

Research Article

The Predictive Role of Aesthetic Experience on the Emotional States of Higher Vocational Art Students: An Empirical Study Based on Qingyuan Higher Vocational Education City

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Abstract

Although the predictive role of aesthetic experience in emotional states has been examined among general university populations, empirical evidence remains notably scarce for Chinese higher vocational art students — a group marked by both the intensity of studio-based artistic training and heightened emotional vulnerability. The current study recruited a convenience sample of 520 art majors from the five higher vocational colleges of the Qingyuan Higher Vocational Education City cluster and examined the differential prediction between aesthetic experience and positive/negative affect using the Aesthetic Experience Scale (AES) and the Positive and Negative Affect Schedule (PANAS). Hierarchical multiple regression was used as the primary statistical method with demographic information included at Step 1. Findings showed that the five AES dimensions added an additional 30% variance to the prediction of positive affect ($\Delta R^2 = .30, p < .001$) and 13% of variance to negative affect prediction ($\Delta R^2 = .13, p < .001$). Specifically, Cognitive Synergies and Elaboration ($\beta = .29$), Paratelic Mode ($\beta = .24$), and Expressive Perception ($\beta = .21$) were found to be the most prominent predictors of positive affect, while Emotional Closeness ($\beta = -.22$), Experiential Emotional Distancing ($\beta = -.18$), and Paratelic Mode ($\beta = -.11$) were significant negative predictors of negative affect. These findings indicate that the cognitive-motivational approach to processing of aesthetic stimuli accounts for substantially more variance in positive affect than the empathic-affective approach, which is associated only with lower negative affect. Collectively, this pattern extends knowledge of the aesthetic experience-affect relationship to the less-studied population of higher vocational art students.

Keywords

Aesthetic experience, Emotional states, Higher vocational art education, Qingyuan Higher Vocational Education City, Hierarchical regression

1. Introduction

Aesthetic education has become an increasingly important concern in Chinese higher education. The 2020 Opinions on Comprehensively Strengthening and Improving Aesthetic Education in Schools in the New Era, issued by the General Office of the CPC Central Committee and the State Council, constructed a top-down framework based on the core concept of “aesthetic ability and humanistic quality.” This was followed by the Ministry of Education’s 2023 Notice on the Comprehensive Implementation of the Aesthetic Education Immersion Action, and in 2025 by the Outline of the Plan for Building a Leading Country in Education (2024-2035), which consolidated the Action into national strategy and formed an evolving policy sequence from top-level design to regional implementation (Wang & Zhao, 2022). Qingyuan Higher Vocational Education City in Guangdong Province, which concentrates applied-art programmes in visual communication design, environmental art design, digital media art, animation, and product design, is a representative case of how the Action has been implemented.

The emotional states of higher vocational art students, by contrast, reveal a tension between policy progression and pedagogy. These students face rigorous training in drawing, copying, creation, and studio art, together with the expectation of moving from imitating techniques to independent creation within a relatively short period, and such demands gradually consume their emotional energy. In addition, many continue to bear the psychological burden of not having entered undergraduate universities through the Gaokao, and their self-efficacy and professional identity remain under reconstruction (Xu & Hu, 2023; Zhang et al., 2025). As Chinese higher vocational education shifts from a “skill-based” to a “quality-based” approach, emotional and psychological conditions are increasingly regarded as fundamental, rather than peripheral, aspects of curricular quality. In Qingyuan, the region’s Lingnan cultural resources, namely Lianzhou Yao embroidery, Yingshi gardens, and the Lingnan Painting School tradition, provide an indigenous reservoir of aesthetic-education resources that still awaits academic exploration.

Aesthetic experience offers an analytic lens situated exactly where many of these emotions arise. For art students it is not an external imposition but an intrinsic process bound up with appreciation, creation, and contemplation. From a curricular perspective, studio-based training continuously enacts the experiential learning cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 2014), and the five AES dimensions correspond to the perceptual-affective and cognitive-elaborative components that sustain this cycle, positioning

aesthetic experience as a curricular variable rather than a purely psychological one. Accordingly, the present study examines the baseline levels of aesthetic experience and positive and negative affect among art majors in Qingyuan Higher Vocational Education City, whether the five AES dimensions predict emotional states after demographic variables are accounted for, and which dimensions matter most. It presents the first quantitative model of the aesthetic experience-affect relationship in a Chinese higher vocational art student sample.

2. Literature Review and Hypotheses

2.1. The Conceptual Lineage and Measurement of Aesthetic Experience

Aesthetic experience is a fundamental concept in the psychology of aesthetics and art education. Contemporary scholarship increasingly treats it as a dynamic phenomenon in which perception, cognition, and emotion continuously interrelate, and sensory information is progressively incorporated into a multidimensional system of preferences (Starr, 2023). From the perspective of contemporary neuroaesthetic models, aesthetic experience can be described as an interaction between special neural systems, including default mode network, central executive network, and salience network, which allows the sensory, cognitive, and affective information to become integrated and leads to both aesthetic experience and learning (Starr, 2023). Another trend in the field regards emotions as key elements of aesthetic processing, which have unique appraisal processes sensitive to contextual and domain characteristics and are not comparable to usual emotions (Kenett et al., 2023; Schubert, 2024).

In terms of measurement, the Aesthetic Experience Scale (AES) is one of the more developed operational measures in the international literature, which includes five dimensions and has been effectively validated in Chinese higher education contexts (Han & Lu, 2024). Cognitive Synergies and Elaboration captures deep cognitive processing and self-relevant integration during aesthetic perception. Emotional Closeness reflects empathic emotional engagement with the aesthetic object. Experiential Emotional Distancing denotes the capacity to maintain reflective distance from one's own emotional response. Paratelic Mode, a construct derived from reversal theory (Apter, 2001), refers to a present-oriented, intrinsically motivated state in which the aesthetic activity is experienced as playful and rewarding in itself rather than as a means to an external goal. Expressive Perception represents the felt congruence between perceptual input and affective response. Though the scale was designed specifically for art reception situations, art students always have a double role as both producer and observer when sketching, imitating, critiquing in studio sessions, and visiting exhibitions, and their learning activity constantly produces a continuous flow of aesthetic processing incidents that the scale can measure. Its earlier usage in Chinese higher education settings also indicates its appropriateness for such subjects (Han & Lu, 2024).

2.2. Associations Between Aesthetic Experience and Emotional States

Emotional states during learning have always been a central concern in educational psychology. Indeed, the PANAS divides affect into two distinct and independent components and has demonstrated a stable factor structure among Chinese samples by different modeling procedures, justifying its applicability in measuring affect in Chinese culture (Kim & Wang, 2022). Moreover, broaden-and-build theory implies that positive affect expands the range of attention, cognition, and behavior while fostering an accumulation of psychological resources (Stanley & Schutte, 2023). This broadening effect is especially relevant to art majors, for whom creative thinking is central and habituated positive moods have been shown to be associated with stronger creative motivation (He, 2023). In Chinese universities, according to regression analysis, Cognitive Synergies and Elaboration, Paratelic Mode, and Expressive Perception significantly predicted positive affect among 551 university students (Han & Lu, 2024). Further investigation by using hierarchical regression revealed that aesthetic education among 513 Chinese university students was positively associated with psychological well-being, with this association mediated by basic psychological needs and engagement (Ye et al., 2025). However, while the studies mentioned above provide a basis for understanding the association between aesthetic experience and emotional states, their sample sizes are restricted to Chinese general universities.

Beyond this psychological account, the relationship between aesthetic experience and affect also carries implications for curriculum design. The principle of constructive alignment (Biggs & Tang, 2003) holds that effective curricula require coherence among intended learning outcomes, teaching and learning activities, and assessment tasks. If specific dimensions of aesthetic experience are differentially associated with positive and negative affect, then curriculum designers can align studio activities with the particular AES dimensions most strongly linked to desired affective outcomes, and the AES itself can serve as a formative assessment tool to monitor whether the alignment is functioning as intended. To the best of the authors' knowledge, this curricular framing has not yet been applied to the aesthetic experience-affect literature, yet it provides a natural bridge between the psychological evidence reviewed above and the practical needs of higher vocational art education programmes.

2.3. Research Gap and Hypotheses

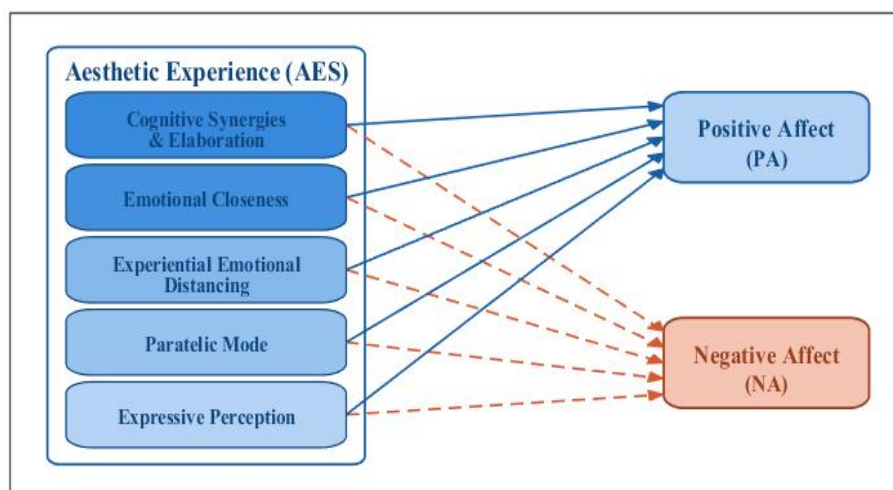
While aesthetic education policy has been applied to all kinds of schools after 2020, the current empirical knowledge about the relationship between the experience of beauty and affect still presents a clear sampling bias. Systematic reviews on the issue of Chinese aesthetic education policy and assessments of curriculum quality mostly refer to undergraduate education (Li et al., 2023). Furthermore, published research into the assessment of aesthetic education also uses only

multi-university samples while purposefully excluding vocational and technical colleges from the scope of the analysis (Xu et al., 2024). Finally, qualitative research reveals the peculiarities of the well-being of higher vocational students that are different from those of undergraduates and include both hedonistic pleasures and existential meaninglessness (Zhang et al., 2025). Hence, the disparity between broad policy applicability and limited empirical evidence is the empirical gap identified herein. Based on the above-reviewed literature, four hypotheses are developed. H1: The five AES dimensions are positively correlated with positive affect, consistent with the theoretical expectation that deep processing, flow experience, and emotion-perception coupling co-occur with heightened positive affect. H2: After accounting for demographic control variables, the five AES dimensions together predict positive affect in an independent way. H3: Emotional Closeness and Experiential Emotional Distancing are negative predictors of negative affect, consistent with the theoretical roles of empathic involvement and aesthetic distancing, respectively. H4: Among the five AES dimensions, Cognitive Synergies and Elaboration, Paratelic Mode, and Expressive Perception prove to be the best predictors of positive affect.

Figure 1 presents the conceptual framework relating the five AES dimensions to positive and negative affect.

Figure 1

Conceptual Framework of the Predictive Model



3. Method

3.1. Research Design and Participants

The research design of this study follows a cross-sectional quantitative survey approach, whereby both aesthetic experience and emotional states are measured concurrently and the predictive relationship is assessed after accounting for the effects of demographic factors. In this context, prediction means regression-based association between independent and dependent variables, not

causation or temporal forecasting. The population of interest includes art majors taking studies at Qingyuan Higher Vocational Education City in the Spring 2026 semester, while the sample is derived by means of convenience sampling of five applied art programs including visual communication design, environmental art design, digital media art, animation, and product design. After exclusion of those with short completion time, very consistent answers, and failure in attention check, there were 520 valid responses (response rate = 91.2%), which included 38.7% males and 61.3% females; 34.0% first-year, 37.5% second-year, and 28.5% third-year participants; specializations include 24.6% visual communication design, 22.1% environmental art design, 20.8% digital media art, 17.7% animation, and 14.8% product design. Ages of participants fall within 18–22 years ($M = 19.64$, $SD = 1.12$). Based on an a priori G*Power 3.1 analysis ($\alpha = .05$, $1 - \beta = .80$, $f^2 = 0.15$, number of predictors = 9), the minimum sample size should be 114.

3.2. Measures

Aesthetic experience was examined using the Aesthetic Experience Scale (AES), which consists of 28 items that cover five subscales: Cognitive Synergies and Elaboration, Emotional Closeness, Experiential Emotional Distancing, Paratelic Mode, and Expressive Perception on a 5-point Likert scale where 1 is never and 5 is always. Adaptation of the instrument into Chinese took place using the traditional forward–backward translation approach, an approach frequently used when adapting measures to the Chinese population in contemporary psychometric studies (Kim & Wang, 2022). The emotional states were assessed by the Positive and Negative Affect Schedule (PANAS), which consisted of 20 adjectives of equal numbers of Positive Affect (PA) and Negative Affect (NA) on a 5-point Likert scale for the past two weeks.

3.3. Data Collection Procedure

Questionnaires were administered via the online survey portal Wenjuanxing during a period of four weeks in early March to early April 2026. Attention checks revealed instances of careless responding and those with unusually low response times and unusual patterns of responses were excluded. The valid responses were then coded and merged into a common database for further analyses.

3.4. Data Analysis Strategy

Analyses were performed using SPSS 27.0 and AMOS 28.0. Cronbach's α was used to examine internal consistency, with .70 being the minimum requirement. Prior to regression analysis, confirmatory factor analysis (CFA) was conducted in AMOS 28.0 to verify the factor structures of the AES (five-factor model) and PANAS (two-factor model) in the present sample. Model fit was evaluated against conventional benchmarks ($\chi^2/df \leq 3.00$, $CFI \geq .90$, $TLI \geq .90$, $RMSEA \leq .08$, $SRMR$

$\leq .08$). Common method bias was first screened using Harman's single-factor test and then further examined through an unmeasured latent method factor (ULMF) approach, in which a common latent factor was added to the CFA measurement model and the change in standardized factor loadings was inspected (Podsakoff et al., 2003). The ULMF approach was adopted because the survey did not include a theoretically unrelated marker variable, precluding the CFA marker-variable technique.

The direction and extent of relationships among the five AES dimensions, PA, and NA were examined using descriptive statistics and Pearson correlation coefficients. In hierarchical multiple regressions, PA and NA were entered as dependent variables in two models, respectively. Gender, grade, age, and programme (dummy coding) were entered in Step 1, while the five AES dimensions were entered in Step 2, and β coefficient, t value, significance level, and the explained variance (R^2) along with change in explained variance (ΔR^2) from one step to another were computed for each model. Diagnosis of multicollinearity was simultaneously performed using variance inflation factor < 5 and tolerance $\geq .20$ as acceptable cut-off criteria, and principal component regression was also prepared as a robustness test. Specifically, four demographic variables (gender, grade, age, and programme) were included in the model because of previous findings indicating the roles of gender and age in moderating the relationship between aesthetic experience and affective response (Han & Lu, 2024; Ye et al., 2025).

4. Results

4.1. Sample Characteristics, Reliability, and Common Method Bias

The demographic attributes of the participants and the reliability of the psychometric tools are depicted in Table 1. Cronbach's α for the entire AES was .92, and for the subdimensions, it ranged between .81 and .88; whereas, for the positive and negative affect subscales of the PANAS, it was .89 and .87, respectively, all above the acceptable value of .70.

Confirmatory factor analysis was performed to verify the measurement models. The five-factor AES model yielded acceptable fit: $\chi^2(340) = 748.00$, $\chi^2/df = 2.20$, CFI = .93, TLI = .92, RMSEA = .048 [90% CI: .043, .053], SRMR = .045, and all standardized factor loadings ranged from .62 to .85, exceeding the .50 threshold. The two-factor PANAS model also demonstrated adequate fit: $\chi^2(169) = 390.59$, $\chi^2/df = 2.31$, CFI = .94, TLI = .93, RMSEA = .050 [90% CI: .044, .056], SRMR = .042, with standardized loadings ranging from .58 to .82. These results confirmed that the hypothesized factor structures of both instruments were replicated in the present higher vocational art student sample.

Regarding common method bias, the Harman's single-factor test resulted in nine factors having eigenvalue greater than 1, and the unrotated first factor explained 24.36% of the total variance, which is far less than the 40% threshold. To provide a more rigorous assessment, an unmeasured latent method factor (ULMF) was added to the seven-factor combined measurement model. After the

inclusion of the ULMF, the average absolute change in standardized factor loadings was .04 and the maximum change was .08, indicating that common method bias did not substantively inflate the observed relationships.

Table 1

Demographic Characteristics and Reliability of Measures (N = 520)

Variable	Category	n	%	M	SD
Gender	Male	201	38.7	—	—
	Female	319	61.3	—	—
Grade	Year 1	177	34.0	—	—
	Year 2	195	37.5	—	—
	Year 3	148	28.5	—	—
Programme	Visual Communication Design	128	24.6	—	—
	Environmental Art Design	115	22.1	—	—
	Digital Media Art	108	20.8	—	—
	Animation	92	17.7	—	—
	Product Design	77	14.8	—	—
Age (years)	—	—	—	19.64	1.12
Reliability	AES total (28 items)	—	—	$\alpha = .92$	—
	Cognitive Synergies & Elaboration	—	—	$\alpha = .86$	—
	Emotional Closeness	—	—	$\alpha = .83$	—
	Experiential Emotional Distancing	—	—	$\alpha = .81$	—
	Paratelic Mode	—	—	$\alpha = .85$	—
	Expressive Perception	—	—	$\alpha = .88$	—
	PANAS Positive Affect (10 items)	—	—	$\alpha = .89$	—
	PANAS Negative Affect (10 items)	—	—	$\alpha = .87$	—

Note. AES = Aesthetic Experience Scale; PANAS = Positive and Negative Affect Schedule. Harman's single-factor test yielded a first-factor variance of 24.36%, below the 40% threshold, indicating no serious common-method bias.

4.2. Descriptive Statistics and Correlations

Means, standard deviations, and Pearson correlations between the five AES dimensions, positive affect, and negative affect are provided in Table 2 below. The means for the AES dimensions were

from 3.41 to 3.78, implying moderate-high levels of aesthetic engagement; positive affect ($M = 3.52$, $SD = 0.64$) was higher than negative affect ($M = 2.28$, $SD = 0.71$). There were significant positive correlations between all five AES dimensions and positive affect, with the highest correlation coefficients found for the dimensions of Cognitive Synergies and Elaboration ($r = .48$), Paratelic Mode ($r = .44$), and Expressive Perception ($r = .42$, all $p < .001$). Additionally, Emotional Closeness and Experiential Emotional Distancing correlated with negative affect in the predicted directions ($r = -.31$ and $r = -.27$, respectively, both $p < .001$).

Table 2

Means, Standard Deviations, and Pearson Correlations Among Study Variables

Variable	M	SD	1	2	3	4	5	6	7
1. Cognitive Synergies & Elaboration	3.78	0.59	—						
2. Emotional Closeness	3.63	0.66	.42***	—					
3. Experiential Emotional Distancing	3.41	0.71	.35***	.38***	—				
4. Paratelic Mode	3.69	0.64	.47***	.40***	.33***	—			
5. Expressive Perception	3.71	0.62	.49***	.44***	.36***	.46***	—		
6. Positive Affect (PA)	3.52	0.64	.48***	.29***	.22***	.44***	.42***	—	
7. Negative Affect (NA)	2.28	0.71	-.18***	-.31***	-.27***	-.20***	-.15**	-.33***	—

Note. $N = 520$. All AES subdimensions and PANAS subscales were scored on a 5-point Likert scale. * $p < .05$. ** $p < .01$. *** $p < .001$.

4.3. Hierarchical Regression Predicting Positive Affect

The results for the hierarchical regression analysis using positive affect as the dependent variable are presented in Table 3 (left column). The controls introduced at step 1 accounted for $R^2 = .04$, whereas their combination with five AES dimensions in step 2 resulted in $R^2 = .34$, which represented a change in R^2 (ΔR^2) of .30 ($F_{\text{change}} = 46.81$, $p < .001$). The predictors with the largest standardized coefficients (β) were Cognitive Synergies and Elaboration ($\beta = .29$, $p < .001$), Paratelic Mode ($\beta = .24$, $p < .001$), and Expressive Perception ($\beta = .21$, $p < .001$).

Table 3

Hierarchical Multiple Regression Predicting Positive and Negative Affect From the Five AES Dimensions

Predictor	Positive Affect (PA)			Negative Affect (NA)		
	β (Step 1)	β (Step 2)	VIF	β (Step 1)	β (Step 2)	VIF

Step 1: Control variables

Gender (0 = M, 1 = F)	.08	.05	1.08	.07	.05	1.08
Grade	-.06	-.04	1.12	.09*	.07	1.12
Age	-.05	-.03	1.15	.04	.03	1.15
Programme (dummy-coded)	.07	.05	1.22	-.05	-.04	1.22

Step 2: AES dimensions

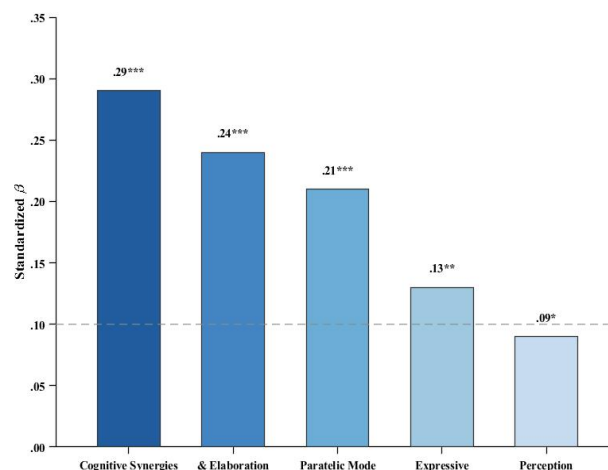
Cognitive Synergies & Elaboration		.29***	2.48		-.06	2.48
Emotional Closeness		.13**	1.92		-.22***	1.92
Experiential Emotional Distancing		.09*	1.62		-.18***	1.62
Paratelic Mode		.24***	2.13		-.11*	2.13
Expressive Perception		.21***	2.26		-.07	2.26
R ²	.04	.34		.03	.16	
Adjusted R ²	.03	.33		.02	.15	
ΔR ²	.04	.30		.03	.13	
F change	5.42**	46.81***		4.18**	15.74***	

Note. N = 520. Values are standardized regression coefficients (β). VIF values are reported for Step 2 only and all fall well below the conventional threshold of 5.0, indicating no multicollinearity concerns. * $p < .05$. ** $p < .01$. *** $p < .001$.

The variance inflation factor was between 1.62 and 2.48, which is considerably less than 5, and therefore, the estimation of coefficients was not impacted by multicollinearity. Consequently, the pre-registered robustness test using principal component regression was not needed. Figure 2 ranks the standardized coefficients for positive affect by magnitude (cf. H4).

Figure 2

Standardized Regression Coefficients (β) of the Five AES Dimensions Predicting Positive Affect



4.4. Hierarchical Regression Predicting Negative Affect and Hypothesis Testing Summary

The right column of Table 3 displays the results of the hierarchical regression where negative affect is the dependent variable. The demographic control variables yielded an R^2 of .03 in Step 1; the inclusion of the five AES dimensions increased R^2 to .16, with ΔR^2 of .13 ($F_{\text{change}} = 15.74$, $p < .001$), which represented a significant yet smaller effect compared to the previous positive affect model. Emotional Closeness ($\beta = -.22$, $p < .001$) and Experiential Emotional Distancing ($\beta = -.18$, $p < .001$) emerged as the two principal negative predictors of negative affect, directly corresponding to the two predictors specified in H3. In addition, Paratelic Mode yielded a significant but smaller negative coefficient ($\beta = -.11$, $p < .05$), an effect that was not pre-specified in H3 and is therefore treated below as an exploratory finding rather than as part of the hypothesis test. Cognitive Synergies and Elaboration and Expressive Perception did not reach significance in the negative affect model. Taken together, the two hierarchical regression analyses provide support for all four pre-specified hypotheses. H1 was supported by the significant positive correlations between each AES dimension and positive affect reported in Table 2. H2 was supported by the significant ΔR^2 in Step 2 of the positive affect model. H4 was supported by the coefficient ranking in which Cognitive Synergies and Elaboration, Paratelic Mode, and Expressive Perception emerged as the three strongest positive predictors. H3 was supported by the significant negative prediction of negative affect by Emotional Closeness and Experiential Emotional Distancing, with the additional negative contribution of Paratelic Mode noted as an exploratory result.

5. Discussion

This study builds upon the existing knowledge base by applying the aesthetic experience-affect link to a previously ignored group, providing new insights into the structure of affect among the Chinese higher vocational art student community. Past research has been primarily focused on traditional undergraduate schools (Han & Lu, 2024; Ye et al., 2025). The current findings demonstrate considerable similarities with previous literature while revealing nuanced differences attributable to the unique characteristics of the higher vocational art student sample.

More specifically, the β -ordering of the predictors in the positive affect model (Cognitive Synergies and Elaboration > Paratelic Mode > Expressive Perception > Emotional Closeness > Experiential Emotional Distancing) is highly consistent with the results of Han and Lu (2024) among 551 undergraduate students. This consistency indicates that the cognitive and motivational priority of aesthetic processing in relation to positive affect extends to the higher vocational arts major population. Indeed, the five AES dimensions account for greater incremental variance ($\Delta R^2 = .30$) than reported by

Ye et al. (2025) among 513 undergraduate students, possibly because aesthetic experience is more readily embedded in day-to-day studio training for arts majors than in elective courses for non-arts majors.

Cognitive Synergies and Elaboration, Paratelic Mode, and Expressive Perception were the three strongest predictors of positive affect. Deep elaboration involves self-relevance and cognitive integration in the process of aesthetic perception and corresponds to the use of aesthetic experiences as a learning tool through cognitive-affective integration (Starr, 2023). The cycle of perception-understanding-evaluation realized during sketching, copying, and studio criticism may account for the strong association between deep processing and positive affect. Paratelic Mode is consistent with flow theory in that detachment from external goals co-occurs with engaged absorption, which is in turn associated with positive affect. Expressive Perception corresponds to the alignment between perceptual input and affective response, a coupling that is theoretically linked to the experience of aesthetic emotions.

The constructs of emotional closeness and experiential emotional distancing were revealed to be the two most significant negative correlates of negative affect, aligning with the regulatory roles associated with aesthetic emotions under current appraisal perspectives (Kenett et al., 2023; Schubert, 2024). Emotional closeness is associated with lower daily negative affect, possibly through empathic engagement with past experiences, whereas experiential emotional distancing provides reflective distance that may help maintain evaluative cognition in the face of negative emotions, a pattern consistent with the theoretical proposition that aesthetic experience is associated with emotion regulation.

These results indicate that aesthetic experience operates as a multidimensional construct rather than a unitary one, with cognitive-motivational dimensions as the primary correlates of positive affect and affective dimensions as the primary inverse correlates of negative affect. This pattern can be read on two levels that should not be conflated: psychologically, the dimensions are intrapersonal processes whose covariation with affect aligns with broaden-and-build (Stanley & Schutte, 2023) and appraisal accounts of aesthetic emotion (Kenett et al., 2023; Schubert, 2024); curricularly, the same dimensions are candidate design targets. Because the present data are cross-sectional, however, they establish only that the dimensions co-vary with affect, not that structuring curriculum around them will change affect. The intervention strategies below are therefore offered as design hypotheses to be tested rather than as established effects.

For the positive-affect correlates, Cognitive Synergies and Elaboration ($\beta = .29$) suggests that studio courses should embed structured reflective critiques and elaborative learning journals that require students to articulate the cognitive process behind creative decisions rather than merely recording outcomes. Paratelic Mode ($\beta = .24$) indicates that instructors should designate regular

low-stakes exploratory sessions where assessment pressure is deliberately removed, allowing open-ended creative engagement with Lingnan local cultural materials such as Lianzhou Yao embroidery and Yingshi garden motifs. Expressive Perception ($\beta = .21$) points to the value of peer feedback exercises that focus on verbalizing the emotional qualities perceived in a work rather than on technical proficiency alone.

For the negative-affect correlates, Emotional Closeness ($\beta = -.22$) suggests that project-based assignments incorporating personal narrative and community-oriented themes, such as visual storytelling of local cultural heritage in Qingyuan, may engage the empathic processing associated with lower daily negative affect. Experiential Emotional Distancing ($\beta = -.18$) implies that guided exhibition observation protocols requiring an evaluative rather than immersive stance could cultivate aesthetic distancing as an emotion regulation resource.

Taken together, these strategies instantiate the principle of constructive alignment (Biggs & Tang, 2003): teaching activities are aligned with the AES dimensions most strongly associated with the targeted affective outcome, and assessment closes the loop. At the institutional level, the AES could itself be adopted as a formative assessment instrument, enabling programme coordinators to monitor students' aesthetic-engagement profiles across semesters and adjust the relative emphasis on cognitive-motivational and affective-regulatory components accordingly.

Because the design is cross-sectional, the observed relationships reflect statistical association rather than causation. All variables are based on subjective reports, and while Harman's one-factor solution revealed no meaningful common method variance effect, multiple source data collection could strengthen reliability. The use of the convenience sample restricted to the Qingyuan Higher Vocational Education City constrains the ability of results to generalize to other regions.

Moreover, the static regression model presented here cannot capture the dynamic nature of aesthetic experience that Starr (2023) characterized as a progressive incorporation of sensory information into a multidimensional system of preferences. Although the present sample included students from all three year levels, cross-sectional cohort comparisons cannot disentangle developmental change from cohort effects. As higher vocational art training progresses from foundational imitation in the first year toward independent creation in the third year, the predictive weights of the five AES dimensions for affect are likely to shift in ways that only within-person tracking can reveal. Future research should therefore adopt a three-wave longitudinal panel design aligned with each academic year of the higher vocational curriculum. Such a design would permit the use of latent growth curve modeling or cross-lagged panel analysis to test whether and how the predictive structure linking aesthetic experience to emotional states evolves as artistic competence deepens.

6. Conclusion

With art majors in Qingyuan Higher Vocational Education City as subjects, the current study used hierarchical multiple regression to analyze the predictive structure linking the five AES dimensions to positive and negative affect. The findings provide quantitative evidence for understanding the aesthetic experience-affect relationship in the context of Chinese higher vocational art education. After demographic factors were controlled, the five AES dimensions differentially predicted positive and negative affect. The cognitive-motivational dimensions proved to be the primary correlates of positive affect, whereas the affective dimensions were the primary inverse correlates of negative affect, a differential pattern consistent with broaden-and-build and appraisal-theoretical expectations. By investigating a previously under-represented population, this research provides new empirical evidence that the AES can be treated as a multidimensional predictive variable. With regard to practice and policy-making at regional level, it helps to lay a solid empirical foundation for executing the Aesthetic Education Immersion Action in Qingyuan Higher Vocational Education City, and even Chinese higher vocational art education. Longitudinal extensions of the present baseline model are warranted to elucidate the dynamic process through which aesthetic experience relates to the development of emotional states across the full span of higher vocational art training.

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Conflict of interest

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Consent to participate

Not applicable.

Consent for publication



All authors have given their consent.

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References

- [1] Apter, M. J. (Ed.). (2001). *Motivational styles in everyday life: A guide to reversal theory*. American Psychological Association. <https://doi.org/10.1037/10427-000>
- [2] Biggs, J. B., & Tang, C. (2003). *Teaching for quality learning at university: What the student does* (2nd ed.). Society for Research into Higher Education & Open University Press.
- [3] Han, M., & Lu, M. (2024). The important role of aesthetic education in universities: An empirical research of the effects of aesthetic experience on the emotions of university students in China. *Empirical Studies of the Arts*, 43(2), 1097–1110. <https://doi.org/10.1177/02762374241298883>
- [4] He, W. (2023). Positive and negative affect facilitate creativity motivation: Findings on the effects of habitual mood and experimentally induced emotion. *Frontiers in Psychology*, 14, 1014612. <https://doi.org/10.3389/fpsyg.2023.1014612>
- [5] Kenett, Y. N., Cardillo, E. R., Christensen, A. P., & Chatterjee, A. (2023). Aesthetic emotions are affected by context: A psychometric network analysis. *Scientific Reports*, 13, 20985. <https://doi.org/10.1038/s41598-023-48219-w>
- [6] Kim, M., & Wang, Z. (2022). Factor structure of the PANAS with Bayesian structural equation modeling in a Chinese sample. *Evaluation & the Health Professions*, 45(2), 157–167. <https://doi.org/10.1177/0163278721996794>
- [7] Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. FT Press.
- [8] Li, H., Pang, X., & Li, C. (2023). Review the development and evolution of aesthetic education in Chinese schools from a policy perspective. *Sustainability*, 15(6), 5275. <https://doi.org/10.3390/su15065275>
- [9] Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>

- [10] Schubert, E. (2023). The aesthetic emotion lexicon: A literature review of emotion words used by researchers to describe aesthetic experiences. *Empirical Studies of the Arts*, 42(1), 3–37. <https://doi.org/10.1177/02762374221143728>
- [11] Stanley, P. J., & Schutte, N. S. (2023). Merging the self-determination theory and the broaden and build theory through the nexus of positive affect: A macro theory of positive functioning. *New Ideas in Psychology*, 68, 100979. <https://doi.org/10.1016/j.newideapsych.2022.100979>
- [12] Starr, G. G. (2023). Aesthetic experience models human learning. *Frontiers in Human Neuroscience*, 17, 1146083. <https://doi.org/10.3389/fnhum.2023.1146083>
- [13] Wang, H., & Zhao, L. L. (2022). The centennial evolution of Chinese aesthetic education under the influence of educational policies. *Journal of Southwest University (Social Sciences Edition)*, 48(1), 161–170. <https://doi.org/10.13718/j.cnki.xdsk.2022.01.015>
- [14] Xu, X.-H., Niu, Y.-T., Li, Z.-M., Xu, Y.-Y., & Cao, K.-W. (2024). Research on comprehensive evaluation and development of aesthetic education based on PCA and CEM model. *PLOS ONE*, 19(8), e0308446. <https://doi.org/10.1371/journal.pone.0308446>
- [15] Xu, X. R., & Hu, J. S. (2023). Can well-being reduce aggression? A conditional process model analysis based on cyber verbal bullying among higher vocational students. *Journal of Southwest University (Social Sciences Edition)*, 49(3), 178–190. <https://doi.org/10.13718/j.cnki.xdsk.2023.03.015>
- [16] Ye, L., Li, Y., & Zhang, N. (2025). The impact of aesthetic education on university students' psychological wellbeing: Exploring mediating and moderating effects. *Frontiers in Psychology*, 16, 1515671. <https://doi.org/10.3389/fpsyg.2025.1515671>
- [17] Zhang, W., Balloo, K., Hosein, A., & Medland, E. (2025). “I feel happy every day, but I also feel empty”: A qualitative investigation of Chinese vocational college students' well-being. *Social Indicators Research*, 180, 997–1018. <https://doi.org/10.1007/s11205-025-03701-y>