A randomized clinical trial study," *J Appl Environ BiolSci*, vol. 4, no. 7, pp. 238–244, 2014.

[11] A. Kumar and S. P. Panda, "Performance analysis of neuro linguistic programming techniques using confusion matrix," *Indones. J. Electr. Eng. Comput. Sci*, vol. 25, no. 3, pp. 1696–1702, 2022, doi: https://doi.org/10.11591/ijeecs.v25.i3.pp1696-1702.

[12] M. HemmatiMaslakpak, M. Farhadi, and J. Fereidoni, "The effect of neuro-linguistic programming on occupational stress in critical care nurses," *Iranian journal of nursing and midwifery research*, vol. 21, no. 1, pp. 38–44, 2016, doi: https://doi.org/10.4103/1735-9066.174754.

[13] S. Li, S. Lu, S. Ni, and K. Peng, "Identifying psychological resilience in Chinese migrant youth through multidisciplinary language pattern decoding," *Children and Youth Services Review*, vol. 107, no. 1, p. 104506, 2019, doi: https://doi.org/10.1016/j.childyouth.2019.104506.

[14] M. V. Bui, E. McInnes, G. Ennis, and K. Foster, "Resilience and mental health nursing: An integrative review of updated evidence," *International Journal of Mental Health Nursing*, vol. 32, no. 4, pp. 1055–1071, 2023, doi: https://doi.org/10.1111/inm.13132.

[15] M. Waruwu, "Pendekatan penelitian pendidikan: metode penelitian kualitatif, metode penelitian kuantitatif dan metode penelitian kombinasi (Mixed Method)," *Jurnal Pendidikan Tambusai*, vol. 7, no. 1, pp. 2896–2910, 2023.

[16] F. Syahdan, "Hubungan antara keterampilan kerja dengan produktivitas kerja," *Psikoborneo*, vol. 5, no. 1, pp. 1–10, 2017.

[17] K. L. Chrouser, J. Xu, S. Hallbeck, M. B. Weinger, and M. R. Partin, "The influence of stress responses on surgical performance and outcomes: literature review and the development of the surgical stress effects (SSE) framework," *The American Journal of Surgery*, vol. 216, no. 3, pp. 573–584, 2018.

[18] K. M. Connor and J. R. T. Davidson, "Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC)," *Depression and anxiety*, vol. 18, no. 2, pp. 76–82, 2003, doi: https://doi.org/10.1002/da.10113.

[19] M. R. Anjomshoa, M. R. Esmailzadeh, and M. Keshtidar, "Effects of neuro-linguistic programming course on job stress, positive organizational behavior and job motivation in physical education teachers," *Pedagogy of physical culture and sports*, vol. 24, no. 3, pp. 111–117, 2020.

[20] S. E. French, R. Lenton, V. Walters, and J. Eyles, "An empirical evaluation of an expanded nursing stress scale," *Journal of nursing measurement*, vol. 8, no. 2, pp. 161–178, 2000, doi: https://doi.org/10.1891/1061-3749.8.2.161.

[21] P. Sarafis *et al.*, "The impact of occupational stress on nurses' caring behaviors and their health related quality of life," *BMC nursing*, vol. 15, no. 1, pp. 1–9, 2016, doi: https://doi.org/10.1186/s12912-016-0178-y.

https://doi.org/10.34011/jmp2k.v35i1.2618