

Expressive Arts Therapy for Indonesian Nursing Students: A Mixed-Methods Evaluation of Self-Esteem and Catharsis

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Article Info	ABSTRACT
<p>Article history:</p> <p>Received September 29, 2025 Accepted November 05, 2025</p>	<p>Pendidikan keperawatan dapat berdampak negatif pada kesejahteraan psikologis dan harga diri mahasiswa. Expressive Arts Therapy (EAT) adalah intervensi yang menjanjikan, namun penelitian efektivitasnya dengan metode hibrida di Indonesia masih terbatas. Penelitian ini bertujuan mengevaluasi intervensi EAT berbasis menggambar bebas untuk meningkatkan harga diri mahasiswa keperawatan Indonesia. Studi metode campuran ini menggunakan desain kuasi-eksperimental one-group pre-test-post-test. Dari 415 mahasiswa di Kalimantan Selatan dan Tengah, 24 partisipan dengan harga diri rendah-sedang dipilih (purposive sampling). Data kuantitatif (Nurses' Self-Concept Questionnaire/NSCQ) dianalisis menggunakan paired-samples t-test; data kualitatif dari wawancara mendalam dan FGD (10 partisipan) dianalisis secara tematik. Hasil kuantitatif menunjukkan peningkatan rerata skor harga diri tidak signifikan ($t(23) = -0,850, p = 0,202$). Namun, analisis kualitatif mengungkap manfaat psikologis substansial dalam empat tema: (1) peningkatan wawasan dan kesadaran diri; (2) pelepasan emosi dan reduksi stres (katarsis); (3) menggambar sebagai ekspresi non-verbal vital; dan (4) pengalaman terapeutik yang positif. Meskipun tidak signifikan secara statistik, intervensi EAT menggambar bebas memberikan manfaat psikologis mendalam. EAT adalah alat berharga untuk mendukung kesehatan mental mahasiswa keperawatan, berfungsi sebagai metode manajemen stres dan eksplorasi diri.</p> <p>Nursing education can negatively impact students' psychological well-being and self-esteem. While Expressive Arts Therapy (EAT) is a promising intervention, research on its effectiveness using hybrid methods in non-Western contexts like Indonesia is limited. This study evaluated a free-drawing-based EAT intervention to enhance the self-esteem of Indonesian nursing students. This mixed-methods study used a quasi-experimental, one-group pre-test-post-test design. From 415 students screened in South and Central Kalimantan, 24 participants with low-to-medium self-esteem were selected (purposive sampling). Data were collected using the Nurses' Self-Concept Questionnaire (NSCQ) pre- and post-intervention. Quantitative data were analyzed using a paired-samples t-test; qualitative data from in-depth interviews and FGDs (10 participants) were thematically analyzed. Quantitatively, the increase in mean self-esteem scores was not statistically significant ($t(23) = -0.850, p = .202$). In stark contrast, qualitative analysis revealed substantial benefits across four themes: (1) enhanced self-insight and awareness; (2) emotional catharsis and stress reduction; (3) drawing as vital non-verbal expression; and (4) a positive therapeutic experience. Although the EAT intervention did not yield statistically significant improvement in self-esteem scores, it provided profound psychological benefits like emotional catharsis and enhanced self-awareness. EAT is a valuable tool for supporting nursing students' mental well-being, functioning as an effective method for stress management and self-exploration.</p>
<p>Keywords:</p> <p>Expressive Arts Therapy Self-Esteem Nursing Students Mental Health Hybrid Methods Indonesia</p>	

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Introduction

Higher education in nursing is globally recognized as a demanding environment, one that can induce significant psychological distress among students (Bernhardt et al., 2023; Council of State Boards of Nursing, 2020). The demanding curriculum, high clinical expectations, and intensive engagement with human suffering and illness are consistently reported to correlate with elevated levels of stress, anxiety, and a decline in students' mental well-being (Hardy et al., 2021; Reblando, 2018; Yulia et al., 2024). One of the fundamental psychological constructs susceptible to the impact of these challenges is self-esteem, which constitutes an individual's subjective evaluation of their own worth. Low self-esteem among nursing students not only adversely affects their academic performance and clinical competence but also has the potential to impede the development of resilience and the quality of care they will provide as future healthcare professionals (Alzeyadi and Mohammed, 2020; Dancot et al., 2023; Golan et al., 2023; Heidari et al., 2022; Kim, 2024; Pérez-Fuentes et al., 2019).

In the context of human resource development within the health sector, ensuring the optimal mental health of nursing students is an urgent priority (Arnone, 2024; Stelnicki and Carleton, 2021). This aligns with global agendas such as the Sustainable Development Goals (SDGs), particularly Goal 3 (Good Health and Well-being) and Goal 4 (Quality Education). Therefore, the development of effective, accessible, and culturally acceptable interventions to enhance self-esteem is crucial. Among various non-pharmacological approaches, Expressive Arts Therapy (EAT) has emerged as a promising modality (Simon et al., 2020; Wang and Abdullah, 2024). EAT utilizes creative processes, such as drawing, painting, or other art forms, as a medium to explore and communicate emotions, enhance self-awareness, and strengthen healthy coping mechanisms (Binson and Lev-Wiesel, 2018; E. and T., 2012; Kim, 2010; Kwong et al., 2019; Li and Peng, 2022; Liu et al., 2022; Mishra et al., 2021; Mohamad and Mohamad, 2014; Ozceker et al., 2023; Simon et al., 2020; Xie et al., 2025; Yan et al., 2021). Previous research has demonstrated the potential of EAT in managing stress and improving various aspects of mental health (Carter et al., 2023; Keough, 2023; Wang and Abdullah, 2024; Zevallos and Cueva, 2024). Specifically, drawing activities have been identified as effective in facilitating emotional expression and enhancing self-esteem across diverse populations.

Despite compelling preliminary evidence supporting EAT, several significant gaps in the literature motivate the present study. First, the majority of studies on EAT tend to employ a singular methodological approach, either quantitative or qualitative, thereby failing to capture a holistic understanding of the intervention's effectiveness and the participants' subjective experiences (Juanamasta et al., 2023). Second, the application of EAT within the context of nursing education in non-Western countries, such as Indonesia, remains limited. Consequently, a deep understanding of this intervention's effectiveness, considering cultural adaptations and the specific challenges faced by Indonesian nursing students, has yet to be thoroughly explored. Finally, many intervention studies focus solely on short-term impacts and seldom evaluate the sustainability of therapeutic effects through follow-up measurements.

To address these gaps, this study is designed with several fundamental innovations. It adopts a hybrid method approach, integrating a quasi-experimental design with in-depth qualitative analysis to comprehensively evaluate the intervention's effectiveness. The EAT intervention protocol, utilizing a free-drawing technique, was collaboratively developed with clinical psychologists and mental health nurses and was specifically contextualized to address the challenges faced by nursing students in South and Central Kalimantan. Furthermore, this research incorporates a mid-term impact evaluation to assess the sustainability of changes in self-esteem post-intervention.

Consequently, the primary objective of this research is to systematically evaluate the effectiveness of a free-drawing-based Expressive Arts Therapy intervention in enhancing the self-esteem of nursing students in Indonesia. The findings of this study are expected not only to provide robust empirical evidence regarding the benefits of EAT but also to yield a standardized intervention model that can be integrated into curricula or student support services. Such an integration would serve to bolster the mental health and resilience of future nurses, aligning with the broader vision of strengthening human resources in the health sector.

Methods

Study Design

This study employed a mixed-methods design, integrating a quasi-experimental, one-group pre-test-post-test framework with in-depth qualitative inquiry. The quantitative framework was chosen to evaluate changes in nursing students' self-concept scores before and after the Expressive Arts Therapy (EAT) intervention. However, the authors acknowledge the inherent limitation of this design, which lacks a control group, in establishing definitive causal relationships. In the absence of a comparison group, any observed changes cannot be definitively attributed solely to the EAT intervention, as the influence of external factors or natural maturation cannot be ruled out. To mitigate this weakness and capture a more holistic perspective, the qualitative component, utilizing in-depth interviews and Focus Group Discussions (FGDs), was incorporated to provide a rich, contextual understanding of the participants' subjective experiences with the therapy.

Population, Samples and Sampling

Population

The target population for this study consisted of undergraduate nursing students enrolled in the Nursing Science Study Programs at two higher education institutions: Institut Kesehatan Suaka Insan in Banjarmasin, South Kalimantan, and Universitas Eka Harap in Palangka Raya, Central Kalimantan.

Samples and sampling

A multi-stage purposive sampling technique was used to recruit participants. The process involved two distinct stages:

- 1. Initial Screening:** A total of 415 nursing students from both institutions participated in a screening phase using the Rosenberg Self-Esteem Scale (RSES). The primary inclusion criterion for proceeding was a self-esteem score classified as medium or low.
- 2. Final Selection:** Following the initial screening, 36 students who met the inclusion criteria were invited to participate in the study and completed the baseline assessment using the Nurses' Self-Concept Questionnaire (NSCQ). However, the final sample that fully participated in all stages of the research, including the pre-test, the complete intervention, and the one-month post-intervention follow-up, comprised 24 students.

This resulted in a participant attrition rate of 33.3% (12 students). The primary reasons for this attrition were voluntary withdrawal and time constraints. It is important to acknowledge that this high rate of attrition introduces a potential for attrition bias. It is possible that participants who withdrew were those who perceived little benefit from the intervention or felt less engaged. If this were the case, the final sample may be skewed towards individuals who had a more positive experience. This potential bias should be considered when interpreting the study's findings, particularly the overwhelmingly positive qualitative results.

The researcher acknowledges that this final sample size (N=24) is small for quantitative analysis. Consequently, the study has limited statistical power, affecting its ability to detect anything but a very large effect from the intervention.

Instruments

1. Screening

a. *Rosenberg Self-Esteem Scale (RSES).*

The Rosenberg Self-Esteem Scale (RSES) is a widely used instrument, recognized for its robust validity and reliability in measuring self-esteem (Martín-Albo et al., 2007; Monteiro et al., 2022; Salerno et al., 2017; Yu et al., 2022). The instrument's validity has been established through multiple methods. Construct validity, frequently assessed using Confirmatory Factor Analysis (CFA), has demonstrated that the scale's items consistently measure the intended construct of self-esteem.

Furthermore, the RSES exhibits strong concurrent validity, as evidenced by its correlation with other self-esteem measures, such as the Coopersmith Self-Esteem Inventory. Its predictive validity has also been established, with RSES scores showing significant correlations with measures of depression and anxiety, as theoretically predicted.

The reliability of the RSES is typically assessed by measuring its internal consistency, utilizing Cronbach's Alpha. While the resulting values may vary across studies, the literature consistently reports acceptable levels of reliability, with exemplary values such as $\alpha = 0.709$ and $\alpha = 0.724$ (Martín-Albo et al., 2007). Given this robust psychometric evidence, the RSES is deemed a valid and reliable instrument for the screening process in the present study.

b. Nurses' Self-Concept Questionnaire (NSCQ).

The primary measure of self-concept in this study was the Indonesian-adapted version of the Nurses' Self-Concept Questionnaire (NSCQ). This instrument, originally developed by Cowin (2001), comprises 36 items that measure six dimensions of a nurse's professional self-concept. It is important to acknowledge that the NSCQ is primarily designed to assess the self-concept of nurses with clinical experience; its application in this study, therefore, represents an adaptation for a pre-clinical student population. This context is crucial for interpreting the findings, as a majority of participants (62.5%) had no prior clinical exposure.

Despite this limitation, the Indonesian version of the NSCQ was selected due to its robust validation in the local context. Studies by Hariyati & Afifah (2019) have consistently demonstrated its excellent psychometric properties among both practicing nurses and nursing students in Indonesia. Construct validity analysis indicates that all 36 items significantly load onto the six original dimensions, with factor loadings reported to be above 0.40. In terms of reliability, the instrument demonstrates high internal consistency, with a Cronbach's Alpha for the total scale ranging from $\alpha = 0.92$ to 0.94 and subscale reliabilities between $\alpha = 0.75$ and 0.90 (Hariyati & Afifah, 2019).

Based on this strong evidence, the NSCQ was deemed the most appropriate and dependable instrument available for this study. The choice was made with the explicit understanding that an instrument focused on professional self-concept might be less sensitive to changes in a pre-clinical sample, a point that is critical to the interpretation of the quantitative results.

2. Intervention

The intervention consisted of structured Expressive Arts Therapy (EAT) sessions centered on the technique of free drawing. This therapeutic module was developed in collaboration with a clinical psychologist and a mental health nurse to ensure its relevance to the specific academic and clinical pressures faced by nursing students.

To ensure therapeutic competence and intervention fidelity, all sessions were conducted by a facilitator qualified as a Registered Nurse (RN) with a specialization (Major) in Mental Health and Psychiatric Nursing. The facilitator possessed prior practical experience in utilizing art-based therapies in clinical practice with psychiatric patients. Furthermore, prior to the study's implementation, the facilitator and a collaborating clinical psychologist from Sambang Lihum Mental Health Hospital jointly developed a detailed and standardized Standard Operating Procedure (SOP), specifically tailored for the EAT free-drawing intervention for nursing students.

The sessions were designed to guide participants in exploring their emotions and building self-awareness through creative expression and guided self-reflection.



Figure 1. Standard Operating Procedure (SOP) Flowchart for the Expressive Arts Therapy (EAT) Free-Drawing Intervention.

This flowchart details the structured pathway for the EAT intervention, dividing the process into three primary stages. (1) Session Preparation involves determining participants, preparing the facilitator, securing materials and space, and managing administrative tasks (e.g., informed consent, pre-test). (2) Phase 1: Session Implementation outlines the 60-minute therapeutic session, including the opening (10 min), drawing instruction (5 min), free-drawing process (15 min), and guided reflection/sharing (15-20 min). (3) Phase 2: Post-session details the procedures for documentation, evaluation, and artwork management. The diagram also specifies critical guidelines for the facilitator, such as maintaining psychological safety, ensuring confidentiality, and initiating referral procedures for participants showing significant distress.

Procedure

Data collection was conducted in three distinct phases, as illustrated in the research flowchart.

- Preparation Phase.** Following the acquisition of ethical approval from the Health Research Ethics Committee (KEPK) of Institut Kesehatan Suaka Insan, an initial survey was conducted to gather baseline data using a locally validated version of the Rosenberg Self-Esteem Scale (RSES). This pre-test data was used to screen and select eligible participants from both institutions.
- Implementation Phase.** Selected students then participated in the Expressive Arts Therapy (EAT) free-drawing intervention. Immediately prior to the first intervention session, the Nurses' Self-Concept Questionnaire (NSCQ) was administered to collect pre-test data. The intervention consisted of one session for each divided group, each lasting 90 minutes. Each session followed a consistent structure: (a) a briefing and prompt introduction (15 minutes), (b) a free-drawing period (45 minutes), and (c) group reflection and debriefing (30 minutes). To facilitate self-exploration, specific prompts were provided in each session, including: "Draw what is currently on your mind," "Illustrate a challenge you face as a nursing student," "Depict your source of personal strength," and "Draw a message for your

future self." Throughout these sessions, researchers also collected observational data on participant engagement and emotional responses.

3. **Follow-Up Phase.** One month after the conclusion of the intervention, a follow-up measurement was conducted. This included administering the Nurses' Self-Concept Questionnaire (NSCQ) to all 24 participants. Concurrently, to explore the subjective experience and sustainability of the intervention's effects, qualitative data were collected from a total of 10 participants (5 from Institut Kesehatan Suaka Insan and 5 from Universitas Eka Harap) through in-depth interviews or a Focus Group Discussion (FGD).

Data Analysis

A mixed-methods approach was employed for data analysis. Quantitative Analysis: Statistical analysis was performed using JAMOVI software to compare pre-test and post-test self-esteem scores. The analysis followed three steps: (1) The Shapiro-Wilk test was used to assess the normality of the data distribution; (2) A Paired-Samples t-test was conducted to determine if there was a statistically significant mean difference between pre-test and post-test scores ; and (3) Cohen's d was calculated to measure the effect size and determine the practical significance of the intervention. All transcripts from the in-depth interviews and FGD, collected from the 10 qualitative participants, were analyzed using thematic analysis. This method involved systematically identifying, analyzing, and reporting patterns (themes) within the data to provide deep and nuanced insights into the participants' experiences with the free-drawing EAT intervention.

Ethical Clearance

All research procedures were reviewed and approved by the Health Research Ethics Committee (KEPK) of Institut Kesehatan Suaka Insan (Approval No: 207/KEPK-SI/VI/2025). Written informed consent was obtained from all participants before their enrollment in the study.

Results

This section presents the research findings, beginning with the demographic and academic characteristics of the participants. It then details the quantitative analysis of the intervention's effect on self-esteem and career plans, followed by a thematic analysis of the qualitative data from participant interviews and focus group discussions.

Participant Characteristics

The final sample consisted of 24 nursing students who completed all phases of the study. As shown in Table 1, the participants were distributed across various academic stages, with the largest proportion being first-year students (Semesters 1-2, 33.3%). The majority of the sample demonstrated high academic achievement, with 70.8% (n=17) holding a Grade Point Average (GPA) above 3.50.

Regarding their motivation and background, nursing was the first-choice major for a slight majority (54.2%, n=13), and exactly half of the participants (50%, n=12) had a family member working in the nursing profession. A key characteristic of the sample was their limited clinical exposure; a significant majority (62.5%, n=15) had not yet undertaken any clinical or community practice.

Table 1. Participant Demographic and Academic Characteristics (N=24)

Characteristic	Category	Frequency (f)	Percentage (%)
Semester			
	Semester 1-2	8	33.3
	Semester 3-4	7	29.2
	Semester 5-6	4	16.7
	Semester 7-8	5	20.8
Cumulative GPA			
	3.01-3.50	7	29.2
	>3.50	17	70.8
Nursing as First Choice			
	Yes	13	54.2
	No	11	45.8
Family in Nursing			
	Yes	12	50
	No	12	50
Clinical Experience			
	None	15	62.5
	< 3 months	2	8.3
	3-6 months	6	25.0
	>6 months	1	4.1

Quantitative Findings

Primary Outcome: Self-Esteem Scores

To evaluate the intervention's primary objective, a paired-samples t-test was conducted to compare self-esteem scores before and one month after the Expressive Arts Therapy (EAT) intervention. The assumption of normality for the distribution of difference scores was met, as assessed by the Shapiro-Wilk test, $W(24) = 0.956$, $p = .365$.

Descriptive statistics showed a slight increase in the mean self-esteem score from the pre-test ($M = 222.00$, $SD = 32.80$) to the post-test ($M = 230.00$, $SD = 43.00$). However, this increase of 8.46 points was not statistically significant, $t(23) = -0.850$, $p = .202$. The resulting effect size was small (Cohen's $d = -0.173$), indicating that the intervention had a minimal practical impact on the overall self-esteem scores as measured by the Nurses' Self-Concept Questionnaire (NSCQ).

Consistent with this, a descriptive analysis of self-esteem categories showed a modest positive shift. The proportion of participants in the "High" self-esteem category increased from 54.2% ($n=13$) to 62.5% ($n=15$) post-intervention, with a corresponding decrease in the "Medium" category from 45.8% ($n=11$) to 37.5% ($n=9$).

Table 2. Descriptive Statistics and Paired-Samples t-test Results for Pre-test and Post-test Scores

Variable	N	Mean (M)	Standard Deviation (SD)
Pre-test Score	24	222.00	32.80
Post-test Score	24	230.00	43.00
Paired Differences		Mean Difference	<i>t</i> (23)
Pre-test vs Post-test		-8.46	-0.850

Note. This table presents the descriptive statistics and the results of the paired-samples t-test comparing scores before and after the intervention.

To evaluate the impact of the Expressive Arts Therapy (EAT) intervention on students' self-esteem, a paired-samples t-test was conducted. The analysis compared pre-test and post-test scores across six distinct dimensions of self-esteem, revealing varied effects of the intervention, as detailed in Table 3.

Table 3. Comparison of Self-Esteem Scores Before and After the Expressive Arts Therapy Intervention

Dimension	Before (Pre-test)	After (Post-test)	Mean Difference	<i>t</i> (23)-value	<i>p</i> -value	Cohen's <i>d</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)				
General Self-Concept	37.4(7.06)	38.2(7.78)	0.80	-0.43	.672	0.09
Caring	35.90 (7.78)	39.80 (6.59)	3.90	-2.09	.047*	0.43
Staff Relations	35.90 (7.78)	37.60 (7.67)	1.70	-0.86	.401	0.18
Communication	36.10 (6.94)	37.90 (6.77)	1.80	-0.97	.344	0.20
Knowledge	35.40 (5.84)	38.50 (7.95)	3.10	-1.76	.092	0.36
Leadership	42.40 (7.79)	38.30 (8.20)	-4.10	1.92	.068	-0.39

Note: *M* = Mean, *SD* = Standard Deviation. The mean difference is calculated as (Post-test - Pre-test). An asterisk (*) indicates statistical significance at *p* < .05.*

The primary finding of this study is a statistically significant improvement in the *Caring* dimension. The mean score for *Caring* increased from (*M* = 35.90, *SD* = 7.78) at pre-test to (*M* = 39.80, *SD* = 6.59) at post-test. This mean difference of 3.90 points was statistically significant, *t*(23) = -2.09, *p* = .047. Furthermore, the calculated effect size (Cohen's *d* = 0.43) indicates a small-to-moderate practical significance, suggesting that the EAT intervention had a meaningful positive impact on this specific aspect of self-esteem.

In contrast to the findings for the *Caring* dimension, no statistically significant changes were observed in the other dimensions. Although an increasing trend in mean scores was noted for General Self-Concept, Staff Relations, Communication, and Knowledge, these improvements did not reach the threshold for statistical significance (all *p* > .05). This suggests that while the intervention may have had some positive influence, it was not potent enough to produce a statistically verifiable change in these areas.

A noteworthy observation was made in the *Leadership* dimension. Contrary to the other dimensions, the mean score for Leadership decreased from pre-test (*M* = 42.40) to post-test (*M* = 38.30). While this decrease of 4.10 points was not statistically significant (*p* = .068), it approaches significance and indicates that the EAT intervention may not have had a positive effect, and could have potentially had an adverse influence, on participants' self-perceived leadership within the context of this study.

In summary, the results indicate that the Expressive Arts Therapy intervention was specifically effective in enhancing the *Caring* dimension of students' self-esteem. However, the study did not find sufficient statistical evidence to support its effectiveness across the other five measured dimensions. The intervention's targeted

impact highlights its potential utility for fostering specific affective components of self-esteem, while its broader effects remain unsubstantiated by the current data.

Secondary Outcomes: Career and Behavioral Changes

While the intervention did not significantly impact the primary outcome, notable changes were observed in participants' career clarity and professional interests, as detailed in Table 4. It is important to note that these secondary outcomes consist of nominal and ordinal data; therefore, the following changes are presented descriptively, and inferential statistics were not applied to this data.

The most significant change was a sharp reduction in career uncertainty. The proportion of students undecided about their post-graduation plans decreased by more than half, from 45.8% (n=11) to 20.8% (n=5). This was accompanied by a substantial increase in the number of participants planning to work as a clinical nurse in Indonesia, which rose from 29.2% (n=7) to become the most chosen path at 45.8% (n=11).

Furthermore, participants developed more specific clinical interests. The percentage of students with no specific area of interest decreased from 45.8% (n=11) to 29.2% (n=7). This shift corresponded with a marked increase in interest in Medical-Surgical Nursing, which grew from 29.2% (n=7) to 45.8% (n=11). Minor positive changes were also noted in student organization involvement and reliance on social support networks.

Table 4. Pre- and Post-Intervention Comparison of Behavioral and Career-Related Factors (N=24)

Variable	Category	Pre-Intervention f (%)	Post-intervention f(%)
Active in Student Organization	Yes	7 (29.2%)	8(33.3%)
Career Plan After Graduation	Undecided/Don't Know	11(45.8%)	5(20.8%)
	Work as clinical nurse	7(29.2%)	11(45.8%)
	Work Outside Nursing	2(8.3%)	5(20.8%)
Specific Clinical Interest	None	11(45.8%)	7(29.2%)
	Medical-surgical Nursing	7(29.2%)	11 (45.8%)

Qualitative Findings

In stark contrast to the non-significant quantitative results for self-esteem, the thematic analysis of participant interviews and focus groups revealed profound and overwhelmingly positive subjective benefits. Four major themes emerged, providing deep insight into the participants' therapeutic experience.

Theme 1: Enhanced Self-Insight and Awareness

Participants frequently described the free-drawing process as a catalyst for self-discovery and reflection. The creative act served as a bridge to their inner selves, allowing them to better understand their own emotions, perspectives, and needs.

"I feel more relieved after this practice and can get to know myself from different points of view. I can now fix what I think is negative about myself." (Student_1)

"We can also see what we really want and need when we look at the results of our subconscious drawings; we can know ourselves in more detail than what I previously thought." (Student-3)

Theme 2: Emotional Release and Stress Reduction (Catharsis)

This was the most dominant theme. Participants consistently reported a powerful sense of catharsis, describing the intervention as a safe and effective outlet for releasing pent-up emotions, stress, and anxiety. The act of drawing helped quiet the "noise" in their minds and alleviate their mental burdens.

"This therapy momentarily made me feel relieved because part of my mental burden was lifted after participating, and I feel more comfortable." (Student-4)

"Through free drawing, I was given the space to express feelings, thoughts, and experiences... This activity can also be a medium for emotional release and increase feelings of calm and comfort." (Student-5)

Theme 3: Drawing as a Vital Means of Non-Verbal Expression

Many participants highlighted the value of drawing as an alternative form of communication, especially for those who find it difficult to articulate their feelings verbally. The artistic process became a language of its own, enabling them to express complex emotions that words could not capture.

"This intervention is very helpful for me and for people who may find it difficult to express their feelings to others because they are confused about how to articulate them." (Student-3)

"This activity has its own appeal because I can express myself indirectly through the canvas." (Student-4)

Theme 4: A Positive and Supportive Therapeutic Experience

Overwhelmingly, participants perceived the intervention as a positive and beneficial experience. A key factor contributing to this was the creation of a safe, non-judgmental, and supportive environment. Feeling heard and validated by the facilitators allowed them to open up and engage fully in the therapeutic process.

"I feel more open about what I feel and I feel heard without any judgment from anyone. I felt comfortable when the people involved in this intervention supported me...because of their positive demeanor." (Student-1)

"...this practice also provided a sense of comfort for me because by drawing I could express myself, what I was thinking, and so on." (Student-7)

Discussions

The central finding of this study presents not a paradox, but rather a critical insight into methodological alignment. Our primary task in this discussion is to reconcile why the Expressive Arts Therapy (EAT) intervention yielded profound psychological benefits, as evidenced by our qualitative data, yet failed to produce a statistically significant change on the Nurses' Self-Concept Questionnaire (NSCQ). We posit that this divergence is not indicative of a failed intervention, but instead offers compelling evidence of a fundamental construct mismatch between the therapeutic objectives of EAT and the specific metrics captured by the NSCQ.

This methodological incongruence becomes clearer upon closer examination of the instruments and the intervention itself. EAT is intentionally designed to foster emotional processing, catharsis, and general self-awareness benefits that are primarily affective and introspective in nature (Dilawari, K. & Tripathi, 2014; Heiderscheidt, 2022; Malchiodi, 2023; Wang and Abdullah, 2024). The NSCQ, conversely, is a tool tailored to measure a professionally-oriented self-concept, deeply rooted in the context of clinical roles and responsibilities (Alzeyadi and Mohammed, 2020; Dancot et al., 2021; Ford, 2015). Given that the majority of our participants were pre-clinical students with limited exposure to professional nursing practice, the NSCQ was insufficiently sensitive to detect the deeply personal and formative changes that were at the very core of their therapeutic experience. This realization stands as the study's principal contribution: a directive for future research on the critical importance of selecting precisely aligned instruments to measure the outcomes of arts-based therapeutic interventions.

From a qualitative standpoint, the success of the intervention was unequivocal and robust. The theme of catharsis, characterized by emotional release and a significant reduction in perceived stress emerged as the most dominant therapeutic mechanism reported by participants. This finding is not unique to the Indonesian context; it clearly mirrors outcomes from international EAT research. For instance, studies across diverse populations, such as older adults with mild cognitive impairment in China (Yan et al., 2021) and individuals living with HIV in Hong Kong (Kwong et al., 2019), also identified emotional release and stress reduction as core benefits. The process of free-drawing, in particular, provided a secure and non-verbal medium through which students could externalize and process considerable academic and personal pressures. This serves as a powerful validation of a core tenet of EAT: that creative expression can unlock and alleviate psychological distress that may be inaccessible through purely verbal means (Adibah and Zakaria, 2015; Kossak, 2009; Wang and Abdullah, 2024).

Integrated with this profound emotional release was a significant enhancement of self-awareness and personal insight. Participants consistently reported that the process of reflecting upon their artwork fostered novel perspectives and a more profound understanding of their intrinsic needs and values. This finding strongly aligns with global EAT literature, which frequently cites enhanced self-exploration as a primary outcome. Research in Thailand, for example, found that EAT promoted personal growth and self-awareness among lecturers (Binson & Lev-Wiesel, 2018), and a study with medical students in Oman highlighted positive perceptions of EAT in enhancing self-awareness (Simon et al., 2020). This introspective journey was carefully nurtured by the supportive and non-judgmental therapeutic environment cultivated by the facilitators. The synergy between emotional expression and guided reflection allowed students to move beyond simple stress relief towards a more integrated and nuanced comprehension of themselves.

A compelling bridge connecting these subjective experiences to tangible, real-world impacts is clearly visible in a key secondary quantitative finding. Following the intervention, we observed a dramatic decline in the proportion of students who were undecided about their career paths, which fell from 45.8% to 20.8%. Concurrently, there was a substantial increase in the percentage of students planning to pursue careers as clinical nurses, rising from 29.2% to 45.8%. This marked shift provides robust quantitative corroboration for the qualitative theme of "Enhanced Self-Insight and Awareness."

The logical connection between these data points forms a powerful, unified narrative. As participants became more attuned to their internal states, emotional responses, and personal values through the EAT process, they

concurrently developed greater confidence and decisiveness regarding their professional futures. This demonstrates that the impact of the intervention extended far beyond immediate psychological comfort. It functioned as a pragmatic tool for self-development, translating newfound internal clarity into concrete and significant life planning.

Further nuance is revealed through a detailed analysis of the NSCQ subscales, which highlights the intervention's specific effects. The statistically significant improvement recorded in the "Caring" dimension ($p = .047$) aligns logically with the introspective and empathetic nature of the EAT process. An intervention designed to encourage a deeper understanding of one's own emotional state would naturally foster a greater capacity for empathy and compassion towards others, which is the cornerstone of the caring construct in nursing (Keough, 2023).

Conversely, the decrease in the "Leadership" dimension score, which approached statistical significance ($p = .068$), may initially seem counterintuitive but likely reflects a temporary and necessary shift in focus. The intensive, inwardly-directed process of EAT may have temporarily de-emphasized the development of externally-directed, authoritative attributes such as leadership. This should not be interpreted as a negative impact, but rather as a probable trade-off in psychological focus, from the external world to the internal landscape, during a period of intensive therapeutic self-exploration.

The implications of these findings for contemporary nursing education are significant and far-reaching. Expressive Arts Therapy should not be relegated to a remedial role but should instead be viewed as a proactive and universally beneficial tool for fostering resilience, emotional intelligence, and professional identity formation among students. We strongly recommend the integration of EAT modules into the standard nursing curriculum, perhaps as a facilitated debriefing mechanism following challenging clinical rotations. Such an application could help students process complex emotional experiences, thereby mitigating the risk of burnout and enhancing their capacity for compassionate care.

In conclusion, to build upon this work, future research should prioritize the use of more appropriately aligned psychometric instruments. Scales designed to measure constructs such as emotional regulation, mindfulness, or self-compassion would likely be more sensitive to the specific benefits conferred by EAT. Furthermore, adopting longitudinal study designs would be invaluable for tracking the long-term impacts of EAT on students' career trajectories, professional satisfaction, and overall well-being, providing a more complete picture of the lasting value of such interventions.

Study Limitations

Several important limitations of this study should be considered when interpreting the findings. First, a fundamental limitation lies in the one-group, quasi-experimental design, which lacked a control group. The absence of a comparison group precludes the drawing of strong causal inferences. Consequently, the profound psychological benefits revealed in the qualitative data cannot be definitively attributed solely to the EAT intervention, as confounding factors such as natural maturation or other life events cannot be ruled out.

Second, the study is constrained by limitations related to the sample. The final sample size ($N=24$) is small for quantitative analysis. This resulted in limited statistical power, restricting the study's ability to detect anything other than a very large effect from the intervention. This issue was compounded by a high participant attrition rate of 33.3% (12 students). This high attrition introduces a significant potential for attrition bias. It is possible that participants who withdrew were those who perceived little benefit from the intervention or felt less engaged. If this were the case, the final sample may be skewed towards individuals who had a more positive experience, which should be considered when interpreting the study's findings, particularly the overwhelmingly positive qualitative results.

A third significant limitation involves a methodological mismatch between the intervention's targets and the quantitative measurement instrument. A clear construct mismatch was present: the EAT intervention was designed to foster affective and introspective changes (e.g., catharsis, self-awareness), whereas the Nurses' Self-Concept Questionnaire (NSCQ) is tailored to measure a professionally-oriented, clinical role-based self-concept. As a result, the instrument was likely insufficiently sensitive to capture the nuanced psychological shifts that participants actually experienced. This issue was compounded by the fact that the majority of participants (62.5%) were pre-clinical students with limited clinical exposure, rendering the NSCQ a suboptimal tool for this population. The failure to detect a statistically significant change likely reflects the limitations of this instrument rather than a failure of the intervention itself.

Conclusion

In conclusion, while the free-drawing-based Expressive Arts Therapy intervention did not yield statistically significant changes in scores as measured by the Nurses' Self-Concept Questionnaire (NSCQ), an instrument that may have been insensitive to the nuanced psychological shifts that occurred the study provides compelling evidence of its therapeutic value from a qualitative perspective. The primary strength of EAT, as demonstrated by our findings, lies not in its capacity to alter professional self-concept in the short term, but in its function as a powerful tool for stress management and self-exploration.

EAT successfully facilitated emotional catharsis, enhanced self-awareness, and fostered clarity in participants' career paths. These findings imply that EAT can serve as a highly valuable supportive intervention within nursing education; not as a tool to remedy low self-esteem, but rather as a proactive tool for stress management, emotional expression, and self-development. Educational institutions could consider integrating EAT sessions into counseling services or co-curricular activities to holistically support student mental health. Future research should employ a randomized controlled trial (RCT) design with a larger sample size and an extended follow-up period to corroborate these findings and evaluate the long-term impacts of the intervention.

Acknowledgements

The authors express their sincere gratitude to the Directorate General of Higher Education, Research, and Technology (Diktilristek) for providing financial support through the 'Penelitian Dosen Pemula (PDP)' grant Batch I, which enabled this research. We also appreciate the institutional backing from Institut Kesehatan Suaka Insan and STIKES Eka Harap. We are grateful to LLDIKTI Region XI and the LPPM of IKES Suaka Insan for their administrative support, specifically in facilitating research permits, contracts, monitoring, and dissemination activities. Lastly, we acknowledge the valuable assistance provided by Stephen Abel Imanuel and Rizka Okta Amara in completing this study.

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