



Self-concept and aesthetic experience in young adult students: A sequential mediation model of creativity and spirituality

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Abstract: Given the increasing emphasis on holistic development in arts education, understanding how individual psychological factors shape aesthetic perception has become a critical area of inquiry. This study examined the relationship between self-concept and aesthetic experience, focusing on the sequential mediating roles of creativity and spirituality in young adults. A total of 744 art students (aged 17–25 years) completed measures of self-concept, creativity, spirituality, and aesthetic experience. The results of the sequential mediation model showed that: higher self-concept is associated with higher aesthetic experience. Creativity plays a mediating role between self-concept and aesthetic experience to be lower. Spirituality plays a mediating role between self-concept and aesthetic experience to be higher. Creativity and spirituality had a masking effect on the relationship between self-concept, which is explained because the indirect effects via creativity and spirituality operating in opposite directions in the overall predictive pathway, thereby suppressing the direct association between self-concept and aesthetic experience. These findings support Self-Consistency Theory by demonstrating that individuals tend to maintain coherence between internal self-evaluations and experiential engagement, and they extend this theory by showing that such consistency is expressed through psychological resources such as creativity and spirituality in shaping aesthetic experience. The implications for student support suggest that enhancing creativity and spirituality in educational settings may help students translate self-concept into more meaningful aesthetic engagement, thereby supporting psychological and experiential outcomes in academic and artistic contexts.

Keywords: Self-concept; creativity; spirituality; aesthetic experience; chain mediation model

Introduction

In the context of higher education, art students refer to those receiving specialized art education, typically exhibiting distinctive artistic characteristics (Götz & Götz, 1974). Previous research has shown that this population has attracted increasing attention in educational and psychological studies due to their intensive engagement with artistic learning environments (Gao et al., 2026). For example, King (1983) examined adolescent art students and found distinctive patterns in academic engagement and personal development within art education contexts. Similarly, Baiwi Alanoz (2020) reported meaningful associations between self-related cognitions and aesthetic responses among art education students, suggesting that this group provides a relevant context for studying artistic learning processes. More recent studies have further indicated that students in art-related disciplines are frequently exposed to continuous aesthetic training and structured creative practice, which may distinguish them from students in non-art disciplines (Song et al., 2025). Such educational exposure makes art students a suitable population for examining how sustained artistic training shapes experiential engagement in learning environments. In addition, prior literature suggests that art students often operate within educational settings that emphasize open-ended tasks, experimentation, and expressive exploration, which may support the development of divergent thinking and creative cognition (Chamberlain et al., 2018). However, these differences are typically interpreted as

domain-specific educational effects rather than inherent personal characteristics. The decision to focus on art major undergraduate students was driven by the need to explore individuals with a higher likelihood of engaging deeply with aesthetic experiences. Their educational background allows for a more focused exploration of how these factors interact in a domain-specific context.

Self-concept and aesthetic experience

Aesthetic experience refers to a complex response that involves emotional, cognitive, and spiritual dimensions when individuals encounter artworks, natural landscapes, or other objects perceived as beautiful (Wanzer et al., 2020). Some researchers define it in terms of preferences and emotional reactions (Karim et al., 2022), while others emphasize the combination of emotions and cognitive states (Vessel et al., 2013). Aesthetic experiences are shaped by multiple factors (Pizzolante et al., 2024), and individuals who report more frequent engagement in aesthetic activities tend to experience stronger aesthetic responses (Świątek et al., 2024). Personal cognition, personality traits, and cultural background all contribute to aesthetic perception (Mohammadi-Zarghan et al., 2024). These cognitive processes operate within the framework of existing aesthetic schemas, influencing how people experience aesthetic situations and objects (Qiao & Jiang, 2023). Therefore, one's self and self-perception may form distinct cognitive schemas within the environment, which in turn affect aesthetic experiences (Fingerhut et al., 2020).



Self-concept, defined as an individual's cognitive, perceptual, and evaluative understanding of the self, shapes cognitive schemas that influence aesthetic engagement (Salgues et al., 2024). These schemas may directly affect the nature and depth of aesthetic experiences (Vessel et al., 2023). Based on this, we propose Hypothesis 1: self-concept significantly and positively predicts aesthetic experience.

Creativity mediation

Creativity can be seen as a manifestation of inner psychological processes (Rosa, 2016). It is a uniquely human capacity involving the ability to generate original ideas, produce innovations, and create new products or solutions (Runco & Jaeger, 2012). Humanistic psychologists suggest that individuals with high self-esteem tend to show higher levels of creativity (Plucker et al., 2004). Self-efficacy is also closely linked to creativity. Individuals with strong self-efficacy are generally confident in their ability to complete tasks and achieve goals. When faced with complex or unfamiliar challenges, they tend to respond with greater persistence and innovative thinking (Bandura, 1997). They often perceive obstacles as challenges that can be overcome, thereby activating creative processes to solve problems (Tierney & Farmer, 2002). Therefore, we propose Hypothesis 2: self-concept positively predicts creativity.

The creativity model emphasizes that creative activities, such as art creation, foster a deep understanding of the world, which is often intertwined with spiritual growth (Koestler, 1964). Creativity not only provides a way for individuals to express themselves but also guides them toward deeper spiritual experiences. Individuals with high creativity are more likely to explore higher meanings and purposes in life through creative activities, such as art creation or thought experiments, which serve as a foundation for spiritual growth (Corry et al., 2015). In the creative process, an artist's imagination shapes their inner inspiration (Beatty et al., 2016). Research shows that in imaginative play—often recognized in early childhood education as an aspect of creative development—young children demonstrate capacities for meaning-making and identity negotiation, which are key dimensions of spirituality in childhood (Goodliff, 2013). Based on this, we propose Hypothesis 3: an individual's creativity positively predicts their spirituality.

Myszkowski et al. (2014) found that figural creativity and openness predicted aesthetic sensitivity. Aesthetic sensitivity and aesthetic experience interact to form an individual's overall performance and engagement in aesthetic activities (Zhang et al., 2023). Therefore, we also examine whether creativity influences aesthetic experience. Hypothesis 4: creativity is related to aesthetic experience.

Aesthetic experience is described as an emotional response grounded in aesthetic cognition, involving the interaction and integration of multiple psychological functions, including rational components (Sirois, 2008). While aesthetic experience primarily refers to an individual's sensory and emotional engagement with art or beauty, spirituality, by contrast, involves a deeper, often transcendent

quest for meaning, purpose, and connection to something greater than oneself (Świątek et al., 2023). Philosophical perspectives suggest that spirituality, emerging from subjective experience, shares an intrinsic connection with aesthetic experience (Wynn, 2018). However, more comprehensive links between individual subjective experiences and aesthetic experiences remain underexplored. We propose that an individual's capacity for seeking meaning may influence aesthetic experience even without direct engagement with artworks. Hypothesis 5: aesthetic experience involves the participation of spirituality.

Spirituality mediation

Spirituality can be defined as an individual's profound quest for meaning and purpose in life, coupled with a sense of connectedness to a transcendent dimension (de Jager Meezenbroek et al., 2012). Narayanasamy (2004) describes spirituality as a sense of personhood and individuality that acts as the guiding force behind our uniqueness and serves as an inner source of power and energy, which sustains us as individuals. Spirituality drives the search for meaning and purpose and supports the establishment of positive and trusting relationships.

Theoretical basis

According to Self-Consistency Theory, individuals have a fundamental drive to maintain internal consistency between their self-concept and their external experiences (Lecky, 1945). This drive stems from the need to ensure that one's self-image aligns with the world around them, as individuals tend to perceive and interpret external stimuli in a way that supports and reinforces their existing self-views. Individuals' engagement with aesthetic experiences is shaped by the need to reconcile these experiences with their self-views, which in turn may influence their emotional and cognitive responses to such stimuli. In the aesthetic context, various dimensions of self-concept are relevant. For example, self-esteem can shape how individuals respond to aesthetic stimuli (McCrae, 2024). People with higher self-esteem may be more confident in their aesthetic judgments and more open to engaging with diverse and complex forms of beauty (Pizzolante et al., 2024). They may also derive greater enjoyment from aesthetic experiences because they see themselves as capable of appreciating and understanding artistic nuances (Świątek et al., 2024). Self-efficacy, or the belief in one's ability to manage and interpret events, may also influence the quality of aesthetic engagement (Bandura, 2018). Individuals with high self-efficacy may be more willing to explore and reflect on artworks, especially those requiring active interpretation (Silvia, 2006). Exploring certain aesthetic values of artistic objects, as well as interpreting the aesthetic experience of people when exposed to art can contribute towards understanding art and people's affective reactions to artwork (Kostoulas et al., 2020). Given the multidimensional structure of self-concept, individuals may experience different levels of self-esteem and self-efficacy in different areas of life, including the aesthetic domain (Showers et al., 2015). For instance, a person might feel confident in their academic abilities but unsure about

interpreting abstract art (Barbot, 2020). Such domain-specific differences may shape how individuals approach and respond to aesthetic experiences, often preferring those that align with their perceived strengths (Jacobsen & Beudt, 2017). In sum, both self-esteem and self-efficacy, as aspects of self-concept, appear to influence the way individuals engage with and experience aesthetic stimuli (Tinio & Smith, 2017; Esteve-Faubel et al., 2021).

The Chinese context

In the Chinese cultural context, spirituality is often understood not only as an individual search for transcendence and life meaning, but also as closely related to harmony between the self, others, and the broader social environment (Niu et al., 2022). Influenced by traditional philosophical thought, spirituality may emphasize inner moral cultivation, balance between personal desires and social responsibilities, and the pursuit of harmony within interpersonal and natural contexts. Rather than being purely associated with religious belief, spirituality in Chinese culture is more frequently expressed through meaning-oriented life orientation, ethical self-development, and emotional connectedness with family and community (Niu et al., 2020). Such a cultural understanding of spirituality supports the applicability of the spirituality construct in the present Chinese sample. If sensitivity to art is regarded as part of spirituality, then spirituality may enhance the intensity of aesthetic experiences (Świątek et al., 2023).

The current study

Based on Self-Consistency Theory, which posits that individuals strive for internal consistency between their self-concept and external experiences, this study forms a theoretical model that explores how self-concept influences aesthetic experience. In the current study, we integrate five hypotheses and propose a sequential mediation model (see Figure 1): Self-concept is positively correlated with aesthetic experience. Self-concept can influence aesthetic experience by enhancing an individual's creativity, which then affects their spirituality and ultimately impacts their aesthetic experience. We also consider that creativity or spirituality can function

as independent mediating variables to influence aesthetic experience.

Methods

Participants and setting

Art major undergraduate students from universities across China were recruited using a random sampling approach. Participants completed an online questionnaire designed for the purpose of this study. A total of 800 individuals between the ages of 17 and 25 participated. After excluding those who did not complete all items or were not currently enrolled college students, valid data from 744 participants were retained for analysis. The mean age of the sample was 19.45 years ($SD = 1.66$), with 68.2% identifying as female and 31.8% as male.

Measures

Self-concept

Participants' self-concept was measured using the Tennessee Self-Concept Scale (TSCS) developed by Fitts (1965). Considering the participants' linguistic and cultural context, the study employed the third revised edition of the scale, which was translated into Chinese and adapted by Lin (1980) in Taiwan. Previous studies have shown that, under the background of Chinese culture, the use of the self-concept scale to measure college students has good reliability (Zhang et al., 2022). All items were presented in Chinese to ensure linguistic clarity and cultural appropriateness. The full scale included 70 items, with 10 items specifically targeting Self-Criticism, a negative aspect of self-concept (e.g., "Every once in a while, I think of something unspeakably bad"; Cronbach's $\alpha = 0.842$). The remaining 60 items were categorized into five content dimensions: Physical Self (12 items; Cronbach's $\alpha = 0.814$), Moral-Ethical Self (12 items; Cronbach's $\alpha = 0.819$), Personal Self (12 items; Cronbach's $\alpha = 0.732$), Family Self (12 items; Cronbach's $\alpha = 0.906$), and Social Self (12 items; Cronbach's $\alpha = 0.875$). An alternative classification method grouped these 60 items according to structural dimensions: identity, self-satisfaction, and behavior. The total self-concept score was calculated by summing the scores across either all content or structural dimensions. Each item was rated on a 5-point Likert scale ranging from 1 (completely disagree)

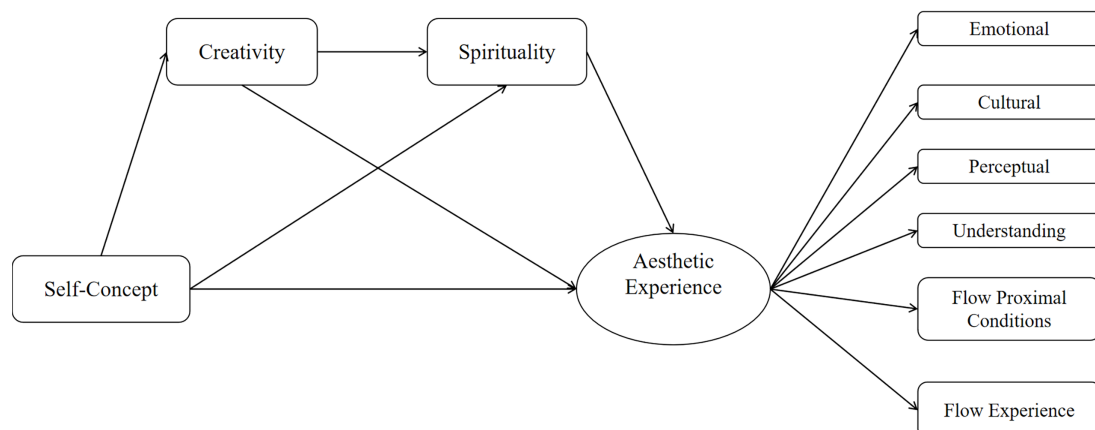


Figure 1. Theoretical model of relations between self-concept, creativity, spirituality and aesthetic experience

to 5 (completely agree), with 30 items reverse scored. After reversing the scores of the reverse-coded items, higher total scores on the scale represent a higher level of self-concept. Based on the purpose of holistic analysis, the total score of the self-concept scale was used to reflect the overall level of self-concept. The scale demonstrated strong internal consistency in this study (Cronbach's $\alpha = 0.934$).

Creativity

The Williams Creativity Scale (WCS) (Williams, 1980) was employed to evaluate participants' creative abilities. The scale is widely used among Chinese students (Ren et al., 2024). In the present study, the items were administered in Chinese to ensure linguistic clarity and cultural appropriateness for Chinese participants. The instrument comprises 50 items and encompasses four dimensions: Inability to Risk Taking (11 items; e.g., "In school, I like to try to guess the outcome of things or problems, even if I don't always guess correctly"; Cronbach's $\alpha = 0.684$), Curiosity (14 items; Cronbach's $\alpha = 0.797$), Complexity (12 items; Cronbach's $\alpha = 0.689$), and Imagination (13 items; Cronbach's $\alpha = 0.799$). Items were rated using a 3-point Likert scale ranging from "completely inconsistent" to "completely consistent." Eight items (4, 9, 12, 17, 29, 35, 45, and 48) were reverse scored. After reversing the scores of the reverse-coded items, higher total scores on the scale represent a higher level of self-concept. To capture the overall creative disposition of participants, the composite score of the creativity scale was used in the analysis. In the present study, the internal consistency of the overall scale was satisfactory (Cronbach's $\alpha = 0.919$).

Spirituality

Participants' spirituality was assessed using the Spirituality Measurement Scale (SMS) developed by Makkar and Singh (2021), comprising 44 items. In the present study, the items were provided in Chinese to ensure linguistic clarity and cultural appropriateness. The core dimension, Transcendence, consists of 19 items (e.g., "Creates an atmosphere of positivity"; Cronbach's $\alpha = 0.964$). Three correlated dimensions are also included: Self-Awareness (6 items; Cronbach's $\alpha = 0.938$), Self-Efficacy (8 items; Cronbach's $\alpha = 0.931$), and Service Towards Others (5 items; Cronbach's $\alpha = 0.876$). Items were scored on a 5-point Likert scale ranging from 1 (completely disagree) to 5 (completely agree). The higher the total score of the subjects, the more spirituality. The composite score of the spirituality scale was employed to represent participants' general level of spirituality. The overall internal reliability of the scale was excellent (Cronbach's $\alpha = 0.978$).

Aesthetic experience

The Aesthetic Experience Questionnaire (AEQ) developed by Wanzer et al. (2020) was used to examine participants' responses while engaging with artworks. At present, the existing research has carried out a survey on college students with Chinese cultural background, showing good credibility (Hu et al., 2024). In this study, Chinese was also used for measurement to ensure the language clarity and cultural suitability of Chinese participants. This 22-item scale includes six dimensions, four of which are

artistically oriented: Emotional (4 items; e.g., "I experience a wide range of emotions"; Cronbach's $\alpha = 0.890$), Cultural (4 items; Cronbach's $\alpha = 0.942$), Perceptual (3 items; Cronbach's $\alpha = 0.917$), and Understanding (4 items; Cronbach's $\alpha = 0.944$). The remaining two dimensions are related to flow experiences: Flow Proximal Conditions (3 items; Cronbach's $\alpha = 0.924$), and Flow Experience (4 items; Cronbach's $\alpha = 0.909$). Each item was rated on a 7-point Likert scale ranging from 1 (completely disagree) to 7 (completely agree). The higher the total score of the questionnaire, the better the aesthetic experience. The total score of the aesthetic experience scale was used to indicate participants' overall aesthetic experience. The AEQ demonstrated strong internal consistency in this study (Cronbach's $\alpha = 0.977$).

Procedure

This study was approved by the Ethics Committee of Shaanxi Normal University (HR2023-12-02). All participants provided informed consent prior to their involvement, and voluntary participation was ensured. The questionnaire was administered online via the Wenjuanxing platform (<https://www.wjx.cn>).

Statistical analysis

Correlational analyses were conducted using SPSS to examine the relationships among the key study variables. To explore gender differences in aesthetic experience, independent samples t-tests were performed, while linear regression was used to assess the effect of age on aesthetic experience. A chained mediation model was tested using the PROCESS macro for SPSS version 27 (Model 6; Hayes & Rockwood, 2017). Indirect effects were evaluated using the bootstrapping method with 5000 resamples and 95% confidence intervals (Fritz & MacKinnon, 2007; Tofighi & MacKinnon, 2011). Additionally, Harman's single-factor test was employed to assess the potential influence of common method bias (Podsakoff et al., 2003).

Results

Test of common method bias

To minimize potential bias arising from self-reported data, both anonymous survey procedures were employed. Harman's single-factor test revealed that 11 factors had eigenvalues greater than 1, with the first factor accounting for 27.66% of the total variance—well below the 40% threshold. These results indicate that common method bias was not a significant concern in the current study.

Preliminary analyses

Correlation analyses revealed that self-concept was significantly and positively correlated with aesthetic experience ($r_p = 0.433$, $p < 0.01$), creativity ($r_p = 0.305$, $p < 0.01$), and spirituality ($r_p = 0.641$, $p < 0.01$). Similarly, aesthetic experience showed significant positive correlations with creativity ($r_p = 0.525$, $p < 0.01$) and spirituality ($r_p = 0.753$, $p < 0.01$), while creativity and spirituality were also positively correlated ($r_p = 0.461$, $p < 0.01$). Additionally, all six dimensions of aesthetic experience were significantly positively correlated with the total aesthetic experience score as well as with self-concept,

Table 1. Correlation matrix of self-concept, creativity, spirituality, and aesthetic experience

	M	SD	1	2	3	4	5	6	7	8	9	10
1. Self-Concept total	247.51	31.99	1									
2. Creativity	107.38	12.72	0.305**	1								
3. Spirituality	135.56	26.95	0.641**	0.461**	1							
4. Aesthetic Experience	106.75	23.08	0.433**	0.525**	0.753**	1						
5. Emotional	19.24	4.62	0.359**	0.460**	0.647**	0.877**	1					
6. Cultural	19.94	4.80	0.428**	0.479**	0.680**	0.922**	0.777**	1				
7. Perceptual	14.89	3.60	0.420**	0.481**	0.675**	0.917**	0.727**	0.876**	1			
8. Understanding	19.78	4.64	0.413**	0.490**	0.703**	0.939**	0.766**	0.852**	0.871**	1		
9. Flow Proximal Conditions	13.88	3.40	0.370**	0.440**	0.696**	0.863**	0.704**	0.701**	0.738**	0.778**	1	
10. Flow Experience	19.01	4.39	0.363**	0.498**	0.699**	0.914**	0.760**	0.775**	0.789**	0.825**	0.828**	1

Note. ** $p < 0.01$.

Table 2. Differences between females and males in analyzed variables

	Female (N = 237)		Male (N = 507)		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	M	SD	M	SD			
1. Self-Concept total	242.05	32.00	250.07	31.69	−3.208	0.001	31.790
2. Creativity	136.40	29.73	135.17	25.57	0.581	0.561	26.967
3. Spirituality	106.61	27.19	106.81	20.91	−0.114	0.909	23.098
4. Aesthetic Experience	47.93	11.67	45.46	8.27	3.309	0.001	9.483
5. Emotional	19.28	5.50	19.22	4.15	0.164	0.869	4.622
6. Cultural	19.72	5.36	20.05	4.52	−0.878	0.38	4.803
7. Perceptual	14.65	4.08	15.00	3.35	−1.252	0.211	3.595
8. Understanding	19.63	5.33	19.84	4.28	−0.574	0.566	4.638
9. Flow Proximal Conditions	14.10	3.97	13.78	3.10	1.19	0.235	3.399
10. Flow Experience	19.22	4.90	18.91	4.14	0.898	0.37	4.394

creativity, and spirituality (see Table 1). Based on these findings, subsequent mediation analyses were conducted. Independent samples *t*-tests indicated significant gender differences in self-concept scores and total aesthetic experience (see Table 2).

The chain mediation effect test

Before conducting the mediation analysis, all reverse-coded items in the measurement scales were recoded. After recoding, total scores were calculated to ensure consistent scoring direction across instruments. Since the scales used in the present study have well-established factor structures documented in previous research, we calculated the composite scores based on these existing structures, and a separate confirmatory factor analysis (CFA) was not conducted. However, the measurements demonstrated excellent validity and reliability in the present sample. Specifically, the Kaiser-Meyer-Olkin (KMO) measures for all scales were outstanding (self-concept = 0.966, spirituality = 0.973, aesthetic experience = 0.971, creativity = 0.953), indicating excellent suitability for their underlying constructs. Additionally, the internal consistency reliabilities were highly satisfactory, and their expected correlations with other study variables provided support for criterion-related validity.

For the chain mediation analysis, all variables were standardized prior to testing. Using the PROCESS macro version 4.1 in SPSS, with age and gender controlled (Hayes & Rockwood, 2017), regression results demonstrated that self-concept positively predicted creativity ($\beta = 0.32$, $p < 0.001$) and spirituality ($\beta = 0.56$,

$p < 0.001$). Creativity, in turn, significantly predicted spirituality ($\beta = 0.29$, $p < 0.001$) and aesthetic experience ($\beta = 0.22$, $p < 0.01$). Spirituality also positively predicted aesthetic experience ($\beta = 0.71$, $p < 0.001$). Interestingly, self-concept negatively predicted aesthetic experience ($\beta = -0.09$, $p < 0.001$), suggesting a masking effect within the chain mediation model (see Table 3). All regression coefficients reported are standardized (see Figure 2).

The negative direct effect of self-concept on aesthetic experience ($\beta = -0.09$) after introducing mediators is a form of suppression or masking effect. This suppression effect occurs when the mediators—creativity and spirituality—account for some of the variance in aesthetic experience that was initially attributed to self-concept, thus revealing a more complex relationship. In a suppression effect, the direct effect between the independent and dependent variables becomes negative or weaker once the mediators are introduced, reflecting that the mediators explain variance that was initially considered as part of the direct effect. The negative direct effect of self-concept ($\beta = -0.09$) should therefore be understood as a statistical artifact caused by the inclusion of creativity and spirituality. While the direct effect is negative, the indirect paths through creativity and spirituality remain significant and positive, providing a more accurate and comprehensive understanding of the influence of self-concept on aesthetic experience.

The mediation analysis further indicated that the total indirect effect of creativity and spirituality on the relationship between self-concept and aesthetic experience

Table 3. Regression analysis of variable relationships

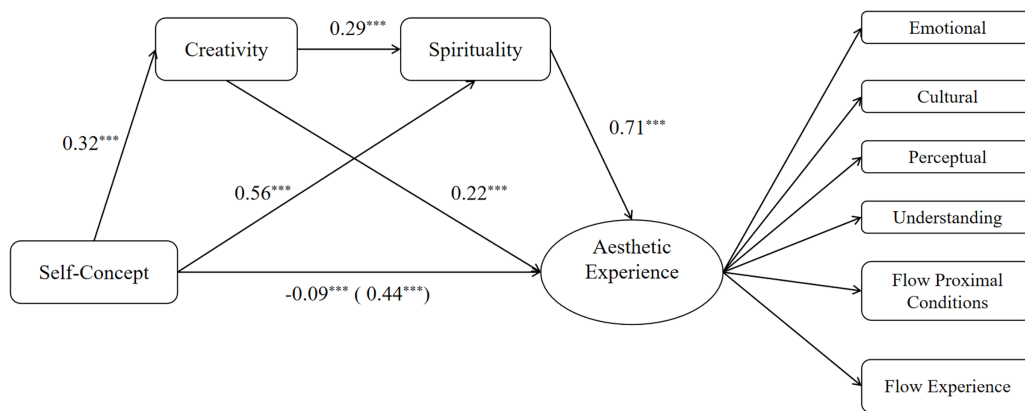
Predictor variable	Eq. (1) (Creativity)		Eq. (2) (Spirituality)		Eq. (3) (Aesthetic Experience)	
	β	t	β	t	β	t
Sex	-0.05	-1.51	-0.08	-3.15*	0.03	1.19
Age	-0.09	-2.51*	0.02	0.57	-0.03	-1.34
Self-Concept	0.32	9.01***	0.56	20.23***	-0.09	-3.06**
Creativity			0.29	10.54***	0.22	8.61***
Spirituality					0.71	22.04***
R	0.32		0.70		0.78	
R^2	0.10		0.50		0.61	
F	28.22***		182.16***		233.96***	

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Eq. (1): $Creativity = \beta_0 + \beta_1(Self-Concept) + \beta_2(Sex) + \beta_3(Age) + \varepsilon_1$

Eq. (2): $Spirituality = \beta_0 + \beta_1(Self-Concept) + \beta_2(Creativity) + \beta_3(Sex) + \beta_4(Age) + \varepsilon_2$

Eq. (3): $Aesthetic\ Experience = \beta_0 + \beta_1(Self-Concept) + \beta_2(Creativity) + \beta_3(Spirituality) + \beta_4(Sex) + \beta_5(Age) + \varepsilon_3$

**Figure 2.** The final chain mediation model plot. Note. *** $p < 0.001$.

was 0.54 (Table 4), with a 95% confidence interval [0.48, 0.59], excluding zero, confirming a significant mediation effect. This total effect comprised three significant indirect pathways: (1) self-concept $\rightarrow$ creativity $\rightarrow$ aesthetic experience (effect = 0.07, 95% CI [0.05, 0.10]), (2) self-concept $\rightarrow$ spirituality $\rightarrow$ aesthetic experience (effect = 0.40, 95% CI [0.34, 0.46]), and (3) self-concept $\rightarrow$ creativity $\rightarrow$ spirituality $\rightarrow$ aesthetic experience (effect = 0.07, 95% CI [0.04, 0.09]), all of which had confidence intervals excluding zero, indicating significant mediation effects. It is important to clarify that the total effect includes both the direct and indirect effects. In this case, the direct effect of self-concept on aesthetic experience is negative ($\beta = -0.09$), while the indirect effects through creativity and spirituality are positive. Thus, although the direct effect of self-concept is negative, the significant positive indirect effects through creativity ($\beta = 0.07$) and spirituality ($\beta = 0.40$) result in an overall positive influence. As a result, the total indirect effect (0.54) is larger than the total effect (0.44) because the positive indirect effects outweigh the negative direct effect, providing a more comprehensive explanation of how self-concept influences aesthetic experience.

Discussion

Previous studies have only focused on individual differences in aesthetic experiences, without exploring the relationship between self-concept and aesthetic experiences, as well as their underlying mechanisms. In this study, we first explore how self-concept potentially predicts aesthetic experiences. Based on prior studies, we have constructed a mediating model. Our results indicate that self-concept can predict aesthetic experiences by promoting individuals' spirituality through their creativity.

Our findings support Hypothesis 1, showing that self-concept significantly predicts aesthetic experiences. Deep aesthetic experiences may promote integration of the inner self with external aesthetic stimuli, breaking self-boundaries and facilitating new self-construction, thus enhancing the aesthetic experience. This idea aligns with the view that aesthetic experiences are not just passive perceptions but active engagements that shape the individual's sense of self (Vessel et al., 2013). Moreover, the process of self-construction through aesthetic experiences may lead to changes in how individuals perceive and relate to external stimuli, which suggests that aesthetic engagement serves as a transformative process in which the individual interacts with the world in a more integrated manner (Salgues et al., 2024). This is consistent with previous research, which has shown that exploring the

Table 4. Results of the chain mediation effects

	Effect	BootSE	BootLLCI	BootULCI
Total effect	0.44	0.03	0.38	0.51
Direct effect	−0.09	0.03	−0.15	−0.03
Total indirect effect	0.54	0.03	0.48	0.59
Self-Concept—Creativity—Aesthetic Experience	0.07	0.01	0.05	0.10
Self-Concept—Spirituality—Aesthetic Experience	0.40	0.03	0.34	0.46
Self-Concept—Creativity—Spirituality—Aesthetic Experience	0.07	0.01	0.04	0.09

value of art and interpreting people's aesthetic experiences when engaging with art enhances our understanding of people's affective reactions (Kostoulas et al., 2020).

We further found that self-concept positively promotes aesthetic experiences through creativity, supporting Hypotheses 2 and 4. Individuals with stronger self-identity and higher self-evaluation tend to be more creative and derive greater pleasure from aesthetic engagement. This aligns with previous findings that creativity enhances both aesthetic sensitivity and experience. Creativity, reflecting imagination and curiosity, enables individuals to develop richer and more complex aesthetic schemas (Meyer et al., 2023), which contributes to more pleasurable emotional responses to artworks.

Spirituality emerged as a mediator between self-concept and aesthetic experience, as well as between creativity and aesthetic experience, supporting Hypotheses 3 and 5. Within positive psychology, spirituality is considered an important component of psychological well-being and influences how individuals perceive and experience the world, including aesthetics (Ryff, 2021). Higher spirituality is associated with a deeper appreciation of life's beauty and meaning (Ritz et al., 2024), possibly because spirituality reflects an individual's connection to a higher realm beyond the self. This enables transcending self-limitations to experience intrinsic beauty and significance more profoundly during aesthetic engagement (Božek et al., 2020). While spirituality and aesthetic experience share emotional and cognitive elements, their overlap warrants careful consideration. Both involve deep engagement with the self and external stimuli, yet spirituality often entails a more profound search for meaning and connection, while aesthetic experiences are typically centered around beauty and emotional response. The high correlation between the two constructs suggests that they may be closely related, but it remains unclear whether they represent distinct processes or whether their interaction is more complex. This conceptual overlap necessitates a deeper examination of how these constructs intersect and influence one another. Future research could employ more nuanced measures or experimental designs (e.g., priming one construct while measuring the other) to further discriminate their unique contributions and interactive dynamics.

From the perspective of self-concept, individuals with a more positive and integrated self-view may be more open and motivated to explore the world (Blažek & Besta, 2012). This openness fosters spiritual engagement, enriching their spiritual life and enhancing their capacity to perceive and appreciate beauty. Thus, self-concept may predict aesthetic experience via its effect on spirituality

(Fayn et al., 2015). Moreover, spirituality may mediate the relationship between creativity and aesthetic experience. Creativity involves generating novel ideas and thinking beyond conventional limits (Runco & Jaeger, 2012). Spirituality, with its emphasis on transcending the ordinary and exploring the unknown, can stimulate creative thinking (Vaughan, 2002). Spiritual inspiration may enable individuals to break conventional thought patterns, fostering unique aesthetic perceptions and enriching the aesthetic experience (Chi & Snyder, 2011). These findings offer new insights into the mechanisms of aesthetic experience and suggest that future research should further investigate the specific pathways and influencing factors underlying the mediating role of spirituality.

In the Chinese cultural context, spirituality is not only an individual pursuit of transcendence but also closely linked to harmony between the self, others, and the broader social environment (Niu et al., 2022). This cultural framing suggests that aesthetic experiences in China may involve not just personal emotional responses, but also social and ethical dimensions, with an emphasis on balance and harmony. Therefore, the results of this study, where spirituality mediates the relationship between self-concept and aesthetic experience, are consistent with the view that spirituality in Chinese culture is deeply connected to social and moral responsibilities. This highlights the importance of considering cultural values when examining how self-concept and creativity influence aesthetic engagement.

While this study focuses on art students, it provides valuable insights into the relationships between self-concept, creativity, and aesthetic experience. Expanding the sample to include individuals from other academic disciplines could offer important perspectives on how these variables interact across different populations. For example, students in non-art fields may exhibit different patterns of creativity and aesthetic engagement due to the nature of their academic training. Therefore, applying the proposed model to a broader range of individuals could help identify how self-concept influences aesthetic experience beyond the domain of art, potentially revealing how creativity and spirituality interact in various contexts. Such research could contribute to a more comprehensive understanding of these dynamics in diverse settings, including non-artistic domains, and provide new insights into the role of self-concept in creative and aesthetic processes.

Limitations and future directions

Several limitations of the present study warrant consideration. The cross-sectional design limits the ability to infer

causal relationships. The negative direct effect of self-concept on aesthetic experience after including creativity and spirituality may reflect a suppression effect, potentially due to complex mediator interactions, measurement issues, or unmeasured variables. Creativity and spirituality might also moderate this relationship. Future studies should use longitudinal or experimental methods to clarify these mechanisms. Second, since the data were collected using self-report questionnaires, there is a potential for self-report bias. This could lead to over- or underestimation of certain variables due to social desirability or other factors. Future studies could address this limitation by incorporating experimental procedures, such as behavioral measures or physiological assessments, to provide a more objective understanding of the relationships between self-concept, creativity, spirituality, and aesthetic experience. Third, cultural adaptation concerns should be considered, as the measures used in this study may not fully account for cultural differences. Future research should focus on more thorough cultural adaptation procedures to ensure the validity and relevance of the constructs in diverse cultural contexts. Fourth, one potential limitation of the study is the possibility of selection bias, as art students may naturally exhibit higher baseline levels of creativity compared to students from other academic disciplines. This selection bias could affect the generalizability of our findings. Future studies should aim to include a more diverse sample to better understand the role of creativity in the broader population and reduce potential biases associated with domain-specific groups. Fifth, although Harman's single-factor test was used to examine common method bias, this test alone may not fully account for all potential biases in the data. Other sources of common method bias, such as social desirability and unmeasured variables, may still influence the results. This limitation should be considered when interpreting the findings.

Conclusion

Drawing upon Self-Consistency Theory, this study investigated the relationship between self-concept and aesthetic experience among art students, with a focus on the mediating effects of creativity and spirituality. The results indicate that self-concept significantly and positively predicts aesthetic experience, and that both creativity and spirituality serve as significant mediators in this association. Furthermore, the chain mediation effect was identified, whereby self-concept influences aesthetic experience indirectly through creativity and spirituality. These findings provide nuanced insights into the complex psychological pathways underpinning aesthetic experience and highlight the integral roles of creative and spiritual dimensions in shaping individuals' aesthetic experiences.

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Availability of Data and Materials: The data are available from the corresponding author upon reasonable request.

Ethics Approval: This study was conducted in accordance with the Declaration of Helsinki, and approved by the Ethics Committee of Shaanxi Normal University (HR2023-12-02). All participants provided informed consent after being informed of the study details, and their voluntary participation was assured.

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