**Received:** 04 Mar 2025 | **Accepted:** 07 July 2025 **Genel Tıp Derg. Volume** 35/**Issue** 5 (October), 876-888
DOI: 10.54005/geneltip.1651212

**ORIGINAL ARTICLE**

# The Power of Art: The Impact of Interest in Art on Creativity among Nursing Students

# Sanatın Gücü: Hemşirelik Öğrencileri Arasında Sanata İlgi Duymanın Yaratıcılık Üzerindeki Etkisi

[1]Sema ÜSTÜNDAĞ, [2]Nihan DURGU

[1]Department of Nursing, Faculty of Health Sciences, Kütahya Health Sciences University, Kütahya, Turkiye
[2]Department of Nursing, Faculty of Health Sciences, Manisa Celal Bayar University, Manisa, Turkiye

**Correspondence**

Sema ÜSTÜNDAĞ,
Kütahya Health Sciences University, Faculty of Health Sciences, Nursing Department, Kütahya, Turkiye

**E-Mail:** sema.ustundag@ksbu.edu.tr

**How to cite ?**

Üstündağ S., Durgu N., The Power of Art: The Impact of Interest in Art on Creativity among Nursing Students, Genel Tıp Derg. 2025;35(5):876-888

**ABSTRACT**

**Aim:** Creativity has become increasingly important in the nursing profession for innovative problem-solving and improving patient outcomes. This study aimed to examine the relationships between nursing students' interest in the arts and their creative personality traits, creative trait motivation, and creative mindset levels.
**Methods:** A cross-sectional and descriptive study was conducted with 569 nursing students from two public universities located in the Aegean Region of Türkiye. Data was collected online via Google Forms between May and June 2024. Data was collected using the Interest in Art Scale, the Creative Personality Traits Scale, the Creative Trait Motivation Scales, and the Creative Mindset Scale, and analyzed using Pearson correlation and multiple linear regression analyses.
**Results:** The findings revealed that students who actively engaged in the arts scored significantly higher in task-orientedness, internal motivation, self-confidence, risk-taking, and intrinsic creative motivation. Additionally, interest in the arts was found to be positively correlated with a growth mindset and negatively correlated with a fixed mindset.
**Conclusions:** Artistic activities were found to be effective in enhancing nursing students' creative personality traits and intrinsic motivation. Art-based practices can be incorporated into course content, curriculum-based projects, and simulation activities. In addition, the use of artistic approaches in clinical settings may strengthen nurse-patient relationships and contribute positively to the quality of care. In this context, art should be considered a functional and innovative strategy in nursing education.

**Keywords:** Creativity, intrinsic motivation, nursing, personality traits

**ÖZ**

**Amaç:** Hemşirelik mesleğinde yaratıcılık, yenilikçi problem çözme ve hasta sonuçlarını iyileştirme açısından giderek daha önemli hale gelmiştir. Bu çalışma, hemşirelik öğrencilerinin sanata olan ilgisi ile yaratıcı kişilik özellikleri, yaratıcı özellik motivasyonu ve yaratıcı zihniyet düzeyleri arasındaki ilişkileri incelemeyi amaçlamaktadır.
**Gereç ve Yöntemler:** Türkiye'nin Ege Bölgesi'nde bulunan iki devlet üniversitesinden 569 hemşirelik öğrencisi ile kesitsel ve tanımlayıcı bir çalışma yürütülmüştür. Veriler Mayıs ve Haziran 2024 arasında Google Forms aracılığıyla çevrimiçi olarak toplanmıştır. Araştırmanın verileri, Sanata İlgi Ölçeği, Yaratıcı Kişilik Özellikleri Ölçeği, Yaratıcı Özellik Motivasyon Ölçeği ve Yaratıcı Zihniyet Yapıları Ölçeği kullanılarak toplanmış ve Pearson korelasyonu ve çoklu doğrusal regresyon analizleri kullanılarak analiz edilmiştir.
**Bulgular:** Bulgular, sanatla aktif olarak ilgilenen öğrencilerin görev odaklılık, içsel motivasyon, özgüven, risk alma ve içsel yaratıcı motivasyonda anlamlı derecede daha yüksek puan aldığını ortaya koymuştur. Ayrıca, sanata olan ilginin gelişen yaratıcı zihniyet yapısı ile pozitif, sabit yaratıcı zihniyet yapısı ile ise negatif korelasyon gösterdiği bulunmuştur.
**Sonuçlar:** Sanatsal etkinliklerin hemşirelik öğrencilerinin yaratıcı kişilik özelliklerini ve içsel motivasyonlarını artırmada etkili olduğu bulunmuştur. Sanat temelli uygulamalar ders içeriğine, müfredat temelli projelere ve simülasyon etkinliklerine dahil edilebilir. Ayrıca, klinik ortamlarda sanatsal yaklaşımların kullanılması hemşire-hasta ilişkilerini güçlendirebilir ve bakım kalitesine olumlu katkıda bulunabilir. Bu bağlamda, sanat hemşirelik eğitiminde işlevsel ve yenilikçi bir strateji olarak düşünülmelidir.

**Anahtar Kelimeler:** Hemşirelik, içsel motivasyon, kişilik özellikleri, yaratıcılık

**Peer-Review:** Double anonymized - Two External
**Plagiarism Checks:** Yes - intihal.net
**Complaints:** geneltip@selcuk.edu.tr


Selcuk University Press
Genel Tıp Dergisi | e-ISSN: 2602-3741
https://dergipark.org.tr/tr/pub/geneltip
https://yayinevi.selcuk.edu.tr/

## INTRODUCTION

The rapid advancement of science and technology has further highlighted the need for societal change and development (1). In modern healthcare systems, integrating nursing science with the arts and effectively using creativity are crucial for enhancing the quality of patient care (2). Today, creativity is recognized as a significant value across science, art, education, and everyday life (3). Art is a construct that goes beyond an individual's basic needs, serving the process of self-understanding and meaning-making, and reflecting the spiritual world through aesthetic expression (4). Creativity is an inherent quality in everyone capable of strengthening and deepening one's connection with life. The concept of creativity, metaphorically described by Myra Levine in 1973 as "the fusion of art and nursing science," is an everyday phenomenon observed in nursing interactions (5). The artistic dimension of nursing is reflected in the holistic approach to care, which includes responding to patient needs while respecting privacy, engaging in deep listening, showing compassion and empathy, using physical and emotional touch, and demonstrating imagination and creativity to provide the best possible care in alignment with human dignity and values (6).

Creativity in nursing care enhances mental fluidity, facilitating the development of simple, effective, cost-efficient, and safe new methods of patient care. This process requires creative vision, sensitivity, and the ability to think deeply (1). Nursing science and art converge through creativity, while science represents nursing knowledge, and art enables the practical application of this knowledge. Information guides our actions, and creativity aids in synthesizing this knowledge (7).

The creativity of nurses, which directly impacts the quality of patient care, efficiency of hospitals, and overall image, plays a vital role in the healthcare sector. Nurses can generate innovative solutions by utilizing available resources in unique and original ways during patient care (8).

For nurses to establish effective communication with patients, they must develop creative thinking skills and move beyond routine practices. The development of these skills is crucial for nursing students to gain the competence to intervene in various situations (5). The integration of art and science concepts plays a fundamental role in understanding health and disease processes and developing clinical thinking skills. The humanities enrich our understanding of human existence and shape our lifestyle; therefore, incorporating principles from the arts into educational programs can significantly contribute to developing a human-centered perspective. By using the principles of fine arts, students may better understand patients' holistic overall needs and contemplate the profound effects of illness on both patients and their families (9,10).

In today's healthcare system, nurses are faced with numerous threats and challenges, compelling them to find effective and creative solutions (11). These challenges include heavy workloads, long working hours, insufficient staffing, low wages, lack of orientation, burnout, inadequate support from managers and other healthcare personnel, and limited opportunities for education and professional development (12,13). And these challenges are significant factors that hinder nurses from developing creative practices (14-16). However, integrating creative arts into health

education enhances medical practices and helps healthcare professionals provide high-quality care, hence improving patient satisfaction (17). The use of visual arts and the humanities is considered a powerful tool in teaching nursing students to become skilled clinicians, as it effectively enhances their physical observation skills (18). Open-mindedness, flexibility, and metacognitive skills are critical in nursing, and nurses who possess these skills are more likely to have higher job satisfaction and productivity (16). Moreover, the idea that nursing is both a science and an art is a common thread in the definitions of the profession. Therefore, examining the artistic inclinations of individuals who practice nursing as an art-based profession is important. However, despite the importance of creativity in nursing education and practice, there is very little evidence in the literature regarding the creativity of nurses and nursing students (5).

This study aimed to examine the relationships between nursing students' interest in the arts and their creative personality traits, creative trait motivation, and creative mindset levels. In this context, our research questions were as follows:

1. What is the level of nursing students' interest in art?

2. What is the level of creativity among nursing students?

3. Does participation in artistic activities affect the creativity levels of nursing students?

## MATERIALS and METHODS

### Design and Sample

This study employed a cross-sectional, descriptive design. The study was conducted between May and June 2024 with students enrolled in the nursing departments of two public universities located in the Aegean Region of Türkiye. These universities collectively enroll approximately 1,469 students in their undergraduate nursing programs across two campuses. No sampling method was used, as the entire population was intended to be reached (19). Inclusion criteria were: being 18 years of age or older, the ability to read and write in Turkish, and current enrollment in a nursing program. Exclusion criteria included being under the age of 18, inability to read or write in Turkish, and not being currently enrolled in a nursing program.

### Data Collection

This study employed a quantitative research approach using the survey method (20). This method allows researchers to gather data from a large sample and examine multiple variables simultaneously. Participants were nursing students enrolled in the undergraduate nursing programs. Data were collected through Google Forms (online). Before completing the survey, all participants were asked to sign a consent form, and only those who voluntarily agreed to participate in the study were included. Data was collected between May and June 2024. The purpose and significance of the study were explained to the nursing students before their classes. The self-report questionnaires were then distributed, and participants were asked to complete them immediately. Each questionnaire took approximately 20 minutes to complete. A total of 618 questionnaires were distributed, of which 49 were incomplete, resulting in 569 valid questions.

### Data Collection Tools

Data were collected through a self-administered online questionnaire completed by nursing students. A total of five data collection tools were used, four of which are scales.

### Demographic information form

Developed based on the relevant literature (21-23), this form aimed to identify students' demographic and academic characteristics. It included items on age, gender, class level, whether they actively engaged in any form of art, and the specific type of art practiced. The form consisted of a total of five questions.

### Interest in Art Scale

The Interest in Art Scale, developed by Taşkesen (24), assesses individuals' interest in the arts. The scale consists of two subscales (emotional reasoning and behavior), each containing 10 items. Cronbach's alpha coefficient, indicating the reliability of the scale, was reported to be 0.84 in the original study. Responses are rated on a scale from 1 ("strongly agree") to 5 ("strongly disagree"). Five items are reverse-scored. The total score ranges from 20 to 100, with lower scores indicating a lack of interest in the arts and higher scores reflecting greater interest. In the current study, Cronbach's alpha coefficient was found to be 0.88.

### Creative Personality Traits Scale (CPTS)

The CPTS, developed by Şahin & Danışman (25), is a 17-item measurement tool used to assess creative personality traits. The scale comprises four dimensions: intrinsic motivation (5 items), task-orientedness (5 items), self-confidence (3 items), and risk-taking (4 items). This structure allows for a detailed evaluation of different dimensions of individuals' creative personality traits. Each dimension can be assessed independently, or a single score can be obtained from the total scale. Possible score ranges are as follows: intrinsic motivation, 5-25; task-orientedness, 5-25; self-confidence, 3-15; and risk-taking, 4-20. The total score ranges from 17 to 85, with higher scores indicating a stronger presence of the respective traits, whereas lower scores suggest that the trait is less evident. Cronbach's alpha value was determined to be 0.67 in the original study (25) and 0.81 in the current study.

### Creative Trait Motivation Scales (CTM)

Developed by Taylor & Kaufman (26) and adapted to Turkish culture by Soyer & Boyalı (3), this scale consists of 20 items and three factors: intrinsic motivation (10 items), extrinsic motivation (six items), and amotivation (four items). It is a Likert-type scale, with responses ranging from "strongly disagree-1" to "strongly agree-7." Cronbach's alpha internal consistency coefficients were determined to be 0.91 for intrinsic motivation, 0.90 for extrinsic motivation, and 0.87 for amotivation in the original study and 0.94, 0.81, and 0.82, respectively, in the current study.

### Creative Mindsets Scale (CMS)

Developed by Karwowski (27) and adapted to Turkish culture by Karakelle & Saraç (28), this scale aims to assess the creative mindsets of adolescents and adults. It consists of two subscales: growth mindset and fixed mindset, each containing five items, scored on a scale from 1 to 5. The possible score range for each subscale is 5-25. The adaptation of the scale was conducted with a total of 741 participants. Confirmatory factor analysis on two

sample groups (n1=198; n2=543) confirmed the two-factor structure of the scale. A moderate negative correlation was found between the two subscales, suggesting that fixed and growth mindsets are distinct yet related constructions. In the current study, Cronbach's alpha reliability coefficient was found to be 0.78 for the growth mindset subscale and 0.79 for the fixed mindset subscale.

### Data Analysis

Data collected through Google Forms was transferred to a Microsoft Excel spreadsheet (Alphabet Inc., USA) and analyzed using SPSS v. 23 (IBM, USA). The Shapiro-Wilk test was applied to assess the normality of the data distribution. Skewness and kurtosis values within the range of -2 to +2 were considered acceptable for assuming a normal data distribution, and the analyses were conducted under this assumption (29). Descriptive statistics such as frequency, percentage, and mean values were utilized, while the chi-square test, Student's t test, Pearson correlation analysis, and multiple linear regression analysis were employed for comparing variables that followed a normal distribution (30).

### Ethical Considerations

Participants were evaluated after approval was obtained Ethics Committee of Manisa Celal Bayar University (Decision No: 2378-24 April 2024). Permission was obtained from the institutions where the research was conducted. Before administering the survey, the researchers explained the purpose of the study to the participants and obtained their consent. To ensure the confidentiality of the participants, all the data were made accessible only to the members of the research team. The study was conducted under the principles of the Declaration of Helsinki.

## RESULTS

The mean age of the participants was 19.57±1.60 years (range=18-28 years), with 75.4% being female and 24.6% being male. Among the students, 38.1% (n=217) were first-year students, 23.9% (n=136) were in their second year, 23.0% (n=131) were third-year students, and 14.9% (n=85) were in their fourth year. A total of 20.9% (n=119) of the students reported actively engaging in an art form. These art forms were categorized as performance arts (women: n=47, men: n=22), visual arts (women: n=53, men: n=14), media arts (women: n=5, men: n=4), and literary arts (women: n=5, men: n=4). Additionally, 31.9% of the students were involved in more than one art form.

Among those actively engaged in artistic activities, 72.4% were female (n=86), whereas 23.6% were male (n=33). Regarding the distribution across academic years, 47.9% were in the first year, 25.2% in the second year, 16.8% in the third year, and 10.1% in the fourth year.

Compared with students who did not engage in any art form, those who actively engaged in an art form scored significantly higher on the task-oriented ($t=2.30$, $p<0.05$), internal motivation ($t=2.79$, $p<0.01$), self-confidence ($t=3.88$, $p<0.001$), and risk-taking ($t=2.51$, $p<0.05$) subscales of the CPTS. Furthermore, students involved in the arts scored significantly higher on the intrinsic motivation subscale of the CMT than those not involved in the arts ($t=6.07$, $p<0.001$) (Table 1).

**Table 1.** Comparison of mean scores between students engaged in the arts and those not engaged in the arts (n=569)

| Inventory | Engaged in the arts Mean±SD | Not engaged in the arts Mean±SD | Mean difference | *t** | df | *p* |
|---|---|---|---|---|---|---|
| CPTS-task-orientedness | 17.93±3.50 | 17.06±3.73 | .87 | 2.30 | 567 | 0.021** |
| CPTS-internal motivation | 21.12±3.54 | 20.06±3.69 | 1.05 | 2.79 | 567 | 0.005** |
| CPTS-self-confidence | 10.61±2.63 | 9.50±2.79 | 1.10 | 3.88 | 567 | 0.000** |
| CPTS-risk-taking | 16.13±2.81 | 15.38±2.93 | .75 | 2.51 | 567 | 0.012** |
| CPTS-total | 65.79±8.65 | 62.00±7.99 | 3.78 | 4.51 | 567 | 0.000** |
| CTM-intrinsic motivation | 5.71±0.99 | 5.04±1.09 | .67 | 6.07 | 567 | 0.000** |
| CTM-extrinsic motivation | 4.28±1.07 | 4.14±1.13 | .14 | 1.23 | 567 | 0.218 |
| CTM-amotivation | 3.71±1.21 | 3.80±1.26 | -.08 | -.66 | 567 | 0.506 |
| CMS-growth mindset | 19.92±3.53 | 19.54±3.17 | .38 | 1.15 | 567 | 0.249 |
| CMS-fixed mindset | 12.43±3.71 | 13.18±3.94 | -.75 | -1.87 | 567 | 0.061 |

Independent-samples t-test; *, p<0.05 **CPTS: Creative Personality Traits Scale, CTM: Creative Trait Motivation Scale, CMS: Creative Mindset Scale

The correlation analysis revealed significant positive correlations between emotional reasoning and task-orientedness (r=0.257, p<0.01), internal motivation (r=0.389, p<0.01), self-confidence (r=0.188, p<0.01), and risk-taking (r=0.332, p<0.01) dimensions of the CPTS, as well as the overall CPTS score (r=0.469, p<0.01). Additionally, emotional reasoning had a positive correlation with the intrinsic motivation factor (r=0.405, p<0.01) and a negative correlation with the amotivation factor (r=-0.113, p<0.01) of the CTM. Furthermore, emotional reasoning was positively correlated with the growth mindset (r=0.264, p<0.01) and negatively correlated with the fixed mindset (r=-0.155, p<0.01) of the CMS. The correlation analysis revealed significant positive correlations between the behavior subscale of the Interest in Art scale and the task-orientedness (r=0.257, p<0.01), internal motivation (r=0.389, p<0.01), self-confidence (r=0.188, p <0.01), and risk-taking (r=0.332, p<0.01) dimensions of the CPTS, as well as the overall CPTS score (r=0.469, p<0.01). Creative trait motivation had significant positive correlations with intrinsic motivation (r=0.384, p<0.01) and extrinsic motivation (r=0.153, p<0.01) and a non-significant weak negative correlation with amotivation (r=-0.032, p=0.445). Lastly, the behavior subscale of the Interest in Art scale had a positive correlation with growth mindset (r=0.233, p<0.01) and a very low and non-significant correlation with fixed mindset (r=0.012, p=0.769) (Table 2).

A multiple linear regression analysis was conducted to determine whether emotional reasoning and behavioral interest in the arts significantly predicted creative personality traits. The results indicated that the model was significant (F=83.51, p<0.001). The $R^2$ value (0.228) revealed that emotional reasoning and behavioral engagement in the arts explained 22% of the variance in creative personality traits. Both emotional reasoning (β=0.39, p<0.05) and behavioral interest (β=0.11, p<0.05) were found to be significant predictors of creative personality traits.

**Table 2:** Pearson correlation matrix for the outcome measure (n=569)

| Subdimensions | Mean ± SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Interest in Art-emotional reasoning | 35.21±5.10 | 1 | .644** | .877** | .257** | .389** | .188** | .332** | .469** | .405** | .015 | -.113** | .264** | -.155** |
| 2. Interest in Art-behavior | 34.82±6.77 | | 1 | .932** | .270** | .243** | .183** | .225** | .370** | .384** | .153** | -.032 | .233** | .012 |
| 3. Interest in Art-total | 70.03±10.79 | | | 1 | .291** | .336** | .204** | .299** | .454** | .433** | .103* | -.073 | .271** | -.066 |
| 4. CPTS-task-orientedness | 17.24±3.70 | | | | 1 | .090* | .418** | -.009 | .626** | .194** | -.142** | -.262** | .203** | -.224** |
| 5. CPTS-internal motivation | 20.28±3.68 | | | | | 1 | .048 | .626** | .722** | .433** | .057 | -.056 | .251** | -.165** |
| 6. CPTS-self-confidence | 9.73±2.79 | | | | | | 1 | -.031 | .535** | .119** | -.151** | -.279** | .064 | -.063 |
| 7. CPTS-risk-taking | 15.54±2.91 | | | | | | | 1 | .617** | .421** | .103* | -.020 | .203** | -.102* |
| 8. CPTS-total | 62.79±8.20 | | | | | | | | 1 | .468** | -.053 | -.244** | .296** | -.231** |
| 9. CTM-intrinsic motivation | 5.18±1.10 | | | | | | | | | 1 | .444** | .111** | .409** | -.233** |
| 10. CTM-extrinsic motivation | 4.17±1.12 | | | | | | | | | | 1 | .564** | .161** | -.010 |
| 11. CTM-amotivation | 3.78±1.25 | | | | | | | | | | | 1 | -.055 | .152** |
| 12. CMS-growth mindset | 19.62±3.25 | | | | | | | | | | | | 1 | -.277** |
| 13. CMS-fixed mindset | 13.02±3.90 | | | | | | | | | | | | | 1 |

*Correlation significant at the 0.05 level, **Correlation significant at the 0.01 level. CPTS: Creative Personality Traits Scale, CTM: Creative Trait Motivation Scales, CMS: Creative Mindset Scale

## DISCUSSION

This study investigated the relationship between engagement with the arts and creativity among Turkish nursing undergraduates. The findings revealed a significant positive correlation between engagement in the arts and creative personality traits, daily creative intrinsic motivation, and a growth mindset. Additionally, the study revealed that nursing students' engagement with the arts had a decisive effect on their creative personality traits and daily creative intrinsic motivation, reflected in their emotions, thoughts, and behaviors. The results also suggest that interest in the arts fosters creative traits such as risk-taking, self-confidence, and task-orientedness. These findings provide a robust foundation for emphasizing the importance of incorporating the arts into educational curricula and promoting activities that support creative thinking skills.

The study revealed that 20.9% of the nursing students actively engaged in art. This finding aligns with previous studies (21-23). These results indicate that participation in artistic activities is relatively common among students and may play a significant role in fostering creativity. However, university students tend to prefer social activities that require passive participation, such as watching CDs and DVDs, following the news in written and visual media, and reading books (31).

In this study, it was found that female students were most interested in visual arts, whereas male students tended to prefer performance arts. These findings suggest that artistic interests may vary by gender and that these differences could influence

the diversity of creative activities. Elisondo et al. (32) similarly reported that female students often participated more in crafts, daily creativity, and performing arts, whereas male students were more interested in music, science, and technology.

This study found that students actively involved in the arts had significantly higher creativity scores than those not engaged in the arts. Moreover, students involved in the arts generally exhibited creative personality traits, high intrinsic motivation, and a growth mindset. The growing interest in the pedagogical value of the arts in healthcare education is increasingly evident. This surge in interest has led to numerous empirical studies assessing the effectiveness of the arts in diverse learning environments (33). In these studies, the effectiveness of art-based learning varies depending on the context and implementation conditions. For example, Chacón-López & Maeso-Broncano (22) demonstrated the positive effects of participation in artistic activities on creative thinking and overall creativity. An & Youn (34) noted that inspiration from artworks enhanced participants' productivity in other creative areas. The literature also indicates that involvement in art-making and design thinking expands students' worldviews (35), provides a safe environment for risk-taking (36), and fosters innovation and collaboration skills (37). However, some studies indicate that art-based education is not universally effective. For example, Chen & Walsh (38) found that the creative bonding intervention did not significantly improve self-transcendence among nursing students. Additionally, Rieger et al. (39) reported that while many students found arts-based assignments meaningful, approximately 20% did not value the experience, highlighting the diverse responses to this pedagogical approach. These findings suggest that art-based education may not always produce the expected effects and can vary depending on the context, implementation methods, and individual differences among students. Therefore, to better understand the impact of art-based educational methods, more comprehensive and controlled studies should be conducted across various learning environments and demographic groups.

The impact of engagement with the arts on social intelligence and creative thinking skills is particularly important for nursing students. Kaya et al. (21) reported that nursing students interested in auditory arts had significantly higher levels of social intelligence and skills. This suggests that art-based activities have a profound effect on improving the social competencies of nursing students. The literature emphasizes the importance of daily creativity in enhancing clinical competence in nursing (40). Pellico et al. (41) reported that visual arts education improved nursing students' symptom observation skills. The research conducted by Lovell et al. (42) indicated that art activities increased students' metacognitive awareness and critical thinking tendencies. Additionally, Guo et al. (43) determined that participation in visual arts programs enhanced postgraduate nursing students' observation skills and flexible thinking abilities. In another study, Lampert (44) reported that undergraduate students taking art courses had significantly higher open-mindedness subscale scores than those not taking art courses. Chan (45) demonstrated that creative teaching methods fostered students' creativity. In this

context, research conducted by Taşdelen Baş et al. (46) showed that courses such as decorative arts were particularly effective in developing nursing students' critical thinking and creative skills. Despite these positive findings, some studies suggest that the effectiveness of art-based education may not always be evident, and its impact may vary depending on the learning environment and implementation methods. In the study conducted by Kirklin et al. (47), nurses and physicians who received art-based observation training showed a significant improvement in their scores for describing dermatological photographs. Most participants evaluated the training as relevant, valuable, and enjoyable. However, while the study emphasized the importance of observational skills in clinical practice, it also highlighted the need for further research to examine the long-term effects of such training programs. Although the positive effects of art-based educational methods are observed, some studies have revealed that their effectiveness is limited and does not yield the same results for every student group. This suggests that art-based educational practices may require more personalized approaches and that different strategies should be applied for different students.

This study found that students actively engaged in the arts had significantly higher daily creative intrinsic motivation. In contrast, Jeong & Park (48) reported that nursing students had lower levels of daily creativity. This suggests the potential of engagement with the arts to enhance students' creativity and motivation. Nursing students can develop their creativity through education and training, and academic work can help increase their creativity by engaging them in interesting activities, motivating, and inspiring them (5). The role of the arts in nursing education has the potential to contribute to students' personal development and clinical competencies. In their study, Ridgway et al. (49) showed that participation in art-based activities allowed first-year nursing students to reassess their creativity, health, and well-being, thereby deepening their understanding of person-centered care. These findings suggest that integrating the arts into nursing education could help students develop creative problem-solving skills and generate more effective solutions in complex healthcare environments.

To cultivate creativity among nurses, it is essential to support creativity through engaging and motivating activities during the educational process. Nurses with enhanced creativity are likely to find creative and practical solutions more easily when dealing with crises in increasingly competitive and changing healthcare environments. The use of the arts in education, particularly when addressing high-impact social issues, has been shown to reinforce theoretical education and promote the development of critical, empathetic thinking and creativity (50-53). However, the literature also presents findings suggesting that the effectiveness of art-based teaching methods is not always evident and may vary depending on the event, situation, and conditions. Hadavi Bavili & İlçioğlu (54) examined the impact of creative and artistic teaching methods in anatomy education. The study found that both instructional approaches enhanced students' self-efficacy levels; however, no significant differences were observed between the groups in terms of

self-efficacy and attitude scores. Similarly, a study conducted in Türkiye demonstrated that both creative drama and conventional classroom teaching methods positively influenced nursing students' attitudes toward violence against women. While both groups showed significant improvements in post-test scores, no statistically significant difference was found between the two instructional approaches (55). In a study by Röhm et al. (56), rehabilitation science students watched a film on schizophrenia; however, no significant changes were observed in their stigmatizing attitudes. In Sandberg et al. (57), art-based leadership training generated high satisfaction, but the targeted skill development was not achieved. This situation is explained by the "halo effect," where aesthetic and enjoyable learning experiences overshadow the actual learning outcomes. Another study implemented the creative-bonding intervention to improve nursing students' attitudes toward older adults. Participants involved in art-based activities showed a significant improvement in attitude scores, although no meaningful changes were found in self-transcendence or willingness to work with older adults (58). The effects of art-based education methods in nursing education may vary depending on the implementation conditions and student profiles. Therefore, further studies with control groups and larger sample sizes will provide a more detailed understanding of the impact of art-based education methods.

**Limitations and Strengths**

Several limitations should be considered when evaluating this study. First, the study included only nursing students, which may limit the generalizability of the findings to other healthcare professionals. Future research could expand the scope by including other healthcare professionals to provide a broader perspective. Second, the study was limited to two universities in Türkiye, which may restrict the applicability of the findings to different cultural and educational contexts. Conducting studies in various cultural contexts could enhance the generalizability of the results. Third, in our study, an attempt was made to reach the entire population; however, due to voluntary participation, a higher proportion of data was obtained from first-year students. Although this resulted in an uneven distribution across class levels, the study was conducted with a large sample size of 569 nursing students, which enhances the reliability of the findings.

Despite these limitations, this study also has several notable strengths. First, the measurement tools used have been previously validated and shown to be reliable, further supporting the credibility of the results. Second, the study combined two important areas, namely nursing education and creativity, providing valuable insights at the intersection of these fields. Finally, the results demonstrated how integrating artistic activities into nursing curricula could enhance students' creative potential, thereby enabling them to provide more effective healthcare services. These findings can contribute to the development of innovative approaches in nursing education.

**Table 3:** Regression analysis of predictor variables for creative personality traits

| Predictor Variables | B | SE | Beta | t | 95% CI | VIF | p |
|---|---|---|---|---|---|---|---|
| | | | | | LL – UL | | |
| (Constant) | 35.368 | 2.147 | — | 16.472 | 31.158 – 39.578 | — | 0.000 |
| Emotional Reasoning | 0.639 | 0.078 | 0.39 | 8.165 | 0.486 – 0.792 | 1.708 | 0.000 |
| Behavioral Interest | 0.142 | 0.059 | 0.11 | 2.410 | 0.026 – 0.258 | 1.708 | 0.016 |

**Model Summary:** $R^2$=228, F (2,566)=83.51

B: Unstandardized coefficient; SE: Standard error; CI: Confidence interval; LL: Lower limit; UL: Upper limit; VIF: Variance inflation factor.

## CONCLUSION

This study revealed that nursing students who actively engaged in artistic activities demonstrated higher levels of creative personality traits, daily creative intrinsic motivation, and a growth mindset. A statistically significant positive relationship was found between students' interest in the arts and their creativity-related characteristics. Furthermore, art engagement was associated with higher scores in creative traits such as risk-taking, self-confidence, and task-orientedness. These findings indicate that engagement with the arts supports the development of creativity among nursing students.

### Key Findings of the Study

Nursing students who actively engaged in artistic activities scored significantly higher in task-orientedness, internal motivation, self-confidence, risk-taking, creative personality traits, and intrinsic motivation ($p<0.05$).

Interest in the arts was positively correlated with intrinsic motivation ($r=0.433$, $p<0.01$) and growth mindset ($r=0.271$, $p<0.01$), and negatively correlated with fixed mindset ($r=-0.066$, $p<0.05$), indicating a significant association between artistic engagement and creative cognitive orientation.

Emotional reasoning and behavioral interest in the arts were significant predictors of creative personality traits, together explaining 22.8% of the total variance ($F=83.51$, $p<0.001$, $R^2=0.228$).

### Conflict of interest

The author declares that there is no conflict of interest.

### Financial support

There was no funding for this study.

### Acknowledgment

We thank all the nursing students who participated in this study.

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