Research on the Promotion of Artistic Learning Strategies on Middle School Students' Academic Achievement: Mediated Influence Based on Positive Impressions

By

Baojun Li

Ph.D，Candidate, Arts Performance Communication, School of Liberal Arts, Shinawatra University
Email: 62405041-7@st.siu.ac.th

Varangkana Niyomrit

Dr, Arts Performance Communication, School of Liberal Arts, Shinawatra University
Email: varangkana.n@siu.ac.th

Abstract

This article aims to study　the purpose of this study was to explore the influence of learning strategy consulting on the academic performance of middle school students, with positive emotions as the intermediate variable. In this study, 140 senior middle school students were selected to receive 8 times of artistic group psychological consulting In addition, 2 case owners were also given 6-8 times of individual psychological consulting. Using positive psychology, developmental art psychology, group counting and other theoretical methods, this paper analyzes their learning change process, uses group counting and art therapy techniques to intervene, and uses case analysis to analyze the cognitive change, The intervention effects of group psychological guidance and individual psychological guidance verify that the use of artistic learning strategies has a good intervention effect on improving the academic performance of middle school students. The research results were found as follows:

1. Artistic learning strategies based on art psychology, positive psychology, and positive emotion intervention have a significant intervention effect on the academic performance of middle school students..
2. The intervention of art therapy on examination anxiety exceeded 6 months, which was more effective than that of case intervention for 3 months.
3. Art therapy has obvious effect whatever it is used for long term case intervention or short term group counting.
4. The intervention of art therapy examination arbitrary needs to adopt structured, semi structured and open treatment forms according to the different intervention objects.
5. The intervention of test anxiety has obvious influence on the intervention of group structure metropolis.

Keywords: Artistic psychology,Learning strategy, Academic performance, Middle school students' learning problems, Positive emotion intervention technology

Introduction

Based on the academic performance of middle school students, this study hopes to investigate the current situation of middle school students' learning strategies and academic emotions, explore the impact of different types of artistic learning strategy counseling and different types of academic emotional experience on middle school students' academic

performance, and draw research conclusions, so as to provide some educational suggestions for improving middle school students' academic performance, It also provides new theoretical support for the future researchers to implement the intervention training to improve the performance of middle school students.

Research objectives

The main problems of this study consist of three parts, as follows:

The main content of artistic learning strategy counseling
Based on the physical and mental characteristics and learning characteristics of middle school students, this paper studies in detail how to design the ideas and methods of artistic learning strategy counseling, and develop a set of scientific and professional curriculum system with rich content.

The characteristics of Academic Emotion and its relationship with academic achievement
This study conducted independent sample t-test and analysis of variance on the collected data to investigate the characteristics of high school students' perceived feedback and academic emotions. Relevant literature shows that feedback affects students' academic emotions, and academic emotions significantly affect students' academic performance. Therefore, this study attempts to study the relationship between feedback, academic emotion and academic achievement, which is specifically divided into the correlation between s variables and the mediating effect of Academic Emotion between feedback and academic achievement.

Experimental study of positive emotion mediation
In order to verify the impact of feedback on academic emotions and students' academic performance from multiple perspectives, this study also conducted a study on the influence of artistic learning strategy counseling on academic performance with artistic learning strategy counseling as the independent variable and academic emotions as the dependent variable, using a mixed experimental design.

Literature Review

From the perspective of positive psychology, this study designed an artistic learning strategy consulting program to intervene middle school students' academic performance, and verified the influence of artistic learning strategy consulting and academic impression on students' academic performance.

Positive psychology
Positive psychology interprets psychology from a new perspective, focusing on mental health and good mental state. It is a science aimed at promoting the development, improvement and self realization of individuals, groups and the whole society Miao Yuanjiang, Zhu Xiaohong,Gong Jifeng (2009) Subjective well-being (SWB) refers to the subjective attitude and feeling of a subject that his existing life state is exactly the ideal life state in his mind Diener (2000).

Learning strategies
Learning strategies are some methods and means to achieve learning goals. Those who hold this view believe that learning strategies are the methods or skills for learners to engage in the process of information processing. For example, Mayer (1988) believes that

learning strategies are "various behavior patterns implemented by learners to promote how they process information". Rigney (1978) believes that learning strategies are "various processes and procedures in the process of learners' absorbing, maintaining and applying knowledge and homework." Nisbet (1986) and others believe that "learning strategies are a series of processes of processing, selection, adjustment and skill application". Learning strategies are composed of some important dimensions, and these dimensions are interrelated. For example, Dansereau (1985) believed that "learning strategies include primary strategies and auxiliary strategies, and the primary strategies can be divided into Comprehension memory strategies, retrieval application strategies, etc.Auxiliary strategies can be divided into time planning strategies, attitude motivation strategies, self-regulation strategies, etc.

Academic emotions

Efklides (2005) showed that academic emotions have three characteristics: diversity, situational and dynamic. Meanwhile, Goetz and other researchers conducted a series of studies on the domain specificity of academic emotions Goetz, Frenzel and pekrun used the zero model to discuss that the domain specificity of students' academic emotions was statistically more significant than the grade difference, and further found that the difference of happy emotions was more significant in different subjects. Then they took the second grade students of middle school as the research object, and explored the emotions perceived in mathematics, physics, German and English. The results showed that the academic emotions of middle school students in similar fields had strong correlation, And the higher grades have more obvious domain specificity than the lower grades. Goetz, hall and Haag's performance differences in English, German, mathematics, music and physical education for the three emotions of happiness, anxiety and boredom also confirmed the domain specificity of academic emotions. In 2011, Xu Su, a Chinese scholar, selected students in grades 6 and 8 as the research object and also analyzed the domain specificity of academic emotions. The research found that there were significant differences in academic emotions among different disciplines, and academic emotions showed significant differences in gender and grade, especially in the field of mathematics, the domain specificity of academic emotions was more obvious.

Group counseling

Group counseling is different from individual counseling, which means psychological counseling completed in the group. Group counseling in China was initiated by Professor Fan Fumian of Tsinghua University in the 's. Group psychological counseling refers to "the process in which teachers or counselors, facing most of the students being coached, apply appropriate assistive technologies based on the principles of social and group dynamics to assist individuals in self understanding, self-development and self-realization." Fan Fumeng believes that group counseling is a form of psychological counseling in the context of a group. It promotes individuals to know, explore and accept themselves through observation, learning and experience in communication through interpersonal interaction within the group. Adjust and improve the relationship with others, learn new attitudes and behaviors, and develop a well adapted process of helping others.

Conceptual Framework

This study analyzes the concepts of artistic psychology, learning strategies, group consulting and academic emotions, establishes the research framework, and conducts experimental research.
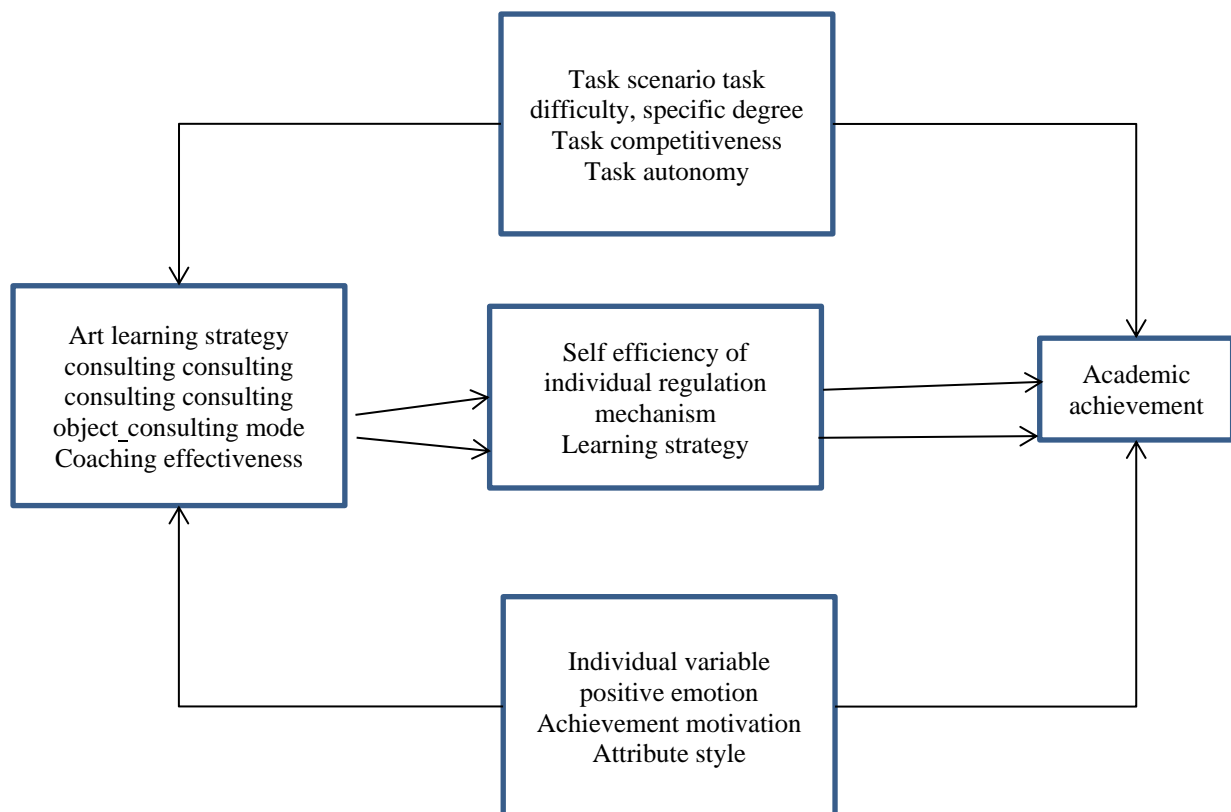
Fig.1 *Logical Relationship of Experimental Research*

Research Methodology

Selection of research objects. According to China's existing educational system, high school students are between the ages of 15 and 18. During this period, students' physical and mental development is rapid and unbalanced, which is a period of complex and full of contradictions. At the same time, in the middle school stage, students are facing the "hard goal" of the college entrance examination, and the whole high school career is always under high pressure. Therefore, the mental health problems of students at this stage should be widely concerned.

The students in grade three of senior high school are facing the college entrance examination and are in the stage of role transformation and adaptation. Due to the changes in the knowledge learned in primary and secondary schools, teachers' teaching methods, campus environment and interpersonal relationships, students are likely to have maladaptation. The common problems are that the campus environment is not suitable and the interpersonal relationship is tense, but most students will not adapt to their studies and have a negative attitude towards learning. If the bad emotions at this stage can not be effectively handled, it will affect the students' learning state in the three years of high school. Therefore, this study selected the third grade of high school as the research object to study the influence of artistic learning strategy counseling on academic performance.

Study sample. In this study, cluster sampling was used to select the third grade students of a high school in Foshan as the survey object, and the adolescent academic emotion questionnaire compiled by Yu Guoliang and Dong Yan was used to investigate the Academic Emotion of the survey object. The recruitment of group members was carried out by PPT in

four classes of grade three in senior high school to publicize what is artistic learning strategy counseling, the purpose of this artistic learning strategy counseling, and the registration method. Further introduce the group auxiliary knowledge to the applicants and determine the members of the experimental group. Those who are willing to participate in the group assistance will be assigned to the experimental group, while those who are not very willing will be assigned to the control group. Finally, the members of the experimental group and the control group were determined.

Data Collecting Method

Literature research

Through literature reading, we can understand the content of learning strategies, and the impact of learning strategies on students' academic performance. Through a variety of literature search, we found the "middle school students' Learning Strategies Questionnaire" and the "adolescent academic Emotion Scale" used in China, and then further study the artistic learning strategy counseling and learning strategy theory. Subsequently, the research object was determined, and the artistic learning strategy counseling recruitment ppt was made. During the whole research process, the rigorous psychological research paradigm was adopted to standardize the whole research.

Pre post test and tracking test

Before officially starting the art learning strategy counseling activity, the members of the experimental group and the control group were pre tested with the Academic Emotion Scale. After 8 times of artistic learning strategy counseling activities in the experimental group, the members of the experimental group and the control group were tested with the Academic Emotion Scale. Three months after the end of the experiment, the students in the experimental group were followed up again. This study used spssl9.0 statistical software to analyze the pre-test, post test and tracking test of the experimental group and the pre-test and post test of the control group.

Excellent of the research design sub section

The artistic learning strategy counseling activity has a total of 8 group activities, once a week, 60 minutes each time. The location of artistic learning strategy counseling activities is set in the school group classroom. The name of the group is "learning strategy training camp", and the theme is "active learning and happy growth". The group is a closed, education oriented group. Each group meeting is conducted according to the designed counseling program, with clear artistic learning strategy counseling goals. The design of artistic learning strategy guidance scheme is based on the theme setting of positive life, based on seligeman's positive psychology theory, and through the training of positive psychology, it helps members establish good interpersonal relationships, increase their understanding of their own advantages, and ultimately improve their subjective well-being.

Research results

Objective 1. The results shown that basic situation of academic emotions.the average and standard deviation of the four sub questions of academic emotions are as follows From the overall average value, middle school students'positive emotions are more than negative emotions, and high ambient emotions are more than low ambient emotions From the perspective of dispersion, the standard deviation of negative high wake up call is the highest, and the standard deviation of positive high wake up call is the lowest.

Table 1 *Descriptive Statistics of Middle School Students' Academic Emotions (m ± SD)*

	Positive high arousal	Positive low wake up	Negative high arousal	Negative low arousal
Low grouping	3.65 ±.54	3.31 ±.66	3.05 ±.77	2.47 ±.69
High grouping	3.53 ±.59	3.23 ±.60	3.02 ±.62	2.63 ±.61
Male	3.61 ±.57	3.19 ±.64	3.05 ±.67	2.66 ±.67
Female	3.65 ±.58	3.19 ±.62	3.1 ±.73	2.59 ±.66
Population	3.63 ±.58	3.19 ±.63	3.12 ±.70	2.63 ±.66

Among the 13 specific academic emotions, the scores from high to low were steeling joy, hope, calm, anger, depression, anxiety, relaxation, pride, satisfaction, shape, upset, helplessness and bordeom Middle school students experience pleasure at most and border at least.

Table 2 *Descriptive Statistics of Specific Academic Emotions*

	Pleasure	Hope	Calm	Angry	Depressed	Anxious	Relax	Pride	Satisfy	Ashamed	Upset	Helplessness	Boredom
M	3.92	3.90	3.55	3.30	3.27	3.24	3.12	3.07	2.89	2.89	2.47	2.46	2.1
SD	.69	.74	.75	.81	.82	.86	.79	.81	.73	.83	.79	.81	.81

Analysis on the differences of academic emotions between high and low groups The academic achievement (the sum of Z scores of Chinese, mathematics and English) is ranked in descending order The top 27% is the high score group, and the last 27% is the low score group, with 70 students in each group The independent sample t-test of the two groups of students'academic emissions shows that there are significant differences in the four types of academic emissions between the high and low groups In general, the positive emotions of the high score group were more than those of the low score group, and the negative emotions of the later were more than those of the former; In addition to angel, there were also significant differences in the other 12 specific emotions between the high and low score groups These differences initially confirmed the close relationship between academic emotions and achievement.

Objective 2. The results shown that overall situation of learning strategies.Descriptive statistical analysis of the three subscales of learning strategies shown that the average score of middle school students' learning strategies from high to low was metacognition > Resource Management > cognition.

Table 3 *Descriptive Statistics of Three Subscales of Junior High School Students' Learning Strategies (m ± SD)*

	Procedural strategy	Meta programming strategy	Resource integration strategy
Low grouping	3.42 ±.61	3.52 ±.62	3.48 ±.59
Low grouping	3.23 ±.67	3.33 ±.67	3.31 ±.62
Male	3.23 ±.67	3.32 ±.68	3.26 ±.68
Female	3.24 ±.54	3.35 ±.61	3.30 ±.53
Population	3.23 ±.61	3.33 ±.65	3.28 ±.62

Among the nine specific learning strategies, the scores are ranked from high to low according to the frequency of use The results are shown in the table below Middle school

students use the strategy of continuous effort most frequently and the strategy of using learning environment least

Table 4 *Descriptive statistics of junior high school students'specific learning strategies*

	M	SD
Continuous forces	3.587	.67
Monitor	3.442	.67
Deep processing	3.364	.75
Time management	3.22	.91
Active help seeking	3.212	.74
Plan and objective	3.204	.74
Interval repeat	3.193	.83
Learning process	3.088	.58
Environmental utilization	3.085	.83

Objective 3 The results showed that correlation analysis between academic impression and academic achievement .Pearson correlation analysis of Academic Emotion and academic achievement shown that academic emotion was significantly correlated with language, number, foreign language achievement and total achievement Positive emotions are positively correlated with performance, while negative emotions are negatively correlated with performance See the table below for specific coefficients.

Table5 *Correlation Analysis of Four Dimensions of Academic Emotion and Academic achievement*

	Chinese	Mathematics	English	Total score
Positive high arousal	.346***	.348***	.392***	.388***
Positive low wake up	.279***	.355***	.323***	.371***
Negative high arousal	-.150**	-.273***	-.172***	-.228***
Negative low arousal	-.382***	-.423***	-.379***	-.454***

The relationships between 13 discrete emotions and academic achievement are shown in the table below Except for "angel", all discrete emotions are significantly correlated with academic achievement The correlation coefficient of satisfaction was the highest, reaching 0.431

Table 6 *Correlation Analysis of specific academic emotions and academic achievement*

	Academic achievement
Pleasure	.441***
Pride	.156**
Hope	.369***
Satisfy	.267***
Calm	.342***
Relax	.281***
Anxious	-.124**
Ashamed	-.392***
Anger	0.02
Boredom	-.432***
Helplessness	-.487***
Depressed	-.220***
Fatigue - upset	-.275***

Progression analysis of Academic Emotion on academic achievement Taking the four types of academic emotions as predictive variables and academic achievement as dependent variables for linear expression (forced entry strategy), the standardized factors P and t observed, and the determination coefficient R2 of the model are shown in the table below Positive high emotions can positively predict academic performance (p=0.32, t=8.68, p<0.001), while negative low emotions can negatively predict academic performance (p=-0.37, t=-10.86, p<0.001); Positive low ambient and negative high ambient can also positively predict academic achievement to a certain extent, but it does not reach a significant level (t=0.13, p>0.05; t=0.23, p>0.05).

Discussions

Knowledge from research Identify the body of knowledge that is the result of research Synthesis in the form of diagrams, charts or concept maps with a concern, easy to understand format/structure description.

The overall characteristics of academic emotions. The emotional experience of middle school students is rich and strong, and the average scores of positive high, positive low and negative high are more than 3. Table 4-1 shows that middle school students' positive emotions are more than negative emotions, and high arousal emotions are more than low arousal emotions. According to the score ranking of 13 specific academic emotions, students experience more emotions such as joy, hope, and calm, and less negative emotions such as boredom, helplessness, and upset.

The overall characteristics of learning strategies. In general, middle school students' use of learning strategies is good, and the use level of the three strategies is above "sometimes". The most commonly used learning strategies are meta procedural strategies, followed by resource integration strategies, and finally procedural strategies. After in-depth analysis of the use of nine specific learning strategies, it is found that the average score from high to low is: effort, monitoring, in-depth processing, time management, active help seeking, planning objectives, organization, learning process, environmental utilization. The use of continuous effort strategy is the most frequent. Most students are aware of the importance of learning and believe that they can achieve their goals through continuous efforts.

The correlation analysis between learning strategies and performance shows that students with high level of strategy use are more likely to obtain good academic performance, while students with good academic performance also tend to use more learning strategies. The correlation coefficients between the three learning strategies and academic achievement from high to low are: resource integration strategy, meta procedural strategy, procedural strategy. Regression analysis found that metacognition and resource management could significantly predict higher academic achievement, while procedural strategies did not significantly predict academic achievement.

Conclusion

According to the research results, artistic learning strategies have a positive effect on the improvement of middle school students'academic performance, and the intervention effect is significant, which is completely consistent with the initial hypothesis.

(1)   Middle school students'positive emotions are more than negative emotions, and high ambient emotions are more than low ambient emotions; The grade difference of

academic emotion is significant, but the gender difference is not significant.

(2) With the increase of grade, the use of learning strategies of middle school students increased; Girls use more sustained effective strategies and environmental strategies than boys.

(3) Positive high emotion and negative low emotion can significantly predict academic achievement; In addition to "angel", academic achievement has a significant feedback effect on 12 kings of negative emotions.

(4) Procedural strategies and resource integration strategies can significantly predict the academic achievement of middle school students.

(5) Academic emotions and learning strategies can jointly predict the academic achievement of middle school students; The five learning strategies of deep processing, organization, monitoring, effort and environmental management have significant mediating effects.

Suggestions

Positive high emotion and negative low emotion affect the academic achievement of middle school students through continuous effort strategy to a large extent. Middle school students with positive and high emotions tend to use continuous effort strategies in their ordinary learning, and their final academic performance is generally high; However, students with negative and low emotions are difficult to devote themselves to learning tasks for a long time, so they rarely get good grades. It can be seen that in the middle school stage, effort is one of the important reasons for the differentiation of students' achievements.

The influence mechanism of Academic Emotion on academic achievement is quite complex. The low mediation effect means that there may be other important intermediate variables that have not attracted the attention of researchers.

References

Dansereau, D.F., learning strategies research, inj.w.segal, s.f.chipman&r Glaser (EDS), thinking and learning skills, vol.1985, p209-239

Efklides, a emotional experiences during leading: multiple5 situated and dynamic[j] Learning and instruction, 2005,15 (5): 377-380

Fanfumin, group counseling, Beijing Higher Education Press, 2014

Goetz, t, Frenzel, A.C., pekrun, r..The domain specificity of academic emotional experiences[j] The Journal of experimental, education, 2006,75 (1): 5-29

Goetz, T.5, Frenzel, A., C., pekrun, R., between-, and within domain relationships of students' academic emotions [j]. Journal of educational psychology, 2007,99 (4): 715-733

Goetz, t "pekrun, F., hall, N., & Haag, L Academic impressions from a social cognitiveperspective: antecedents and domain specificity of students9 affect in the context of Latin instruction[j] British Journal of educational psychology, 2006,76 (2): 289-308

Mayer.r.e, learning strategies, an overview, in c.e.weintein, e.t.goes & p.alexander (EDS), l

Miao Yuanjiang from happiness to realization: an overview of realizing happiness [j] Guangdong Social Sciences, 2011 (5): p114-121

Miao Yuanjiang overview of happiness curiculum [j] Jiangxi education, 2003 (1.2): 21-23

Nisbet J &shucksmith j.learning strategies Routledge & Kegan Paul PLC, 1986:24-34

Nisbet, j& shucksmith, learning strategies Routledge & Kegan Paul plc., 1986, P.5-6

Rigney.j.w., learning strategies:a theoretical perspective, in h.fo'neil, Jr (EDS): learning strategies, 1978, p.165