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Examining Parents on The Enhancement of Primary Students' Behavioral Intention to Use Computer Painting in Chongqing, China

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Abstract

Purpose: This study aims to investigate the factors that impact primary students' intention to use computer painting within primary schools in Chongqing, China. The research framework incorporates several critical variables, encompassing emotional value, economic value, social value, perceived usefulness, enjoyment, satisfaction, and behavioral intention. **Research design, data, and methodology:** Employing a quantitative approach and utilizing a questionnaire survey as the primary data collection instrument, a sample dataset was gathered from 500 parents representing students across three primary schools. Prior to disseminating the questionnaires, the research employed both the Index of Item-Objective Congruence (IOC) and a preliminary Cronbach's Alpha test to ensure the questionnaire's validity and reliability. Subsequently, Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) were employed to scrutinize the dataset, assess the model's goodness of fit, and validate the causal relationships among the variables under investigation. **Results:** The results confirm that emotional value, economic value, perceived usefulness, and enjoyment significantly influence satisfaction and behavioral intention. However, social value has no significant influence on satisfaction. **Conclusions:** Educational institutions, policymakers, and parents should work together to establish a nurturing and well-informed ecosystem that facilitates the seamless integration of computer painting and similar technologies into primary education.

Keywords : Computer Painting, Primary Schools, Satisfaction, Behavioral Intention, China

JEL Classification Code: E44, F31, F37, G15

1. Introduction

Based on the psychological characteristics and creative thinking of primary school students in Chongqing, China, this study analyzes their feelings about using computer painting to create artwork in art classes. It verifies the value of computer painting (CPC) in primary school art courses (Jankowski et al., 2020). Based on various data surveys and previous studies, it is found that the promotion of CPC in the art education of primary school students can transform children from readers of digital painting works into creators, which positively impacts children's behavioral intention (Kisida & Bowen, 2019).

In practice, the study found that all the behavioral intention of main power comes from consumer motivation and satisfaction. According to Zhang et al. (2009), research pointed out that the experience of the product value strongly affects customer behavioral intention. Based on previous studies, the researchers conclude that the high quality of products is an important factor in consumer behavior intention positive effects. Does computer influence behavior intention for elementary school fine arts teaching? How to improve students' initiative and enthusiasm to improve the quality of education in computer art creation course to verify the computer graphics course opened in the elementary school fine arts teaching is effective and has value is a heavy

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point to research on this topic.

In recent years in China, the implementation of the new curriculum reform, the continuous development of quality education and modern education innovation, and the whole field of children's art education have had a comprehensive and profound influence, such as in computer art courses can train the children under good feelings: has a great promoting role in happy; Have a more positive learning emotion and enjoyable experience; In the aspect of emotions, attitudes, and values can set a higher goal (Guo et al., 2019).

Behavioral intention was defined based on the experience of feeling cognitive or evaluation of individual behavior orientation (Spears & Singh, 2004). Interest is the main driver of students consciously engaging in learning activities. Computer painting interesting content prompts it to pursue learning motivation and positively influences the formation of children's behavioral intention. Hence, this study aims to investigate how children perceive the factors that impact their inclination to use computer painting within primary schools in Chongqing, China.

2. Literature Review

2.1 Emotional Value

Emotional value can be based on feelings or emotions of things of a kind of concept of equilibrium quantity (Stafford, 1994). Emotional value defines the perceived value as containing six characteristics: good, rich, understanding, advantages, social, and emotional (Pura, 2005). Emotional value is the willingness to accept the value of this part that can affect our physical and mental health and social relations (Zellweger & Astrachan, 2008).

Consumers on the emotional value and experience of products showed a trend of consistency, experience good emotional value get good body now, emotional value, experience can appear and satisfied. Emotional value affects consumer satisfaction with products (Song et al., 2015). Emotion value can connect services to service quality and satisfaction (Brady & Cronin, 2001; Chiu et al., 2014). Customer satisfaction and emotional value correlate highly (Gallarza et al., 2015). Accordingly, the study proposes the following hypothesis:

H1: Emotional value has a significant influence on satisfaction.

2.2 Economic Value

Economic value is obtained by improving service quality through good implementation (Chan et al., 2010). Economic value impacts productivity associated with customer participation. The service level creates economic value, the

customer to the production process control, and the final goal, the realization of the possibility of the common factors (Flores & Vasquez-Parraga, 2015). Economic value determines consumer preferences and purchasing power (Mathwick et al., 2001).

Economic value and customer satisfaction can predict the future of the product (Finn et al., 2009; Luo et al., 2011). Economic value improves the perception of service quality, leading to increased satisfaction (Chan et al., 2010). By the economic value of participation, the consumers have subjective well-being, satisfaction, and purchase intention again (Oyedele et al., 2018). Therefore, the following hypothesis is proposed:

H2: Economic value has a significant influence on satisfaction.

2.3 Social Value

Social value directly affects the social relationship in each fusion layer and embodiment of social self-image (Kim et al., 2011). According to Williams and Soutar's (2009) study, the existence of social value can stimulate consumption and improve the buyer's satisfaction. The embodiment of the social value is the product that enhances self-concept expression when the social benefit of positive growth (Lee, 2020).

Social value determines the user value (Yeh et al., 2016). Perceived value put forward six dimensions, including social value is one of them (Javier et al., 2007). Kim et al. (2011) proposed that the existence of social and emotional value means that emotional value is the intermediary between social value and satisfaction, with a direct link between the powers. Research proves that social value improves the customer satisfaction degree index (Williams & Soutar, 2009). Thus, a hypothesis is developed:

H3: Social value has a significant influence on satisfaction.

2.4 Perceived Usefulness

Perceived usefulness is believed that the use of a specific system will improve the performance of their work. The ease of use positively influences each other's role perception (Zhong et al., 2022). Liebana-Cabanillas et al. (2013) point out that a good feeling is the user's satisfaction with the product/service. Perceived usefulness for new products or technology can be used to predict performance satisfaction. Perceived usefulness can be defined as a user's satisfaction after use and willingness to continue using the important influence factors (Bhattacharjee, 2001).

A study indicates that perceived usefulness significantly influences satisfaction (Kumar & Ravindran, 2012). The effect of perceived usefulness will directly lead to customer satisfaction (Adamson & Shine, 2003; Liu et al., 2006; Mahmood et al., 2000). Al Natour and Woo (2021) pointed

out that online learning methods can also increase the user's perceived usefulness compared to face-to-face offline learning. Satisfaction will improve accordingly. Perceived usefulness directly affects customer satisfaction, both of which are closely related (Zviran et al., 2005). Based on these assumptions, this study proposes the following hypothesis:

H4: Perceived usefulness has a significant influence on satisfaction.

2.5 Enjoyment

Enjoyment is happiness or pleasure experienced during or after an activity (Ifinedo, 2017). Enjoyment is a benchmark to measure the intrinsic motivation of the product to use the system (Padilla-Meléndez et al., 2013). Chih-Hung Wang (2012) proved that pleasant enjoyment can cause people to keep consuming and improve users' satisfaction with products. Enjoyment gives users a good sense of experience, and this experience value can promote the development of satisfaction (Moon & Kim, 2001).

Perceived enjoyment positively affects customer satisfaction (Kim & Min, 2015). When consumers choose products, a cheerful, fun experience plays an important role. This kind of good experience and built a high level of satisfaction. Many hedonism studies have confirmed that perception enjoys molding the positive impact of customer satisfaction (Chen et al., 2009; Gerow et al., 2013). Consequently, a hypothesis is developed:

H5: Enjoyment has a significant influence on satisfaction.

2.6 Satisfaction

Satisfaction evaluation is involved in things experience to determine that this is an emotional response (Oliver, 1981). Zhong et al. (2022) mentioned in the research, testing services work effect is in line with the expectations of an important factor is the degree of satisfaction. Satisfaction is the user expectations of the product, as well as the embodiment of the compared with the desired effect after using product (Wang, 2012).

Satisfaction can be started in the process of consumption, rather than to wait until after the consumption of (Kang et al., 2009). Satisfaction of value is to meet user requirements (Busacca & Padula, 2005; Gallarza et al., 2015). Chen et al. (2009) in the context of existing research, with students as samples, to confirm the people satisfied with the products, will be more willing to continue to use the product. A large number of previous studies, points out that consumers satisfaction and behavioral intention there is positive correlation between (Zhong et al., 2022). Thus, the following hypothesis is indicated:

H6: Satisfaction has a significant influence on behavioral intention.

2.7 Behavior Intention

Behavioral intention is an important factor in the theory of planned behavior that depends on the perceived behavior control (Wang, 2012). Behavioral intention refers to the individual's pour to perform a specific behavior (Belanche et al., 2012). Behavioral intention is thought to be that people are prepared after a certain behavior, and this behavior is done for future behavioral changes (Sripalawat et al., 2011). Funk et al. (2009) show that people's behavior intention by moving machine guide consumption. In Yoon and Uysal (2005), the research results show that all motivation factors will not affect behavioral intention and the user's full meaning. Behavioral intention and satisfaction establish a good relationship, the product of the bridge, and behavioral intention produces positive experience value relationship satisfaction (Smith & Costello, 2009).

3. Research Methods and Materials

3.1 Research Framework

This study's framework comprises three distinct studies. The first study, conducted by Lee (2020), investigates the enhancement of product satisfaction through the examination of emotional, economic, and social values. The second conceptual framework, developed by Ifinedo (2017), explores the satisfaction and perception of college students engaged in blog learning, emphasizing the importance of perceived usefulness in customer satisfaction. The third study, adopted from Chih-Hung Wang's work in 2012, examines the interconnected factors of enjoyment, satisfaction, and behavioral intention. The conceptual framework for this study is represented in Figure 1.

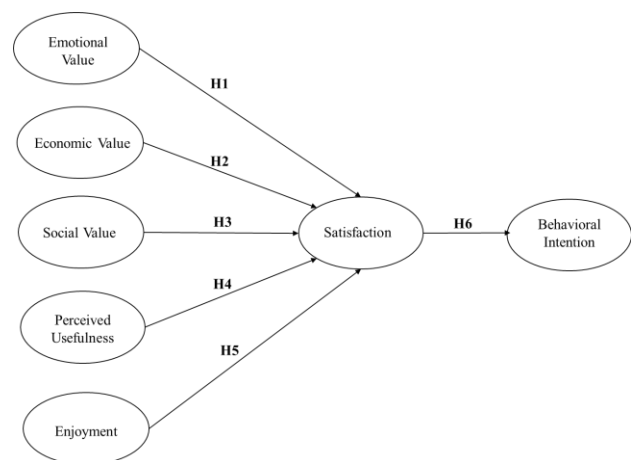


Figure 1: Conceptual Framework

H1: Emotional value has a significant influence on satisfaction.

H2: Economic value has a significant influence on satisfaction.

H3: Social value has a significant influence on satisfaction.

H4: Perceived usefulness has a significant influence on satisfaction.

H5: Enjoyment has a significant influence on satisfaction.

H6: Satisfaction has a significant influence on behavioral intention.

3.2 Research Methodology

Employing a quantitative methodology with a primary data collection tool of questionnaire surveys, responses from 500 parents, representing students, were collected to create a dataset. The questionnaire has three parts which are screening questions, measuring items with five-point Likert scale, and demographic profile. Prior to distributing the questionnaires, rigorous assessments of the instrument's validity and reliability were conducted using the Index of Item-Objective Congruence (IOC) and an initial pilot test employing Cronbach's Alpha. Following this, Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) were applied for comprehensive data analysis. These analytical methods were chosen to scrutinize the dataset, evaluate the model's goodness of fit, and substantiate the causal relationships among the variables being studied.

During the IOC assessment, experts were tasked with providing scores within a range of -1 to +1, with each score signifying a level of consistency in measuring a specific goal (consistent = +1, questionable = 0, inconsistent = -1). In this context, a score of 1 indicated that the project could accurately measure a specific objective, 0 suggested the project had potential for measuring the objective, and -1 implied that the project was unable to measure the objective. After three experts completed the content validity assessment, IOC indices were calculated for each objective in relation to each project. Remarkably, all resulting scores exceeded the acceptable threshold of 0.5, as per the standards outlined by Hiranrat et al. (2016).

Pilot studies typically involve smaller sample sizes compared to large-scale studies, often ranging from 10 to 50 participants. In this study, the researchers employed Cronbach's Alpha reliability analysis with a sample of 50 respondents to evaluate the reliability of each scale. According to Nunnally (1978), a Cronbach Alpha coefficient exceeding 0.7 is indicative of reliability. Encouragingly, the pilot study results met this criterion, demonstrating reliability across all scales, including Emotional Value ($\alpha = 0.850$), Economic Value ($\alpha = 0.758$), Social Value ($\alpha = 0.707$), Perceived Usefulness ($\alpha = 0.852$), Enjoyment ($\alpha = 0.894$), Satisfaction ($\alpha = 0.875$), and Behavioral Intention ($\alpha = 0.913$).

These findings confirm the robustness of the measurement instruments employed in the study.

3.3 Population and Sample Size

The study's target population comprises parents of students enrolled in Grade 3 or higher who have been actively engaged with computer painting in three selected primary schools located in Chongqing, China. Using Soper's calculator (n.d.) with the required input, the minimum recommended sample size is determined to be 444. However, for added robustness and reliability in the study, the research opts to round up the targeted sample size to 500 participants.

3.4 Sampling Technique

In this study, a combination of research sampling methods was employed, including judgmental sampling, stratified random sampling, and convenience sampling. Initially, judgmental sampling was utilized to identify primary school parents whose children were in grades 3-6 and had received computer drawing instruction during a specific timeframe. Following this, the study employed stratified random sampling, where the number of sample units selected from each stratum was determined based on the ratio of units in each stratum to the total number of units, as detailed in Table 1. Lastly, convenience sampling was facilitated by distributing online surveys to parents via the school's communication channels, allowing for practical and accessible data collection.

Table 1: Sample Size

School	Population Size	Proportional Sample Size
Chongqing People's Primary School	1100	66
Chongqing Dadukou district Yucai primary school	6000	362
Chongqing Yangjiaping primary School	1200	72
Total	8,300	500

4. Results and Discussion

4.1 Demographic Information

In the Table 2, 261 participants (52.2%) are male, and 239 participants (47.8%) are female. The frequency of computer painting usage is 1-3 times/week: 85 participants (17.0%), 4-6 times/week: 165 participants (33.0%), 7-10 times/week: 161 participants (32.2%), and more than 10 times/week: 89 participants (17.8%). For satisfaction with computer painting, most respondents are satisfied in the total of 423 participants (84.6%).

Table 2: Demographic Profile

Demographic and General Data (N=500)		Frequency	Percentage
Gender	Male	261	52.2%
	Female	239	47.8%
Frequent Use of Computer Painting	1-3 times/week	85	17.0%
	4-6 times/week	165	33.0%
	7-10 times/week	161	32.2%
	More than 10 times/week	89	17.8%
Satisfaction with Computer Painting	Satisfied	423	84.6%
	Neutral	65	13.0%
	Unsatisfied	12	2.4%

4.2 Confirmatory Factor Analysis (CFA)

As depicted in Table 3, the measurement model underwent Confirmatory Factor Analysis (CFA) within the framework of Structural Equation Modeling (SEM). The

outcomes of the CFA analysis not only reaffirmed the significance of all items within their respective variables but also crucially established discriminant validity through robust factor loadings.

To assess the internal consistency of the measurement items, a reliability test was conducted using Cronbach's alpha coefficient. This analysis consistently yielded strong reliability values for all items, consistently meeting or exceeding the recommended threshold of 0.6, as advised by Hair et al. (2006). In the context of Confirmatory Factor Analysis, item loadings exceeding 0.40, accompanied by associated p-values below 0.05, were deemed satisfactory.

Furthermore, adhering to the principles outlined by Fornell and Larcker (1981), the construct's convergent validity was meticulously examined. The Average Variance Extracted (AVE) surpassed the established criterion of 0.5, and the Composite Reliability (CR) exceeded the designated threshold of 0.6. These findings collectively provide robust evidence affirming the convergent validity of the construct.

Table 3: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
1. Emotional Value (EMV)	Lee (2020)	3	0.762	0.622-0.786	0.773	0.535
2. Economic Value (ECV)	Lee (2020)	3	0.697	0.612-0.688	0.699	0.437
3. Social Value (SOV)	Lee (2020)	3	0.878	0.816-0.875	0.878	0.707
4. Perceived Usefulness (PU)	Sharma et al. (2014)	4	0.944	0.888-0.908	0.945	0.811
5. Enjoyment (EN)	Ifinedo (2017)	4	0.799	0.669-0.754	0.800	0.501
6. Satisfaction (SAT)	Ifinedo (2017)	5	0.834	0.680-0.739	0.835	0.503
7. Behavioral Intention (BI)	Gao and Bai (2014)	5	0.841	0.623-0.796	0.842	0.518

Measurement Model Assessment is a critical step in structural equation modeling (SEM) and confirmatory factor analysis (CFA) to evaluate the quality and fit of a proposed measurement model. The measurement model specifies the relationships between latent constructs (unobserved variables) and the observed variables (indicators) that measure those constructs (Kline, 2011).

Table 4 was utilized to assess the adequacy of the measurement model. The findings demonstrate that the measurement model for the primary campus group demonstrated a satisfactory fit without the need for any modifications. This conclusion is supported by the following goodness-of-fit indicators, all of which consistently met well-established criteria, thus affirming the validity of the confirmatory factor analysis model developed in this study.

Table 4: Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	420.655/303 = 1.388
GFI	≥ 0.85 (Kline, 2011)	0.941
AGFI	≥ 0.85 (Kline, 2011)	0.927
NFI	≥ 0.85 (Kline, 2011)	0.938
CFI	≥ 0.85 (Kline, 2011)	0.982
TLI	≥ 0.85 (Kline, 2011)	0.979
IFI	≥ 0.85 (Kline, 2011)	0.982

Fit Index	Acceptable Criteria	Statistical Values
RMSEA	≤ 0.08 (Hooper et al., 2008)	0.028
Model summary		In harmony with empirical data

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalized fit index, CFI = comparative fit index, TLI = Tucker-Lewis index, IFI = Incremental Fit Index, and RMSEA = root mean square error of approximation.

In line with the guidelines established by Fornell and Larcker (1981), the assessment of discriminant validity encompassed the computation of the square root for each Average Variance Extracted (AVE). As illustrated in Table 5, the calculated discriminant validity values consistently surpassed all inter-construct or inter-factor correlations. This outcome strongly bolsters the validity of the measurement model. With the successful establishment of both convergent and discriminant validity, substantial and compelling evidence exists to affirm the construct validity of this study.

Table 5: Discriminant Validity

	SAT	EMV	ECV	SOV	PU	EN	BI
SAT	0.709						
EMV	0.521	0.731					

	SAT	EMV	ECV	SOV	PU	EN	BI
ECV	0.650	0.639	0.661				
SOV	-0.004	0.000	0.050	0.841			
PU	0.074	0.016	-0.049	0.353	0.900		
EN	0.503	0.616	0.625	0.019	0.006	0.708	
BI	0.238	0.224	0.277	-0.036	-0.099	0.260	0.720

Note: The diagonally listed value is the AVE square roots of the variables

Source: Created by the author.

4.3 Structural Equation Model (SEM)

The structural equation model explores the causal relationships among variables. Table 5 displays the computed goodness-of-fit indices for the structural model of the main campus group. Following the data, the statistical findings revealed a satisfactory fit, as indicated by the following indices: CMIN/DF = 2.647, GFI = 0.888, AGFI = 0.867, NFI = 0.875, CFI = 0.918, TLI = 0.909, IFI = 0.918, and RMSEA = 0.057. These values attest to the model's acceptable goodness of fit.

Table 6: Goodness of Fit for Structural Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	841/701/318 = 2.647
GFI	≥ 0.85 (Kline, 2011)	0.888
AGFI	≥ 0.85 (Kline, 2011)	0.867
NFI	≥ 0.85 (Kline, 2011)	0.875
CFI	≥ 0.85 (Kline, 2011)	0.918
TLI	≥ 0.85 (Kline, 2011)	0.909
IFI	≥ 0.85 (Kline, 2011)	0.918
RMSEA	≤ 0.08 (Hooper et al., 2008)	0.057
Model summary		In harmony with empirical data

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalized fit index, CFI = comparative fit index, TLI = Tucker-Lewis index, IFI = Incremental Fit Index, and RMSEA = root mean square error of approximation.

4.4 Research Hypothesis Testing Result

In the current study, we investigated the relationships between the independent and dependent variables as specified in the research hypotheses. This examination included the evaluation of standardized path coefficients and associated t-values. The outcomes of this analysis are detailed in Table 7, with statistical significance determined by p-values below the threshold of 0.05.

Table 6: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-value	Testing result
H1: Emotional value has a significant influence on satisfaction.	0.258	4.766*	Supported
H2: Economic value has a	0.470	7.152*	Supported

Hypothesis	(β)	t-value	Testing result
significant influence on satisfaction.			
H3: Social value has a significant influence on satisfaction.	-0.060	-1.265	Not Supported
H4: Perceived usefulness has a significant influence on satisfaction.	0.105	2.289*	Supported
H5: Enjoyment has a significant influence on satisfaction.	0.196	3.818*	Supported
H6: Satisfaction has a significant influence on behavioral intention.	0.237	4.367*	Supported

Note: * p<0.05

Source: Created by the author

H1: The standardized path coefficient (β) for emotional value is 0.258, with a t-value of 4.766*, indicating a statistically significant relationship. The hypothesis that emotional value significantly influences satisfaction is supported.

H2: The standardized path coefficient (β) for economic value is 0.470, with a t-value of 7.152*, indicating a statistically significant relationship. The hypothesis that economic value significantly influences satisfaction is supported.

H3: The standardized path coefficient (β) for social value is -0.060, with a t-value of -1.265. The data does not provide support for the hypothesis that social value significantly influences satisfaction.

H4: The standardized path coefficient (β) for perceived usefulness is 0.105, with a t-value of 2.289*, indicating a statistically significant relationship. The hypothesis that perceived usefulness significantly influences satisfaction is supported.

H5: The standardized path coefficient (β) for enjoyment is 0.196, with a t-value of 3.818*. The data supports the structural path, but it supports the second path, suggesting that enjoyment has a significant influence on satisfaction.

H6: The standardized path coefficient (β) for satisfaction is 0.237, with a t-value of 4.367*, indicating a statistically significant relationship. The hypothesis that satisfaction significantly influences behavioral intention is supported.

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

The study aimed to investigate the factors influencing students' behavioral intention to use computer painting in primary schools in Chongqing, China, from the perspective of parents. It employed a comprehensive research model

comprising seven key variables: emotional value, economic value, social value, perceived usefulness, enjoyment, satisfaction, and behavioral intention. The research design, data collection, and methodology were executed using quantitative methods and a questionnaire survey involving 500 parents as respondents.

The research began by ensuring the validity and reliability of the questionnaire. The Index of Item-Objective Congruence (IOC) and Cronbach's Alpha pilot test were utilized for this purpose. These measures are essential in establishing that the instrument accurately measures the intended constructs. The rigorous validation process increases the confidence in the data collected.

The results obtained through Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) provided insights into the relationships among the variables. The findings confirmed several hypotheses. Notably, emotional value, economic value, perceived usefulness, and enjoyment were found to have significant influences on both satisfaction and behavioral intention. This suggests that parents recognize the emotional and economic benefits of computer painting, which in turn influence their satisfaction and intention for their children to use this technology in schools.

Interestingly, the study found that social value did not have a significant influence on satisfaction. This outcome raises questions about the role of social factors in parents' perceptions of computer painting in primary schools. It may indicate that parents prioritize other factors, such as emotional and economic benefits, over social aspects when considering the use of this technology.

In conclusion, this study sheds light on the factors influencing parents' perspectives on students' behavioral intention to use computer painting in primary schools in Chongqing, China. The research model incorporated key variables, and the data collection process was rigorous, ensuring the validity and reliability of the questionnaire.

The findings highlight the importance of emotional value, economic value, perceived usefulness, and enjoyment in shaping parents' satisfaction and intentions regarding computer painting in primary education. These results suggest that parents are receptive to the idea of incorporating computer painting into their children's educational experiences due to the perceived emotional and economic benefits and the utility and enjoyment associated with this technology.

However, it is worth noting that social value did not emerge as a significant factor influencing parents' satisfaction. This finding suggests that parents may not prioritize social aspects when considering the use of computer painting in primary schools. Future research could

delve deeper into understanding why social value is not a significant driver and explore potential avenues for increasing its relevance in this context.

Ultimately, this study contributes valuable insights to the understanding of factors influencing parental perceptions of technology adoption in education, with implications for educational policymakers and practitioners seeking to promote the use of computer painting in primary schools in Chongqing, China, and beyond.

5.2 Recommendation

In the digital age, technology plays an increasingly significant role in education. One such technological innovation is computer painting, which offers creative opportunities for students in primary schools. However, the successful integration of this technology into educational settings relies heavily on parental support and perception. This essay delves into the findings of a study that explored parents' views on the factors influencing their children's behavioral intention to use computer painting. Based on these insights, we present recommendations for enhancing parental support and engagement in the context of primary education in Chongqing, China.

The study's findings emphasize the need for educational awareness campaigns targeting parents. These campaigns should focus on illuminating the social value of computer painting in primary education. It is essential to underscore how computer painting can enhance students' social skills, encourage collaboration, and foster creativity. By providing parents with a clear understanding of the social benefits, they are more likely to support its integration into the curriculum.

Emotional and economic values were identified as key drivers in parents' decision-making processes. Educational institutions and policymakers should recognize the significance of these factors and actively promote them. By highlighting the emotional satisfaction and economic advantages of computer painting, parents can be more effectively convinced of its value in their children's education.

To build trust and foster a sense of partnership, educational institutions should encourage increased parental involvement. Schools can organize workshops, seminars, or meetings to engage parents in discussions about the advantages and potential challenges of using computer painting in the classroom. Providing parents with opportunities to voice their concerns and ask questions can address any uncertainties and build confidence.

A crucial recommendation is the implementation of ongoing monitoring and evaluation processes. These processes should assess the impact of computer painting on

students' academic performance, creativity, and social development. Sharing these findings with parents ensures transparency and keeps them informed about the tangible benefits of technology integration.

Offering training sessions or resources for parents can bridge knowledge gaps and alleviate concerns. Providing tutorials on using related software and platforms and strategies for supporting their children's creative endeavors can empower parents to actively engage in their children's computer painting experiences.

Promoting collaboration and open communication channels between schools and parents is paramount. Schools should actively seek input from parents when implementing technology-based educational initiatives. This inclusive approach fosters a sense of partnership and ensures that the integration of computer painting aligns with parents' expectations and values.

To address the finding that social value may not significantly influence parental satisfaction, educational institutions should consider integrating social value aspects into the curriculum. This can include group projects, collaborative assignments, and discussions that emphasize social interaction and teamwork, demonstrating how computer painting can foster these skills.

To gain a more comprehensive understanding of parents' perceptions and the sustained effects of technology integration, conducting longitudinal research is recommended. Such studies can provide valuable insights into how attitudes evolve over time and the long-term impact on students' development.

Policymakers should take into account the multifaceted nature of parental decision-making when developing educational policies related to technology adoption. Policies should reflect the importance of emotional, economic, and social factors, ensuring they align with the needs and expectations of parents.

Establishing mechanisms for parents to provide feedback and suggestions is crucial. Schools and educational institutions should regularly seek input and adapt their strategies based on parental feedback. This ongoing dialogue can strengthen the partnership between parents and schools, leading to more informed decisions.

In conclusion, parents' views on factors influencing students' behavioral intention to use computer painting in primary schools in Chongqing, China, provide valuable insights for enhancing parental support and engagement in technology integration. The recommendations presented in this essay offer a comprehensive framework for educational institutions, policymakers, and parents to collaboratively create a supportive and informed environment for the effective integration of computer painting and similar technologies in primary education. By actively addressing the emotional, economic, and social aspects, we can ensure

that students receive a well-rounded and enriching educational experience, nurturing their creativity and preparing them for the challenges of the digital age.

5.3 Limitation and Further Study

While the study on parents' views regarding students' behavioral intention to use computer painting in primary schools in Chongqing, China, provides valuable insights, it is essential to acknowledge its limitations. These limitations can guide future research to build upon and expand the knowledge in this area. First, the study collected data from 500 parents in Chongqing, which, while significant, may not represent the entire diversity of parental perspectives across the region or the country. Future studies could aim for a larger and more diverse sample to enhance the generalizability of the findings. Next, the study assumed that parents had a basic understanding of computer painting and its benefits. Future research could assess the level of parental knowledge and experience with computer painting to better understand how prior familiarity might influence their views. Finally, to gain a more comprehensive understanding of parental views, future research could conduct comparative analyses across different educational technologies or teaching methodologies to assess how computer painting compares to other educational tools in terms of parental perceptions.

References

- Adamson, I., & Shine, J. (2003). Extending the new technology acceptance model to measure the end-user information systems satisfaction in a mandatory environment: a bank's treasury. *Technology Analysis & Strategic Management*, 15(4), 441-55.
- Al Natour, S., & Woo, C. (2021). The determinants of learner satisfaction with the online video presentation method. *Internet Research*, 31(1), 234-261. <https://doi.org/10.1108/INTR-04-2019-0155>
- Belanche, D., Casaló, L. V., & Guinalú, M. (2012). Website usability, consumer satisfaction and the intention to use a website: The moderating effect of perceived risk. *Journal of retailing and consumer services*, 19(1), 124-132.
- Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS quarterly*, 25(3), 351-370.
- Brady, M. K., & Cronin, J. J. (2001). Customer orientation: Effects on customer service perceptions and outcome behaviors. *Journal of service Research*, 3(3), 241-251.
- Busacca, B., & Padula, G. (2005). Understanding the relationship between attitude performance and overall satisfaction: theory, measurement and implications. *Marketing Intelligence and Planning*, 23(6), 543-561.

- Chan, K. W., Yim, C. K., & Lam, S. S. (2010). Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures. *Journal of marketing*, 74(3), 48-64.
- Chen, S. C., Chen, H. H., & Chen, M. F. (2009). Determinants of satisfaction and continuance intention towards self-service technologies. *Industrial Management & Data Systems*, 109(9), 1248-1263.
- Chih-Hung Wang, M. (2012). Determinants and consequences of consumer satisfaction with self-service technology in a retail setting. *Managing Service Quality: An International Journal*, 22(2), 128-144.
- Chiu, Y. T. H., Lee, W. I., & Chen, T. H. (2014). Environmentally responsible behavior in ecotourism: Antecedents and implications. *Tourism management*, 40, 321-329.
- Finn, A., Wang, L., & Frank, T. (2009). Attribute perceptions, customer satisfaction and intention to recommend e-services. *Journal of Interactive Marketing*, 23(3), 209-220.
- Flores, J., & Vazquez-Parraga, A. Z. (2015). The impact of choice on co-produced customer value creation and satisfaction. *Journal of Consumer Marketing*, 32(1), 15-25. <https://doi.org/10.1108/JCM-04-2014-0931>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Funk, D. C., Filo, K., Beaton, A. A., & Pritchard, M. (2009). Measuring the motives of sport event attendance: bridging the academic-practitioner divide to understanding behavior. *Sport Marketing Quarterly*, 18(3), 126-138.
- Gallarza, M. G., Arteaga, F., Del Chiappa, G., & Gil-Saura, I. (2015). Value dimensions in consumers' experience: Combining the intra-and inter-variable approaches in the hospitality sector. *International Journal of Hospitality Management*, 47, 140-150.
- Gao, L., & Bai, X. (2014). A unified perspective on the factors influencing consumer acceptance of internet of things technology. *Asia Pacific Journal of Marketing & Logistics*, 26(2), 211-231.
- Gerow, J. E., Ayyagari, R., Thatcher, J. B., & Roth, P. L. (2013). Can we have fun@ work? The role of intrinsic motivation for utilitarian systems. *European Journal of Information Systems*, 22(3), 360-380.
- Guo, L., Huang, J., & Zhang, Y. (2019). Education Development in China: Education Return, Quality, and Equity. *Sustainability*, 11(13), 3750. <http://dx.doi.org/10.3390/su11133750>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed). Pearson Prentice Hall.
- Hiranrat, W., Narumol, R., & Chaijaroen, S. (2016). The Design of the Contents of an e-Learning for Teaching M.5 English Language Using ADDIE Model. *International Journal of Information and Education Technology*, 6(2), 127-131. <https://doi.org/10.7763/IJiet.2016.V6.671>
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural Equation Modelling: Guidelines for Determining Model Fit. *The Electronic Journal of Business Research Methods*, 6, 53-60.
- Ifinedo, P. (2017). Students' perceived impact of learning and satisfaction with blogs. *The International Journal of Information and Learning Technology*, 34(4), 322-337.
- Jankowski, T., Francuz, P., Oleś, P., & Chmielnicka-Kuter, E. (2020). The effect of temperament, expertise in art, and formal elements of paintings on their aesthetic appraisal. *Psychology of Aesthetics, Creativity, and the Arts*, 14(2), 209-223. <https://doi.org/10.1037/aca0000211>
- Javier, S., Miguel, A. M., Luis, C., & Rosa, M. R. (2007). Relationship quality of an establishment and perceived value of a purchase. *The Service Industries Journal*, 27(2), 151-174.
- Kang, Y. S., Hong, S., & Lee, H. (2009). Exploring continued online service usage behavior: The roles of self-image congruity and regret. *Computers in Human Behavior*, 25(1), 111-122.
- Kim, B., & Min, J. (2015). The distinct roles of dedication-based and constraint-based mechanisms in social networking sites. *Internet Research*, 25(1), 30-51.
- Kim, H.-W., Gupta, S., & Koh, J. (2011). Investigating the intention to purchase digital items in social networking communities: a customer value perspective. *Information and Management*, 48(6), 228-234.
- Kisida, B., & Bowen, D. H. (2019). *New Evidence of the Benefits of Arts Education*. Brookings. <https://www.brookings.edu/articles/new-evidence-of-the-benefits-of-arts-education/>
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). The Guilford Press.
- Kumar, R. G., & Ravindran, S. (2012). An empirical study on service quality perceptions and continuance intention in mobile banking context in India. *Journal of Internet Banking and Commerce*, 17(1), 1-22.
- Lee, D. H. (2020). The impact of exhibition service quality on general attendees' satisfaction through distinct mediating roles of perceived value. *Asia Pacific Journal of Marketing and Logistics*, 32(3), 793-816.
- Liebana-Cabanillas, F., Munoz-Leiva, F., & Rejon-Guardia, F. (2013). The determinants of satisfaction with e-banking. *Industrial Management & Data Systems*, 113(5), 750-767.
- Liu, Y., Chen, Y., & Zhou, C. (2006). *Determinants affecting end-user satisfaction of information technology service* [Paper Presentation]. 2006 International Conference on Service, Troyes, October.
- Luo, H., Ma, L., Lin, X., & Gan, X. (2011). Longitudinal research on consumers' trust in B2C E-business. *Service Systems and Service Management (ICSSSM), 2011 8th International Conference*, 1-6.
- Mahmood, M., Burn, J. M., Gemoets, L. A., & Jacquez, C. (2000). Variables affecting information technology end-user satisfaction: a meta-analysis of the empirical literature. *International Journal of Human-Computer Studies*, 52(4), 751-771.
- Mathwick, C., Malhotra, N., & Rigdon, E. (2001). Experiential value: conceptualization, measurement and application in the catalog and internet shopping environment. *Journal of Retailing*, 77(1), 39-56.

- Moon, J. W., & Kim, Y. G. (2001). Extending the TAM for a world-wide-web context. *Information & Management*, 38(4), 217-234.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
- Oliver, R. (1981). Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailing*, 57(3), 25-48.
- Oyedele, A., Saldivar, R., Hernandez, M. D., & Goenner, E. (2018). Modeling satisfaction and repurchase intentions of mobile smart wristbands: the role of social mindfulness and perceived value. *Young Consumers*, 19(3), 237-250.
- Padilla-Meléndez, A., del Aguila-Obra, A. R., & Garrido-Moreno, A. (2013). Perceived playfulness, gender differences and technology acceptance model in a blended learning scenario. *Computers & Education*, 63, 306-317.
- Pura, M. (2005). Linking perceived value and loyalty in location-based mobile services. *Managing Service Quality*, 15(6), 509-539.
- Sharma, S. K., Chandel, J. K., & Govindaluri, S. M. (2014). Students' acceptance and satisfaction of learning through course websites. *Education, Business, and Society: Contemporary Middle Eastern Issues*, 7(2/3), 152-166.
- Smith, S., & Costello, C. (2009). Culinary tourism: satisfaction with a culinary event utilizing importance-performance grid analysis. *Journal of Vacation Marketing*, 15(2), 99-110.
- Song, H. J., Lee, C. K., Park, J. A., Hwang, Y. H., & Reisinger, Y. (2015). The influence of tourist experience on perceived value and satisfaction with temple stays: The experience economy theory. *Journal of Travel & Tourism Marketing*, 32(4), 401-415.
- Soper, D. S. (n.d.). *A-priori Sample Size Calculator for Structural Equation Models*. <http://www.danielsoper.com/statcalc>
- Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues and Research in Advertising*, 26(2), 53-66.
- Sripalawat, J., Thongmak, M., & Ngramyarn, A. (2011). M-banking in metropolitan Bangkok and a comparison with other countries. *Journal of Computer Information Systems*, 51(3), 67-76.
- Stafford, T. F. (1994). Consumption values and the choice of marketing electives: Treating students like customers. *Journal of Marketing Education*, 16(2), 26-33.
- Wang, R. (2012). Investigations of important and effective effects of green practices in restaurants. *Procedia-Social and Behavioral Sciences*, 40, 94-98.
- Williams, P., & Soutar, G. N. (2009). Value, satisfaction and behavioral intentions in an adventure tourism context. *Annals of tourism research*, 36(3), 413-438.
- Yeh, C. H., Wang, Y. S., & Yieh, K. (2016). Predicting smartphone brand loyalty: Consumer value and consumer-brand identification perspectives. *International Journal of Information Management*, 36(3), 245-257.
- Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism Management*, 26(1), 45-56.
- Zellweger, T. M., & Astrachan, J. H. (2008). On the emotional value of owning a firm. *Family business review*, 21(4), 347-363.
- Zhang, J. J., Dewald, B., & Neiryneck, B. C. (2009). Experiential values for casino hotels in Macao. *Journal of Quality Assurance in Hospitality and Tourism*, 10(2), 75-92.
- Zhong, K., Feng, D., Yang, M., & Jaruwanakul, T. (2022). Determinants of Attitude, Satisfaction and Behavioral Intention of Online Learning Usage Among Students During COVID-19. *AU-GSB E-JOURNAL*, 15(2), 49-57. <https://doi.org/10.14456/augsbejr.2022.71>
- Zviran, M., Pliskin, N., & Levin, R. (2005). Measuring user satisfaction and perceived usefulness in the ERP context. *Journal of computer information systems*, 45(3), 43-52.