

# Model of Creativity under Positive Emotional Regulation

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## Abstract

Creativity is becoming increasingly important in modern society, and many studies have investigated the factors that influence it. Among these factors, attention and positive emotion are considered crucial, as they have been shown to have a significant impact on creativity. However, the relationship between attention, positive emotion, and creativity among Chinese art college students has not been fully explored. This study aims to address this gap by examining the relationships between these variables, as well as the moderating effect of positive emotion on the relationship between attention and creativity. To achieve this, a survey was conducted using a questionnaire among 407 students from three art colleges in China. The data was analyzed using regression analysis to determine the relationships between the variables. The results showed that attention and positive emotion have a positive impact on creativity. Furthermore, positive emotion can enhance the positive relationship between attention and creativity. In other words, positive emotion can help improve performance in attention and creativity, which is crucial for enhancing creativity among art college students. These findings have significant implications for educational practices. Educators can enhance students' creativity by cultivating their attention and positive emotion.

**Keywords:** Actor's Attention; Creativity; Positive Emotion

## Introduction

Creativity is an important manifestation of human intelligence, which can bring innovation and progress to society (Amabile, 2020). Therefore, the study of creativity has always been a topic of great interest. In the past few decades, many scholars have studied creativity from different perspectives and proposed various theories and models, such as the Creative Process Model (Wallas, 1926), the Image–Word Model of Creativity (Finke et al., 1992), the Interactionist Model of Creativity (Amabile, 1996), the Sociocultural Psychology Model of Creativity (Sawyer, 2011), and the Proactive Control Theory of Creativity (Beaty & Silvia, 2013). Among them, attention and positive emotion are two factors that are often studied, because they have significant effects on human cognition and emotional states.

Attention is an important component of human cognition that helps individuals resist distraction, focus, and maintain stability of attention (Bruner & Colom, 2022). Therefore, attention can provide significant assistance to human learning, thinking, and creativity (Henriksen et al., 2020). In creative tasks, attention plays a particularly important role. For example, during creative tasks, individuals need to concentrate on thinking and experimenting with various possibilities in order to come up with the final creative product (Schiavio et al., 2021). Thus, attention can be considered as a cognitive ability that can facilitate creativity. In addition to attention, positive emotions are also an important factor that influences creativity. Positive emotions can promote cognitive flexibility and creative thinking (Demirtaş 2020). In fact, many innovative ideas and inspirations come from the stimulation of positive emotions. Moreover, research has found that negative emotions may lower the level of human creativity because they can affect individuals' cognitive resources and ways of thinking (Mastria et al., 2019).

While attention and positive emotions are considered important factors for creativity, little research has examined their relationship and their combined effect on creativity. Therefore, this study aims to investigate the relationship between attention, positive emotions, and creativity among Chinese art students. Art students are an especially interesting group to study as creativity is central to their education and future careers (Mavri et al., 2021). By examining how attention and positive emotions interact to impact creativity, this study may provide insights into how to enhance creative thinking and problem-solving in art education.

Schachter and Singer's (1962) theory suggests that emotions are determined by both bodily reactions and cognitive evaluations. When individuals are faced with a stimulus, their body produces a physiological response, but their emotional experience is influenced by their cognitive

evaluation of the stimulus. In this study, attention and positive emotion are the independent variables that produce physiological arousal. Positive emotion is the moderating variable that provides an interpretation for the physiological arousal and may affect creativity. Therefore, if actors are able to maintain positive emotions while performing a task, they may be more likely to interpret the physiological arousal as a creative impulse, leading to higher levels of creativity. Conversely, if actors are unable to regulate their emotions or experience negative emotions, it may affect their interpretation of the physiological arousal and have a negative impact on creativity.

This study has several important implications. Firstly, by examining the combined effects of attention and positive emotions on creativity, it may provide insights into how to enhance creative thinking and problem-solving in art education. Secondly, this study may shed light on the role of cultural factors in shaping creativity, as Chinese art students may have different experiences and perceptions of creativity compared to non-art students from other cultures. Finally, this study may contribute to the wider literature on cognitive and affective factors that influence creativity.

In summary, this study aims to investigate the relationships between attention, positive emotions, and creativity among Chinese art students. By studying how attention and positive emotions interact to affect creativity, this research may offer insights into how to enhance creative thinking and problem-solving in art education, as well as shed light on the role of cultural factors in shaping creativity.

- To explore the relationship between attention and creativity among art college students.
- To examine the relationship between positive emotion and creativity among art college students.
- To investigate the moderating effect of positive emotion on the relationship between attention and creativity among art college students.

## **Literature Review**

### **Attention**

Attention is an important psychological process required for human cognitive activities, involving the concentration and control of attention (Scopelliti & Tiberio, 2020). As research has progressed, attention has been viewed as a core component of cognitive control and an essential psychological process for learning, working, and living (Liu et al., 2019). Attention is a complex psychological process involving multiple aspects of cognitive control. In classical cognitive psychology, attention is usually defined as the selective processing of one or more specific stimuli

or tasks, including selective processing of internal and external information (Yiend, 2010). In recent years, the definition of attention has gradually expanded from narrow selective attention to broader attention control processes, including attention allocation, regulation, inhibition, and flexibility (Frith et al., 2021).

Artistic activities require a high level of both attention and creativity. Therefore, many studies have explored the impact of artistic activities on attention (Romero Naranjo et al., 2022). Some studies suggest that participating in artistic activities can improve individuals' level of attention. For example, a study on adolescents found that participating in music learning can significantly improve an individual's attention level, particularly in the improvement of selective attention and distribution of attention (Fernandez et al., 2019). Similarly, a study found that participating in painting activities can significantly improve students' attention level (Kilis & Yildirim, 2019). In adults, the definition of attention is more extensive, including not only classic attention allocation and maintenance but also attention switching, inhibition, and contextual awareness (Cak et al., 2020). These different types of attention play different roles in different tasks. For example, in creative tasks, stronger attention switching and flow states are required, while in simple tasks, stronger attention maintenance and control are needed (Dietrich & Kanso, 2010).

In studies on art creation, attention is also considered a key factor. In creative activities such as painting, music, and dance, artists require a high level of attention to control and adjust details to achieve the desired effect (Jeon et al., 2019). Some studies have also found that different types of art activities require different levels of attention. For example, music creation requires stronger attention switching and working memory, while painting requires stronger visual-spatial processing and attention control (Sawyer, 2011).

In artistic creation, attention has been proven to be a critical factor, and research results have provided insights into the thinking and creative processes of artists. Overall, attention is an indispensable and important part of human cognitive activity.

### **Positive Emotion**

Mastandrea et al. (2019) defined positive emotion from an artistic perspective as a pleasant emotional experience that includes positive feelings such as joy, happiness, and excitement. Positive emotion is beneficial for both physical and mental health, as it can strengthen the immune system, lower the risk of cardiovascular disease and depression, and improve quality of life and happiness. Therefore, positive emotion has become a hot topic in psychological research. There are multiple theories on the definition of positive emotion. Fredrickson (1998)

proposed the Broaden-and-Build Theory, which suggests that positive emotions can broaden the scope of thought and behavior, promote the accumulation and development of psychological resources and abilities. Seligman's (2002) Positive Psychology emphasizes the importance of positive emotion to individual happiness and life satisfaction. Additionally, individuals can regulate negative emotions and improve their mental health and coping skills by cultivating positive emotion (Greenawalt et al., 2019).

In the realm of art, research on positive emotions has also received wide attention. Studies have shown that engaging in artistic activities can enhance individuals' positive emotions, increase their sense of well-being and life satisfaction (Fancourt et al., 2019). For example, participating in music activities, art creation, and other art activities can stimulate people's joy and excitement, improve self-efficacy and self-esteem, and enhance creativity and innovation. Additionally, viewing art can also have a positive emotional effect. Some studies have found that viewing art can stimulate people's sensations and emotions, enhancing their mental health and happiness (Fancourt & Finn, 2019). Some research has explored the role of emotional expression and recognition. For example, one study found that musicians influence their audience's emotional responses by expressing emotions during performance (Theorell & Bojner Horwitz, 2019). In another study, college students who participated in painting demonstrated higher emotional recognition ability (Alzahrani et al., 2019). These studies indicate that art activities can help individuals express and recognize emotions.

In general, positive emotions play an important role in individuals' creative performance. For art students, their creative performance is closely related to their levels of attention and positive emotions. Therefore, studying the relationship between attention, positive emotions, and creativity is crucial for understanding and improving the creative performance of art students.

### **Creativity**

Creativity is a multi-faceted concept that involves many different factors and domains. Kaufman (2019) defines creativity from an artistic perspective as the ability to generate unique and valuable ideas or solutions to problems, which is achieved through factors such as innovation, imagination, and creative thinking. The origins of creativity research can be traced back to psychology labs in the early 20th century, where the initial focus was on identifying creative individuals through a multitude of scales and tests. Over time, the focus of creativity research has shifted towards a more comprehensive understanding of the nature and sources of creativity (Hernández-Torrano & Ibrayeva, 2020).

There are various interpretations and understandings of creativity. For example, Torrance (1962) defined creativity as "the ability to produce original and valuable results through deliberate actions in the environment", while Shin et al. (2002) defined creativity as "a thinking ability that generates new concepts, insights, and ideas, as well as creative outcomes and behaviors". In addition, some researchers define creativity as "an ability to solve problems and achieve goals through creative thinking, innovation, imagination, and risk-taking" (Graciano et al., 2022).

In the field of creativity research, art has always been a hot topic because artistic works are often considered one of the forms of creative expression (Dissanayake, 2019). Many studies have focused on the impact of arts education on creativity. Some studies have found that art education and training can enhance students' creativity. For example, one study found that after a year of art education, the creativity scores of elementary school students significantly improved (Schoevers et al., 2020). In addition, some researchers have found that learning arts such as music, dance, and drama can enhance creativity, and this effect may be more significant than learning other subjects (Lucchiari et al., 2019).

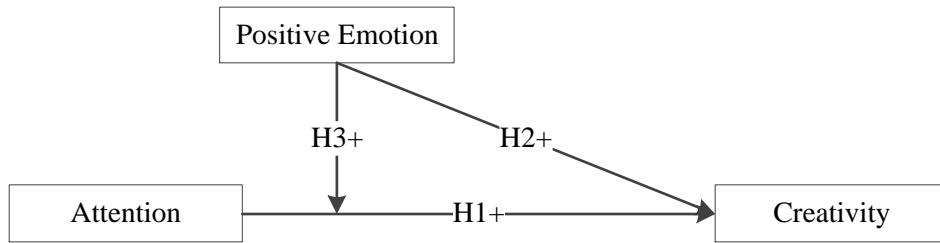
In general, research on creativity has gradually shifted from a general concept to specific fields. The study of creativity in the arts field helps us to gain a deeper understanding of the nature of creativity and how to cultivate it.

### **Research Model**

Stanovich and West (2000) proposed a dual-process theory that human cognitive processes consist of two different but interacting systems: one is a fast, automatic, unconscious system (System 1), and the other is a slow, conscious system (System 2). In this model, attention is viewed as an independent variable because it can promote the activity of System 2, while creativity is viewed as a dependent variable because it is manifested under the influence of System 2. Positive emotions are viewed as a moderating variable because they can affect creativity performance by regulating the interaction between System 1 and System 2. Specifically, attention can enhance the activity level of System 2, making people more consciously and purposefully think and process information, thereby improving creativity performance. At the same time, positive emotions can strengthen the coordination between System 1 and System 2, improving the efficiency of information processing and creative performance.

For Chinese art college students, the relationship between attention and creativity may be particularly important because they need to excel in the complex field of art. In addition, since artistic creation is usually a process of emotional experience, positive emotions may further

influence the creative performance of art college students. Therefore, this study proposes the research model shown in Figure 1.



**Fig.1** Research Model

### Research hypothesis

#### The relationship between attention and creativity

In artistic creation, creativity requires artists to have a deep understanding of the subject matter and expression methods. Attention can enhance problem-solving abilities and insight. By focusing on the creative task, artists can ignore other distracting factors and think more deeply, leading to more unique and creative ideas (Pelowski & Chamberlain, 2023). Attention can also improve efficiency in artistic creation. Creativity not only requires good ideas but also requires artists to put them into practice. Attention can help artists complete creative tasks more quickly and efficiently, turning their ideas into works (Morejón, 2021). Additionally, attention can improve self-reflection and self-correction abilities. Artists need to constantly review their work, identify problems, and make corrections. Attention can help artists more deeply examine their work, discover more problems, and propose better solutions (Kumar, 2022). Furthermore, attention can promote the use of fluid thinking, a nonlinear thinking style that helps generate more creative ideas. Attention can help artists enter a state of "flow" and thus promote the use of fluid thinking, leading to more unique and innovative works (Heiser, 2021).

In summary, attention can promote the expression of creativity in artists by enhancing abilities in problem-solving, efficiency, self-reflection, and fluid thinking. Therefore, the following hypothesis is proposed:

H1: Attention has a positive impact on creativity in art students.

#### The relationship between positive emotions and creativity

Research also suggests that positive emotions contribute to enhancing individual creativity. For example, a study found that college students induced with positive emotions exhibited higher

levels of creative thinking abilities compared to those induced with negative or neutral emotions (Mastria et al., 2019). In another study, college students induced with positive emotions showed higher creative generation and creative exploration performance (Morales-Rodríguez and Pérez-Mármol, 2019). These studies indicate that positive emotions contribute to enhancing individual creative performance.

Positive emotions can promote creativity and imagination. Artistic creation requires artists to have imagination and creativity, and positive emotional states can promote the expression of these abilities. For example, a happy emotional state can stimulate an artist's creativity and imagination, resulting in more unique and innovative works (Chen & Tseng, 2021). Positive emotions can enhance attention and working memory performance, which are important factors in creative expression. Artists need to concentrate their attention and maintain information richness, and positive emotional states can improve these abilities, thereby helping artists to better express their creativity (Smyrnaiou et al., 2020). Positive emotions can promote creativity and problem-solving flexibility. Creativity requires artists to think and solve problems flexibly, and positive emotional states can promote the expression of these abilities. For example, a happy emotional state can make artists more joyful and relaxed, reducing stress and anxiety during the creative process, and helping to solve problems more flexibly (Dou et al., 2021). Positive emotions can enhance confidence and positivity, which are necessary for artistic creativity. Positive emotional states can enhance the expression of these abilities. For example, a happy emotional state can make artists more confident and positive, encouraging them to be more daring in their attempts at creation (Daniel, 2021).

In summary, a positive emotional state can promote the expression of an artist's creativity by enhancing abilities such as promoting creativity and imagination, improving attention and working memory performance, promoting creativity and problem-solving flexibility, and enhancing confidence and positivity. Therefore, the following hypothesis is proposed:

H2: The positive impact of emotions on creativity is evident in art students.

### **The moderator role of positive emotions**

Positive emotional states can enhance the performance of focus, which is one of the important factors for creativity. Artists need to concentrate and maintain information richness, and positive emotional states can improve the performance of focus, thus helping artists to better unleash their creativity (Fancourt et al., 2019). Positive emotional states can promote creativity,

which requires artists to have positive emotions and mindsets in order to enter the creative state more pleasantly and relaxedly. At the same time, positive emotional states can also reduce anxiety and stress for artists, thus enhancing their focus and attention (Forbes et al., 2020). Positive emotional states can enhance the endurance of focus and creativity. The unleashing of creativity requires artists to sustain their focus and energy, and positive emotional states can improve the endurance of these abilities. Artists are more likely to maintain their focus and creativity for a longer period of time when in a state of high emotion (Warr et al., 2019). Positive emotional states can enhance artists' motivation and sense of purpose. In a state of high emotion, artists are more driven and passionate about pursuing their creative goals, making it easier for them to enter the creative state and maintain their focus and creativity (Schiavio et al., 2021).

In conclusion, the positive relationship between emotion and the enhancement of focus and creativity can be achieved through improving the performance of focus, promoting creativity, enhancing the endurance of focus and creativity, and improving artists' motivation and sense of purpose. Therefore, the higher the emotion, the stronger the positive relationship between focus and creativity. As a result, the following hypothesis is proposed:

H3: The positive emotions of art students can promote the positive relationship between attention and creativity.

## Research Methodology

### Measures

The Mindful Attention Awareness Scale (MAAS; Brown and Ryan, 2003) is a 15-item version of the MAAS, with a one-factor and item scores ranging from 1 (almost never) to 5 (almost always). Brown and Ryan (2003) reported internal consistency coefficients above 0.80 across multiple samples. Higher scores on the scale reflect higher levels of attentional focus.

The Positive Affect and Negative Affect Schedule (PANAS) is a commonly used psychological measurement tool for assessing an individual's level of positive and negative affect over a period of time. Developed by Watson et al. (1988), the PANAS includes two subscales: the Positive Affect Scale and the Negative Affect Scale. In this study, we used the Positive Affect Scale as a measure of positive emotion, which includes 10 items for assessing positive affect levels. Watson et al. (1988) reported internal consistency coefficients above 0.80 across multiple samples. Higher scores on the scale reflect higher levels of positive emotion.

The Creativity Scale selected in this study is the original version of the Creativity Scale developed by Rawlings and Locarnini (2007), with a one-factor and five measurement items scored on a scale from 1 (strongly disagree) to 5 (strongly agree). The reliability of the scale was validated through laboratory experiments and questionnaire surveys by Rawlings and Locarnini (2007). Higher scores on the scale reflect higher levels of creativity.

#### **Research object and sampling method**

This study examined art students from three art colleges in China, with a total of approximately 20,382 enrolled students. The participants of this questionnaire were selected based on convenience sampling to ensure that the study has sufficient sample size to meet the needs of structural hypothesis testing. This study is a sampling survey and does not require collecting all target samples. As long as a certain degree of collection is achieved, the statistical results can represent all population samples, and there is a simplified formula for calculating sample size. The formula has an accuracy of 5% and a confidence level of 95%:  $n=N\frac{1}{1+N(e)^2}$ . Thus,  $n = 20382 \sqrt{1 + 20382 (0.05)^2} = 392$ . Considering the possibility of invalid questionnaires, we need to collect more than 392 valid responses, with an estimated distribution of 420 questionnaires.

Used AMOS 26.0 for confirmatory factor analysis and SPSS 26.0 for descriptive statistical analysis, assessing common method bias, Pearson correlation analysis, linear regression analysis, and so on.

## **Results**

### **Sample**

We collected a total of 424 questionnaires in this survey. After excluding 17 invalid questionnaires with identical or inconsistent responses, there were 407 valid questionnaires, with an effective rate of 95.99%.

We surveyed 145 students from School A, accounting for 35.6%, 131 students from School B, accounting for 32.2%, and 131 students from School C, accounting for 32.2%. There were 57 male students, accounting for 14.0%, and 350 female students, accounting for 86.0%. There were 97 freshmen, accounting for 23.8%, 107 sophomores, accounting for 26.3%, 105 juniors, accounting for 25.8%, and 98 seniors, accounting for 24.1%. The sample of this survey was consistent with the actual situation of the three schools, indicating that the sample of this survey was representative.

### Confirmatory factor analyses

The study employed Amos 26.0 software to examine the construct validity of the variables using confirmatory factor analysis. Firstly, a three-factor model was established. Then, goodness-of-fit indices such as  $\chi^2$ , RMSEA, CFI, GFI, and NFI were used to assess the model fit (see Table 1). As shown in Table 1, the three-factor model in Model 1 had good fit indices, with a  $\chi^2_{(160)} = 403.180$  ( $p > 0.05$ ), RMSEA = .058, CFI = .963, GFI = .904, and NFI = .910. This indicates that the model fit the data well. The study also tested three alternative models: Model 2, which combined attention and positive emotion; Model 3, which combined positive emotion and creativity; and Model 4, which combined all variables into one factor. Comparing the fit indices of the four models, Model 1 fit the data better than the other three models. Burnham et al. (2010) proposed indices for model comparison and selection:  $\Delta AIC = AIC - AIC_{min}$ , where  $AIC_{min}$  is the minimum AIC value among a series of related models. This transformation provides strong evidence for model comparison. The following interpretation rules for AIC are as follows: support for the model is strongest when  $\Delta AIC \leq 2$ ; support is weaker when  $4 \leq \Delta AIC \leq 7$ ; and  $AIC \geq 10$  is no longer supported. Model 1 had a  $\Delta AIC$  value of 0, indicating strong support for the uniqueness of the three variables in this study (Burnham et al., 2010).

**Table 1.** Results of Confirmatory Factor Analysis

Model	Factor	$\chi^2$	df	RMSEA	CFI	GFI	NFI	$\Delta AIC$
1	Three factors (A, PE, C)	403.180	160	.058	.963	.904	.910	0
2	Two factors (A+PE, C)	624.102**	164	.064	.937	.891	.885	42.170
3	Two factors (A, PE+C)	697.427***	165	.101	.887	.829	.804	85.830
4	Single factor (A+PE+C)	810.161***	148	.117	.850	.813	.793	92.571

Notes: \*\* $p < .01$ , \*\*\* $p < .001$  (two-tailed tests); A=Attention; PE=Positive Emotion; C=Creativity

### Common method bias

The common method bias refers to the phenomenon that the inter-correlations between different measures are influenced by factors such as the use of the same assessment tools, assessors, time, and location, which in turn affects the interpretation and generalization of research results. In empirical research fields such as management, psychology, and education, common method bias is a common problem. In order to test for common method bias, this study adopted the Harman's single-factor test method, which extracts the first principal component of all

indicators' factor analysis as a common factor. The first principal component explained 33.879% of the variance, which did not exceed 50%, indicating that the common method bias in this study did not cause serious problems.

### Correlation analysis and discriminant validity

This article used a Likert 5-point scale, with a midpoint of 3, and Table 2 shows that the mean score for Attention was 3.349 with a standard deviation of 0.655, indicating that the participants' Attention level was slightly above average and relatively concentrated. The mean score for Positive Emotion was 3.290 with a standard deviation of 0.857, indicating that the participants' Positive Emotion level was slightly above average with some fluctuation in data distribution. The mean score for Creativity was 3.636 with a standard deviation of 0.898, indicating that the participants' Creativity level was slightly above average with some fluctuation in data distribution.

This study used the average variance extracted (AVE) method to test for discriminant validity, which requires that the square root of the AVE of each construct be greater than the correlation between that construct and other constructs, indicating that the variables have discriminant validity (Fornell & Lacker, 1981). The diagonal of Table 2, in bold, shows the square root of the AVE values of each variable, and all AVE values are greater than the correlations between horizontal and vertical constructs, indicating that the variables used in this study have discriminant validity. The correlation analysis examines the linear relationships between variables, and Table 2 shows significant positive correlations between all variables, which preliminarily support the hypotheses in this study.

**Table 2.** Correlation Analysis and Discriminant Validity

Variables	M	SD	Attention	Positive Emotion	Creativity
Attention	3.349	0.655	0.831		
Positive Emotion	3.290	0.857	0.387**	0.807	
Creativity	3.636	0.898	0.411**	0.299**	0.799

Note: \*\* $p<0.01$

### Hypothetical test

The aim of this section is to investigate the direct effects of attention and positive emotion on creativity, as well as the moderating role of positive emotion in the relationship between

attention and creativity. The formula for the moderating effect is  $Y=i+aX+bZ+cXZ+\epsilon$ , which requires including in the regression model the centered independent variable, the centered moderator variable, and the product of the independent variable and moderator, while testing the significance of the interaction term. If the interaction term is significant, it indicates the presence of a moderating effect.

As shown in Table 3, regression model 1 indicates that the independent variable, attention, has a significant positive impact on the dependent variable, creativity ( $\beta=0.411$ ,  $p<0.001$ ), supporting hypothesis H1. Regression model 2 indicates that the independent variable, positive emotion, has a significant positive impact on the dependent variable, creativity ( $\beta=0.299$ ,  $p<0.001$ ), supporting hypothesis H2. Model 3 shows that the interaction term (attention  $\times$  positive emotion) has a significant impact on the dependent variable, creativity ( $\beta=0.351$ ,  $p<0.001$ ), supporting hypothesis H3. And if the VIF values of each explanatory variable to the dependent variable are less than 5, it indicates that there is no multicollinearity in the model.

**Table 3.** Regression Analysis Summary Table

	Creativity		
	M1	M2	M3
Attention	0.411***		0.205***
Positive Emotion		0.299***	0.173***
Attention $\times$ Positive Emotion			0.351***
R <sup>2</sup>	0.207	0.245	0.385
Adj R <sup>2</sup>	0.188	0.213	0.350
F	22.745***	19.381***	35.606***
VIF	$\leq 1.000$	$\leq 1.000$	$\leq 2.007$

Note: \*\*\* $p<0.001$ ;

As shown in Figure 2, when the level of emotion is high, there is an upward trend between focus and creativity. This means that positive emotion regulates the relationship between focus and creativity, making the impact of focus on creativity more pronounced at high levels of positive emotion. The higher the focus, the higher the creativity. Conversely, when the level of positive emotion is low, there is a slight decrease in the trend between focus and creativity. This indicates that at low levels of positive emotion, the impact of focus on creativity is not as

significant as it is at high levels of positive emotion and may even result in a negative relationship between focus and creativity.

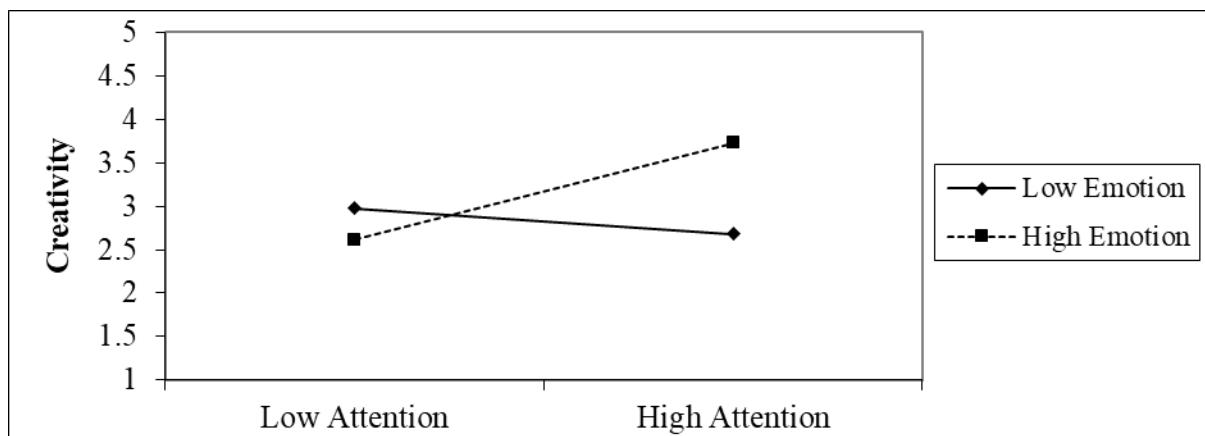


Fig. 2 Adjustment Interaction Diagram

## Discussions

The study found that the focus of actor positively influences their creativity, similar to the findings of scholars Heiser (2021), Morejón (2021), Kumar (2022), and Pelowski and Chamberlain (2023). The higher the level of attention of actor, the higher their creativity. By enhancing their abilities in thinking depth, creative efficiency, self-reflection, and fluid thinking, focus can help artists better unleash their creativity. The positive emotion of actor positively affects their creativity, which is similar to the findings of scholars Smyrnaiou et al. (2020), Chen and Tseng (2021), Dou et al. (2021), and Daniel (2021). The higher the level of positive emotion of actor, the higher their creativity. By promoting creativity and imagination, improving attention and working memory performance, promoting flexibility in creativity and problem-solving, and enhancing confidence and positivity, a positive emotional state can help artists better unleash their creativity.

The study found that the emotions of actor can promote the positive relationship between attention and creativity, similar to the findings of scholars Warr et al. (2019), Fancourt et al. (2019), Forbes et al. (2020), and Schiavio et al. (2021). The positive influence of emotion can be achieved by enhancing the performance of attention, promoting creativity, enhancing the endurance of attention and creativity, and improving the motivation and sense of purpose of artists, thereby promoting the positive relationship between attention and creativity. Therefore, the stronger the positive emotions are, the stronger the positive relationship between attention and creativity.

## Knowledge from Research

This study aims to explore the effects of attention and emotion on creativity among actors, as well as the moderating role of emotion between attention and creativity. The theoretical significance of this study lies in the in-depth exploration of the relationships between attention, positive emotion, and creativity, which can help us better understand these concepts and their interactions. Attention refers to the degree of an individual's attention on a task or goal, while positive emotion refers to positive and happy emotional experiences. Creativity refers to the ability to generate unique, valuable ideas, perspectives, or products. The results of this study indicate that both attention and positive emotion have a positive impact on creativity, meaning that the stronger the attention and positive emotion, the higher the creativity. This is of great significance for the verification and improvement of relevant theories.

Furthermore, this study reveals the moderating role of positive emotion between attention and creativity. Specifically, positive emotion can promote the positive relationship between attention and creativity, meaning that the relationship between attention and creativity is closer in a positive emotional state. This provides a new perspective and ideas for emotion regulation research and also illustrates the importance of emotion regulation in enhancing creativity.

In terms of practical significance, this study can provide a scientific basis for the education and cultivation of art college students. Art majors focus on the cultivation of creativity, and the results of this study can provide guidance for teachers and students, such as how to enhance students' attention and emotional positivity in course design, thereby enhancing their creativity. In addition, this study can also provide valuable references for education and talent cultivation in other fields, such as innovation and entrepreneurship education and leadership development. Moreover, this study can provide inspiration for psychological health and career development. Attention and emotion have a impact on individuals' learning and work efficiency, and therefore, these results can provide some specific suggestions and methods for individuals to master their own emotions and attention, thereby improving their work and learning efficiency, promoting self-growth and development.

## Conclusion

In the performing arts field, focus and creativity play vital roles as performers are often required to craft distinctive performances while tapping into their emotional experiences. Moreover, the nature of performing arts demands exceptional performance within limited time

frames, making a heightened state of focus indispensable. The relationship between focus and creativity poses an intriguing research question as scholars believe that creativity thrives on a certain level of freedom, whereas focus necessitates a sense of tension, seemingly contradictory in nature. Consequently, this article can delve into exploring the delicate balance between focus and creativity. Furthermore, when it comes to creating unique performances within emotional experiences, positive emotions can significantly enhance creative expression while alleviating performance pressure and anxiety. By fostering a positive emotional state, performers are better equipped to fully engage in their performances, showcasing their artistic abilities with confidence and authenticity. Understanding the intricate dynamics between focus, creativity, and emotional experiences in the performing arts can shed light on effective strategies for performers to unleash their full potential. By unraveling these complexities, this research aims to contribute to the development of effective approaches to support performing artists in optimizing their creative and expressive capacities.

## Suggestions

Based on the results of this study, the following suggestions are proposed in this article:

(1) Improve focus: As focus is one of the important factors that promote creativity, we can use various methods to improve the focus of college students majoring in performance arts in art schools. For example, reducing distractions such as electronic devices like mobile phones and computers, creating a quiet learning or working environment; setting reasonable study or work plans, and arranging time appropriately can help improve attention.

(2) Foster positive emotions: Positive emotions can improve an individual's psychological state and work efficiency. Therefore, we can use various methods to foster positive emotions in college students majoring in performance arts. For example, engaging in activities they enjoy frequently, enhancing their sense of happiness; establishing good relationships with family, friends, and others to receive emotional support; engaging in physical activities to release physical and mental stress, and so on.

(3) Emphasize emotional regulation: Since positive emotions can regulate the relationship between focus and creativity, emotional regulation is also a significant issue. We can use various methods to regulate the emotions of college students majoring in performance arts, such as learning emotional regulation techniques like meditation and deep breathing; regularly engaging in relaxing activities such as yoga and walks to reduce physical and mental stress.

(4) Create diverse learning and working environments: To enhance creativity, we can create diverse learning and working environments to stimulate its potential. For example, participating in diverse activities such as cultural exchanges, social practices; reading books from different fields to understand different knowledge and viewpoints; participating in creative courses or activities such as art creation, design, and so on.

In conclusion, the above suggestions can help individuals better promote the relationship between focus, positive emotions, and creativity, thus achieving personal growth and development for college students majoring in performance arts in art schools.

## **Summary**

The study investigated the effects of attention and emotion on creativity among actor, as well as the moderating role of emotion between attention and creativity. The study found that the higher the level of attention and positive emotion of actor, the higher their creativity. Positive emotion can promote the positive relationship between attention and creativity, meaning that the relationship between attention and creativity is closer in a positive emotional state. These findings provide insights for the education and cultivation of actor, innovation and entrepreneurship education, and leadership development. Moreover, the study can inspire individuals to master their own emotions and attention, thereby improving their work and learning efficiency and promoting self-growth and development. In the performing arts field, focus and creativity are essential factors, and positive emotions can enhance creative expression and alleviate performance pressure and anxiety, helping performers better engage in their performances.

## **Comments**

The findings of this study on the effects of attention and positive emotion on creativity among actor are consistent with previous research on this topic. The study reveals that attention and positive emotion have a positive impact on creativity, and that positive emotion plays a moderating role in the relationship between attention and creativity. This provides new insights into the importance of emotion regulation in enhancing creativity and has practical implications for the education and cultivation of actor, as well as for individuals' psychological health and career development.

The study also sheds light on the balance between attention and creativity in the performing arts field. While attention and creativity seem contradictory, this study suggests that the relationship between them can be enhanced by promoting positive emotions, which can enhance creative expression and alleviate performance pressure and anxiety. Overall, this study provides valuable insights into the complex relationship between attention, positive emotion, and creativity, and can serve as a basis for further research on this topic.

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