



Kuram ve Uygulamada Eğitim Yönetimi
Educational Administration: Theory and Practice
2022, Cilt 28, Sayı 2, ss: 145-160
2022, Volume 28, Issue 2, pp: 145-160
www.kuey.net



Exploring the Impact of Ceramic Art Learning Method on Students' Learning Effectiveness: Mediating Role of Learning Motivation

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	Abstract
<p>Article History</p> <p>Article Submission 17 November 2021</p> <p>Revised Submission 29 December 2021</p> <p>Article Accepted 28 February 2022</p>	<p>Ceramic art education is not only a means to develop creativity and self-expression, but it also instills important life skills such as persistence, patience, and problem-solving, making it a valuable and enriching experience for learners of all ages. The purpose of this study was to investigate how the ceramic art learning method affects students' motivation and learning outcomes. Specifically, this study aimed to explore the mediating role of ceramic art learning motivation in the relationship between ceramic art learning method and learning effect. Data was collected from 329 students in Tianjin, China to verify the proposed hypotheses. Partial least squares structural equation modeling (PLS-SEM) was used to analyze the data. The results revealed that ceramic art learning motivation plays a significant mediating role, and both ceramic art learning method and motivation directly affect students' ceramic art learning effect. Based on Dewey's Educational Philosophy, the study findings underscore the importance of effective learning methods and processes to enhance students' ceramic art and cultural learning effectiveness.</p> <p>Keywords: Ceramic Art Learning; Techniques; Motivation; Learning Effect; Educational Philosophy</p>

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Introduction

As the appreciation for handcrafted beauty continues to grow, so does the fascination with the timeless art of ceramic creation, fueling a surge in interest in ceramic art learning and setting the stage for a new generation of ceramic artists to emerge. It is thought that education is crucial to the growth of any nation. The ceramic art curriculum becomes one of the strategic government's initiatives to boost China's competitive character (Chen, 2021). Some learning activities are required to attain educational objectives (Maftuna, 2022). According to Uno (2010) motivation and learning impact each other, hence learning activities need student motivation (Chen, Tsai, Chung, & Lo, 2022). Student learning motivation has an influence on knowledge quality and tough character building in learners (Ibragimjanovna, 2022). A lack of interest for studying has a significant impact on self-ability and character development (Mu & Guo, 2022). Ignoring learners due to a lack of involvement in learning prevents students from reaping the benefits of learning and prevents students from developing their skills or talents (Guo et al., 2022). A lack of student engagement and self-interest in learning activities may lead to a loss of learning motivation (Kim, 2022). The learning process, on the other hand, helps the students (Umar & Ko, 2022). Because a drop in interest may lead to a drop in student learning motivation, it is required to revive learning that is more focused on the urgency of the situation, which is more common among students (Jannah, Surawan, & Yusuf, 2022). Self-motivation is one of the processes that has a significant impact on students' accomplishment (Alamer, Al Khateeb, & Jenou, 2022). Motive stimulation may be achieved by strong interactions between instructors and students, as well as through the learning environment (Shum, Wah Chu, & Yeung, 2022). The instructor is responsible for transforming the student's saturation into an enthusiasm in learning (Rasulova, 2022).

The course of Cultural Arts is an essential topic in China's present curriculum. As a result, the curriculum's arts and cultures are multifaceted, bilingual, and multicultural (Gazwami, 2023; Wu & Forbes, 2022). Cultural art teachings are the outcome of aesthetic, artistic, and creative effort that is founded in conventions and behavioral ideals (Hale & Hale, 1982). These Chinese curriculum courses' chapters are strongly connected to social culture learning. In this instance, the younger generation is crucial as the stewards of the nation's cultural history via the knowledge of art and culture (Huang & Cheng, 2022). Art education has the ability to serve as a guide for the community, particularly the younger generation, in supporting moral ideals (Lawton, Walker, & Green, 2019). However, as time passed, art started to fade from existence. The lack of motivation among art students to engage in creative activities decreases with time (Wadeson, 2010).

In China, negative stereotypes persist, particularly among students who disregard art and culture classes (Chiang, Thurston, & Lin, 2020). This occurs because art and culture classes are seen as unimportant since they are not covered in National Examination courses (Conradty, Sotiriou, & Bogner, 2020). Students become less eager and engaged as a result of this tendency. The type of students' disinterest in art courses has an influence not only on the value of topics, but also on the development of soft skills and character-building (Durand, 2022). Learning might also be missed due to pupils' inability to comprehend (Kulikowski, Przytuła, & Sułkowski, 2022).

Learning facilities are one of the most important aspects in enhancing academic success and motivation in schools (Quansah, 2022). In this context, "school facilities" refers to all of the buildings and tools that students and teachers utilize while at school (Utomo & Ibadurrahman, 2022). School facilities include any physical buildings on school property. This refers to the school buildings, playgrounds, equipment, and other material resources that are supplied in schools for successful teaching and learning processes in order to boost learning motivation (Cheng, Yang, Tao, Kong, & Liu, 2023) whereas proposed by (Cindy, Sugiyono, Usman, & Herwin, 2022) school facilities include buildings, furniture, and equipment that contribute to a good and high-quality learning environment for all children in the classroom.

In the context of the current study, the impact of physical amenities on students' learning motivation was considered in the investigation of the relationship between ceramic art learning method and motivation. The availability of physical facilities has a significant impact on student learning motivation, and recent research has emphasized the importance of providing tools and facilities for effective learning and supervision processes (Asvio, 2022). This highlights the potential significance of physical amenities such as classroom structures and other facilities in

enhancing motivation and successful learning, as well as the importance of classroom features such as desks, seats, whiteboards, and other necessities (Harvey & Kenyon, 2013).

Moreover, the use of effective learning techniques was also considered in the investigation of the impact of ceramic art learning method on students' learning outcomes. Mundry and Hamimah (2022) suggest that effective learning approaches may boost student motivation to study, and teachers must include students in tasks while using learning techniques to observe how motivation and desire to learn are processed (Zimmer & Matthews, 2022). In this study, the mediating role of ceramic art learning motivation in the relationship between ceramic art learning method and learning effect was investigated, highlighting the importance of teachers prioritizing the use of effective learning strategies to increase motivation and improve intrinsic motivation among students (H. Wang et al., 2022). Furthermore, the potential role of learning facilities in achieving learning approaches was also considered in this study, suggesting that teachers could take advantage of educational institution features to guide students in their tasks (Maatuk et al., 2022).

According to several research, there is an obvious correlation between school amenities and student learning motivation (Rahman, Uddin, & Dey, 2021). This is the empirical proof from the classroom showing the physical, age, design, and condition of a school's facilities have a significant impact on students' ability to learn (Realyvásquez-Vargas et al., 2020). The physical layout of a school might be seen as a physical expression of the pedagogy and curriculum being used there (Eyal & Gil, 2022). Similarly, kids' "learning motivation" and "intellectual capacities" are on the rise thanks to modern educational practices (Lailisabila & Aminullah, 2022). Learning issues may be addressed and new insights gained via these approaches (Numonjonov, 2020), providing students with meaningful learning opportunities in order to improve their engagement with and enthusiasm for their studies (Ng, 2022; Sutarto, Sari, & Fathurrochman, 2020). The research shows that facilities and effective teaching techniques have a significant impact on students' desire to learn (Asvio, 2022).

Motivating students to learn ceramic art can be a challenging task, but there are several strategies that teachers can employ. Teachers should focus on creating a supportive and positive classroom environment, where students feel safe to take risks and make mistakes (Rahman et al., 2021). Additionally, teachers can provide opportunities for students to explore their personal interests and artistic styles within the context of ceramic art. Finally, incorporating hands-on activities and group projects can help students feel engaged and invested in the learning process. By using these strategies, teachers can help students develop a passion for ceramic art and feel motivated to continue exploring this medium.

The aim of this research is to investigate the impact of ceramic art learning method and motivation on the learning effect of students. The objective of the study is to explore the relationship between ceramic art learning method, motivation, and learning effect, as well as to examine the mediating role of motivation in the relationship between learning method and learning effect. This study will provide insights into the effectiveness of ceramic art learning methods and the importance of motivation in the learning process. The findings will have implications for educators and policymakers in designing effective teaching strategies for promoting student engagement and success in ceramic art learning.

Literature Review

Ceramic Art Learning Method

While there has been much discussion of classroom design, instructional strategies, and student motivation, no studies have specifically addressed the topic of teaching art and culture. For example, Babić (2017) investigated the impact of machine learning techniques as educational models. While Asvio (2022) research does explore the importance of students' learning environments, such as classroom amenities, on students' desire to learn, it does not examine students' drive to learn about art and culture.

Mundry and Hamimah (2022) stated that learning strategies are put into action in order to realize learning plans that are concrete and realistic in nature. Motivating students to learn is a byproduct of using effective teaching strategies (Chantarasombat, 2022). Teaching strategies that

include student participation allow instructors to gauge their students' level of engagement and enthusiasm in learning as the lessons progress (Archambault et al., 2022). Students who aren't interested in their studies are less likely to put in the effort needed to succeed (Borup, Graham, West, Archambault, & Spring, 2020). Teachers also have the ability to pique their pupils' interest in learning (Anwar, Choirudin, Ningsih, Dewi, & Maselena, 2019). Increasing students' enthusiasm for learning becomes the focus of classroom instruction (Reeve & Shin, 2020). Students' intrinsic motivation might be boosted in this situation since they will feel more accountable for their work (Namaziandost, Neisi, Kheryadi, & Nasri, 2019). In order to help students be more productive, teachers may take use of the resources available in schools (Maatuk et al., 2022). Learning facilities may also help with the achievement of learning approaches.

Ceramic Art Learning Motivation

Hsiao and Su (2021) suggested that Learning motivation is a kind of attitude in which learners naturally and actively engage in learning and strive toward the teaching aim and internal psychological process established by instructors. Furthermore, since learning motivation management incorporates parts of self-control, particularly the function of willpower, some researchers have suggested motivation adjustment procedures from the standpoint of willpower control (Nordli & Hirt, 2021). These willpower modifications are thought to be a method of preserving motivation (Williams, Vardavoulia, Lally, & Gardner, 2023). According to one research, kids preferred to conduct hands-on work and participate in interactive ceramic art learning activities (Waidyaratne, Kim, Howell, & Ike, 2022). When confronted with open ceramic art learning difficulties, the students actively engaged in ceramic art learning activities and shared their knowledge with one another (Martins, 2023). Later, the interest development model was created to improve students' learning interests and results in ceramic art learning. The findings revealed that course experience had a substantial impact on college students' motivation, creativity, and learning. Furthermore, the classroom environment and educational experience may sustain college students' learning enthusiasm in ceramic art learning (Mahgoub & Ahmed, 2022). The KidsProgram platform, which was created for remote ceramic art learning classes, use module programming to create animation and games that excite and challenge students' interest. According to the poll, the platform increased students' learning interest and enthusiasm while also providing an environment for the thorough application of transdisciplinary knowledge (Chen, Daamen, Heurkens, & Verheul, 2020). As previously noted, it is critical to boost learners' confidence and excitement for learning by using motivating tactics that enable them to closely notice difficulties and provide encouragement throughout the learning process.

Ceramic Art Learning Effect

The learning impact is the change in attitude caused by the information, understanding, or skills gained by learners as a result of particular experiences in formal courses and instructional design (Fu, Zou, Xie, Cheng, & Hwang, 2022). Achievement refers to a person demonstrating his or her competence in some area, based on intrinsic heredity as well as experience and study of educational design. It is a kind of impact when a person or organization achieves a goal or degree of achievement in particular disciplines after putting in a lot of work. Relevant studies have examined the use of diverse teaching styles and goals on learners from a variety of viewpoints, and they have compared the differences in learning between conventional and online students using grades, satisfaction, and self-assessment. Significant positive correlations were found between learner motivation and both learning type and performance, and favorable correlations between learner motivation and both learning type and performance were also found (Asvio, 2022). Students' learning satisfaction and performance will increase as they get more online experience (He & Fu, 2022). Fewella, Khodeir, and Swidan (2021) discovered that employing a digital learning system to merge the ceramic art learning idea with game learning, students in the experimental group outperformed those in the control group. Furthermore, the gaming group had a lower cognitive burden than the therapy group. (Martins, 2023) discovered a noticeable increase in the students' idea acquisition and creativity by applying the influence of ceramic art learning education on the students' concept acquisition and creativity in studying light and optics.

On the basis of aforementioned literature the study has developed the following hypotheses (Figure 1).

H1: Ceramic Art Learning Method significantly impacts the Ceramic Art Learning Motivation

of Students.

H2: Ceramic Art Learning Motivation significantly impacts the Ceramic Art Learning Effect of Students.

H3: Ceramic Art Learning Method significantly impacts the Ceramic Art Learning Effect of Students.

H4: Ceramic Art Learning Motivation significantly mediates the relationship of Ceramic Art Learning Method and Ceramic Art Learning Effect.

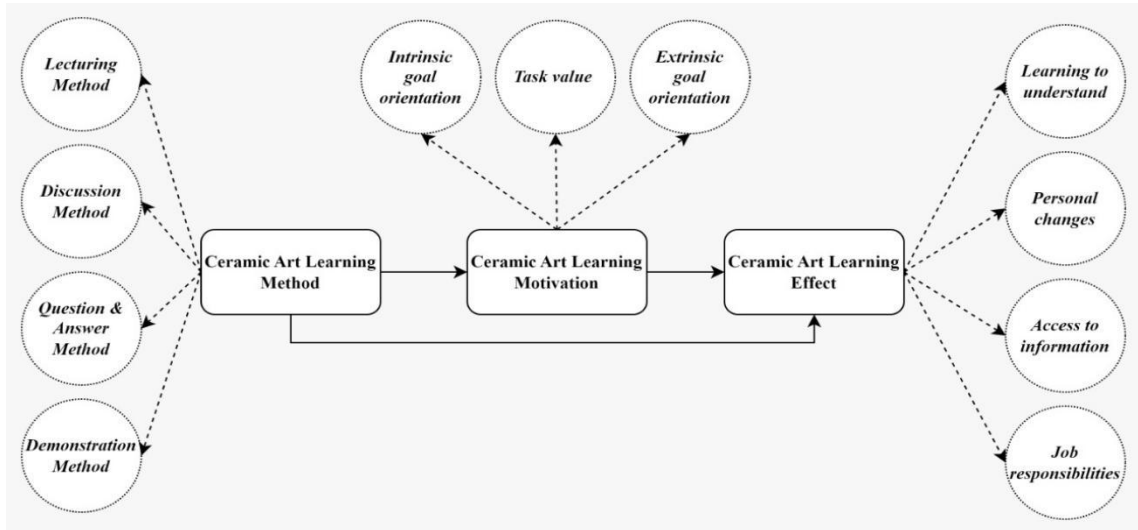


Figure 1. Conceptual Model

Methodology

Sampling and Procedures

Students from secondary schools in Tianjin City, China, were selected to take part in this study. For selecting the respondents of the research, the following inclusion criteria were used. The respondents must be currently enrolled in secondary schools in Tianjin City, China. The respondents must have taken at least one ceramic art class. The respondents must have a basic understanding of Mandarin Chinese, as the survey and interview will be conducted in Mandarin Chinese. The respondents must have given their informed consent to participate in the study. The respondents must have provided accurate and complete information in the survey and interview. The nature of the study was quantitative, therefore data for this inquiry was gathered using approaches such as proportional random sampling. Furthermore, the study ensured that ethical considerations were given to the research, which was seen as an important component, and the authors concealed the respondents' names to preserve their privacy.

Participants were given printed copies of the questionnaire used in this study while they were still present at their respective schools and engaged in Cultural Arts-related instructional activities. In this case, the researcher was successful in securing permission from the classroom teacher to spend time away from the classroom gathering data from the respondents. The reason for talking with the children in an open situation where one may easily get their responses The respondents, who were students, were obliged to complete the questionnaires and submit them to the research team during school hours. The students were excited, according to the researchers, and they responded to our survey at a rate of one hundred percent. Before we started collecting data, we explained to the participants, what the study was about and why it was important.

The respondents were not offered any compensation for their time; and their participation in the study was entirely voluntary on their side. The response percentage for the paper-and-pencil surveys mailed to college and university students was 88.91%, with 329 out of 370 questionnaires being returned. We did not discard any answer since all of the replies were usable for analysis in

the study. As a direct consequence of this, a total of 329 questionnaires were used, of which 154 male respondents (46.81%) and 175 female respondents (53.19%) responded accurately.

In addition, Harman's single factor with a single factor for common method bias was used to analyze the CBM data. A factor analysis is performed using this approach, which integrates all of the component parts. A CBM issue exists in the data if the first component explains more than half of the overall variance in the variable being studied. The findings of the factor analysis reveal that the first component explains just 28.63% (less than 50%) of the total variation (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). As a result, there was no need to be concerned about common method bias in the data.

Measures

There are scales for a variety of factors, including ceramic art learning method, ceramic art learning motivation, and ceramic art learning effect. Except for the control variables, participants' responses were rated on a five-point Likert scale ranging from 1 to 5 (strongly agree 1, to 5 strongly disagree). A twenty-item scale was employed in this research to assess ceramic art learning method on four dimension; of Prameswari, Saud, Amboro, and Wahyuningsih (2020). Whereas for ceramic art learning motivation six item scale has been used on three dimensions, which is adopted from the study of Lam and Wong (1974) and Credé and Phillips (2011). A twelve items scale of Peterson, Brown, and Irving (2010) was used to collect the data on ceramic art learning effect on four dimensions.

Results

Statistical Procedure and Data Analysis Results

In this paper, the structural equation modelling technique known as partially least squares (PLS-SEM) was used. The PLS-SEM methodology is a causal-predictive form of the SEM that places an emphasis on developing structural predictions via the use of statistical models (Ringle et al., 2015). The Bootstrapping method was used to conduct 5000 iterations, which allowed for the discovery of the spread, shape, and bias of the population sampling distribution (Hair, Risher, Sarstedt, & Ringle, 2019). PLS beats the traditional covariance-based SEM (CBSEM) when it comes to evaluating the performance of our model since it is able to cope with multivariate normality, measurement level, sample size, complexity of the model, and unclear elements. The goal of the research is to construct and analyse a theoretical model (Hair, Ringle, & Sarstedt, 2011; Hair, Sarstedt, Ringle, & Mena, 2012) showed in Table 1.

Table 1. Loading, composite reliability, and average variance extracted

Ceramic Art Learning Motivation	Extrinsic Goal Orientation	CAEO1	0.900	0.772	0.898	0.814
		CAEO2	0.905			
	Intrinsic Goal Orientation	CAIO1	0.864	0.778	0.861	0.756
		CAIO2	0.875			
	Task Value	CATV1	0.911	0.795	0.907	0.830
		CATV2	0.911			
Ceramic Art Learning Method	Question & Answer Method	CAQA1	0.811	0.831	0.887	0.663
		CAQA2	0.823			
		CAQA3	0.811			
		CAQA4	0.813			
	Demonstration Method	CADM1	0.879	0.882	0.914	0.682
		CADM2	0.867			
		CADM3	0.827			
		CADM4	0.822			
		CADM5	0.724			
	Discussion	CALU1	0.801	0.786	0.862	0.611

Ceramic Art Learning Effect	Method	CALU2	0.811			
		CALU3	0.726			
		CALU4	0.744			
	Learning to Understand	CALM1	0.883	0.776	0.854	0.595
		CALM2	0.801			
		CALM3	0.631			
		CALM4	0.655			
		CALM5	0.885			
		CALM6	0.803			
		CALM7	0.857			
	Personal Changes	CAPC1	0.933	0.856	0.914	0.780
		CAPC2	0.792			
		CAPC3	0.918			
Job Responsibilities	CAJR1	0.952	0.708	0.769	0.539	
	CAJR2	0.613				
Access to Information	CAAI1	0.917	0.866	0.918	0.788	
	CAAI2	0.903				
	CAAI3	0.842				

Statistical Procedure and Data Analysis

Validity and Model Fitness

The convergent validity criteria are also taken into account in this investigation. The usefulness of the criteria is evaluated with the use of a technique known as confirmatory factor analysis [CFA] (Hair, Hult, Ringle, Sarstedt, & Thiele, 2017). Cronbach's alpha may be seen in Table 1 with values ranging from (0.882) to (0.708). In addition, each variable in this investigation shown a high level of fitness, which suggests that the variables used in this measuring procedure have a high level of convergent validity. The results for the composite reliability (CR) and the average variance extracted (AVE) for the variables in this research vary from (0.769) to (0.918) and (0.539) to (0.830), respectively. Because discriminant validity may be established when the square root of the extracted average variance (AVE) is larger than the values of other coefficients associated to the correlation coefficients of this dimension. AVE stands for extracted average variance. According to the findings, no other coefficient in the same column of the table containing correlation coefficients has a square root that is greater than the average variance found, which is also greater than the absolute value of any other coefficient. This is because the average variance found is greater than the absolute value of any other coefficient. This indicates that the study may be relied on and that it is legitimate. Finding the association required the use of the HTMT approach, and the findings are shown in Table 2.

Table 2. HTMT Discriminant Validity

	1	2	3	4	5	6	7	8	9	10	11
Access to Information											
Demonstration Method	0.289										
Discussion Method	0.363	0.363									
Extrinsic Goal Orientation	0.274	0.289	0.409								
Intrinsic Goal Orientation	0.400	0.391	0.413	0.419							
Job Responsibilities	0.313	0.320	0.326	0.459	0.492						
Learning to Understand	0.198	0.219	0.592	0.626	0.577	0.577					
Lecturing Method	0.171	0.192	0.523	0.577	0.510	0.538	0.626				

	1	2	3	4	5	6	7	8	9	10	11
Personal Changes	0.1 45	0.1 67	0.4 59	0.5 38	0.4 48	0.5 67	0.5 92	0.6 26			
Question & Answer Method	0.3 21	0.3 26	0.4 87	0.5 67	0.4 70	0.6 26	0.5 97	0.5 34	0.4 77		
Task Value	0.3 20	0.3 13	0.4 92	0.7 85	0.4 50	0.7 20	0.4 80	0.4 13	0.3 48	0.7 20	

Inner Model Analysis

In order to construct the model of the structure, the partial least squares structural equation modelling approach was used (PLS-SEM). In specifically, SmartPLS 4.0 was used in order to validate the structural model (path analysis). According to Hair et al. (2017), the variables R2, beta (β), and t-value were analyzed in this particular research. Their theories also concentrated on the accuracy with which they anticipated (Q2) and the magnitude of the impacts (f2). The R2 values for the Ceramic Art Learning Effect (R2 = 0.926), Ceramic Art Learning Motivation (R2 = 0.690), and Ceramic Art Learning Motivation (R2 = 0.926) were all greater than the acceptable levels in the structural model (Table 3). In order to establish a baseline before putting hypotheses to the test, a value was assigned to the variance inflation factor (VIF). The VIF readings all fell below the threshold of 5.00, ranging anywhere from (1.00) to (4.232). Therefore, the predictor latent variables weren't all that comparable, and this presented a difficulty (Hair et al., 2017). Additionally, the fit indices for the structural model, which had an RMSEA value of 0.071, met the suggested level. The research also came to the conclusion that each of the factors included in the structural model had a substantial influence on the outcome.

Table 3. Model Fit Predictive Relevance of Model

	Q²predict	RMSE	MAE	R-square
Ceramic Art Learning Effect	0.260	0.071	0.472	0.926
Access to Information				0.121
Ceramic Art Learning Motivation				0.690
Demonstration Method				0.259
Discussion Method				0.485
Extrinsic Goal Orientation				0.717
Intrinsic Goal Orientation				0.407
Job Responsibilities				0.767
Learning to Understand				0.903
Lecturing Method				0.713
Personal Changes				0.880
Question & Answer Method				0.546
Task Value				0.727

Mediating Effect of Ceramic Art Learning Motivation

To determine how much of a mediating effect "ceramic art learning motivation" has in structural models, the bootstrapping method was used. Table 4 demonstrates that the findings support the hypothesis that ceramic art learning motivation significantly mediates the relationship of ceramic art learning method and ceramic art learning effect. It demonstrates the significance of the structural model's mediating effect setting in establishing a meaningful link between the ceramic art learning method to change the student's learning effect through the motivation (Figure 2).

Table 4. SEM based Path-Coefficients

	Original Sample	STDEV	T Statistics	P Values
Ceramic Art Learning Method → Ceramic Art Learning Motivation	0.831	0.041	20.379	0.0001
Ceramic Art Learning Motivation →	-0.631	0.065	9.749	0.0001

	Original Sample	STDEV	T Statistics	P Values
Ceramic Art Learning Effect				
Ceramic Art Learning Method → Ceramic Art Learning Effect	1.420	0.064	22.108	0.0001
Ceramic Art Learning Method → Ceramic Art Learning Motivation → Ceramic Art Learning Effect	-0.524	0.064	8.241	0.0001

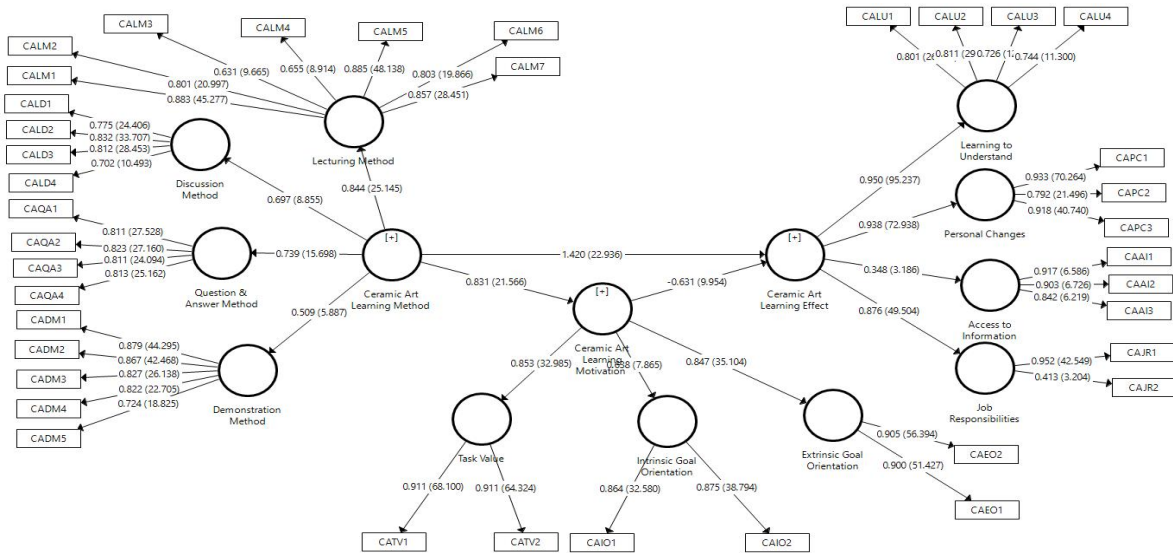


Figure 2. Structural Mode

Discussion

The research on ceramic art learning effect has had a significant impact on education policy and has sparked extensive changes in teaching methods. However, the majority of this study has focused on how ceramic art learning method affects students' ceramic art learning effect. Even studies that concentrate on "multiple measures" of learning effectiveness, like the results of student exams and classroom teacher-student evaluation systems, typically make an effort to validate other measures, like observations of teaching practice, by analyzing their correlation with estimates of the effects of teachers on students' academic performance.

Our research adds to a growing body of work looking at how ceramic art learning method affect student ceramic art learning motivation and ceramic art learning effect outcomes beyond test results. This study sought to discover how ceramic art learning method changes the student's behavior towards ceramic art learning effect in the presence of ceramic art learning motivation. This investigation has revealed some fascinating information about high school students' ceramic art learning motivation. According to the findings of this study, there is a significant relationship between ceramic art learning motivation and student's ceramic art learning effect in China's education system. This study confirms how students feel changes in their learning effectiveness as a result of ceramic art learning methods and ceramic art learning motivational approaches existence in education system (Table 5).

Table 5. Mediating Role of Learning Motivation

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This study seeks to answer the question, "What role do learning facilities and learning techniques play in the learning motivation of high school students?" with regard to ceramic art and culture education. The learning environments that students are exposed to have a significant impact on both the learning motivation and the learning effectiveness that they use. According to the findings of the first piece of study, the kind of learning environment that students are exposed to has a positive and noticeable impact on their desire to learn. However, students' desire to study is dampened when the educational facilities available to them are of poor quality. This is particularly true for students majoring in ceramic art and cultural studies. As a result, improved learning facilities are required for every single learning practice activity when it comes to the application of ceramic art and culture as practical disciplines. In addition, the findings of this research suggest that, in addition to learning environments and learning method, improved student learning motivation may also arise from improved learning facilities. The accumulation of knowledge leads to an increase in both self-awareness and self-capability. Because art and culture are fields of study that place a premium on creative expression and an appreciation of the visual

and performing arts, they possess distinctive qualities that cannot be matched to those of any other academic discipline. If students have access to comprehensive learning facilities as well as efficient teaching techniques, this may assist boost their motivation. These two components help kids become more motivated to study, which is a positive outcome.

Theoretical and Practical Implications

The goal of this research was to get a better understanding of how the ceramic art learning method affects the motivation and learning of ceramic arts and culture students. As a consequence, the research has several ramifications. To begin, we believe that the most important component of a ceramic art learning method in the context of education is the ability to comprehend.

As teaching methods have gotten better, many studies have tried to bring in different ways to learn into the classroom to help students learn about different subjects. In recent years, there has been a new way to teach that uses learning to understand, demonstration methods, discussion methods, and question-and-answer methods to help students learn and be more motivated. Adding a "learning to understand" element can make learning more interesting. Students also want to keep learning because courses will be interesting and because they will feel better about themselves as they learn. Learning materials and methods that show how to do something can also help students answer questions and solve problems better. The results of this study show that when people know about ceramic art and culture, they can reach their goals quickly and make friends who can help them learn in the right direction. Self-efficacy can be improved more actively through experience and learning. A good learning environment is all about having an experience, and improving students' motivation and sense of self-efficacy has a big impact on how well they learn and what they learn.

The results of this study also show that students may be more motivated to learn if their learning facilities are better, in addition to their learning environments and methods. The more you know, the more you understand yourself and the more you can do for yourself. Because art and culture are fields of study that value creative expression and an appreciation of the visual and performing arts, they have unique qualities that no other academic field can match. Students may be more motivated to learn if they have access to good learning facilities and teachers who know how to teach well. These two things make kids more interested in studying, which is a good thing.

Limitations and Future Recommendations

Within the scope of this research, a unique predictor of the learning impact associated with ceramic art was investigated. On the other hand, the educational system in China has certain distinctive characteristics. As a result of this, it is recommended that this phenomenon be researched in additional developing and developing nations while taking into consideration the many context-based art and culture education system components that are specific to each of these countries. In addition, this research solely used information collected from the city of Tianjin in China; information from other places in China was excluded. It's possible that this will be addressed in further study. The purpose of this research was to explore how the learner's motivation for ceramic art learning as well as the technique of learning ceramic art impact the learner's overall efficacy and implications in ceramic art learning. The same sample may be used to investigate how students' future orientations and behavioral intentions are influenced by the technique of learning ceramic art as well as the reason for studying ceramic art. The structural equation modelling (SEM) approach, which was employed in this study, has a number of shortcomings. These shortcomings are discussed in the following paragraphs. Therefore, future research may employ causal research designs to assess the model's predictions on the links between the causes and effects of the phenomenon being studied.

Conclusion

In conclusion, this study found that all of the hypotheses were supported, indicating that ceramic art learning method has a significant impact on both ceramic art learning motivation and learning effect of students. Moreover, ceramic art learning motivation was found to have a significant effect on the learning effect of students, and it also mediated the relationship between ceramic art learning method and learning effect. These findings highlight the importance of

effective teaching strategies that promote student motivation and engagement in the learning process. Additionally, the results of this study provide valuable insights for educators and policymakers in designing effective teaching approaches that can enhance the learning experience and outcomes of ceramic art students. Overall, this research contributes to the existing literature on the impact of teaching methods and motivation on learning outcomes, specifically in the context of ceramic art education.

Acknowledgement

The authors of this research paper would like to express their gratitude to the students from secondary schools in Tianjin City, China who participated in this study. We appreciate their willingness to provide us with valuable information about their experiences with ceramic art learning, which was instrumental in the successful completion of this research. We would also like to extend our sincere thanks to the faculty members who helped us to distribute the survey and organize the interviews. Finally, we are grateful to our colleagues and friends who provided us with their valuable insights and suggestions throughout the research process.

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