pISSN: 1906 - 3296 © 2020 AU-GSB e-Journal.
eISSN: 2773 – 868x © 2021 AU-GSB e-Journal.
http://www.assumptionjournal.au.edu/index.php/AU-GSB/index

Conducting Through Parents on Factors Influencing Primary Students' Behavioral Intention to Use Computer Painting in Chongqing, China

Mandan Li*

Received: September 19, 2023. Revised: October 12, 2023. Accepted: October 13, 2023.

Abstract

Purpose: Satisfaction is a key predictor and prerequisite for behavioral intention using computer painting. The purpose of this study is to explore the view of parents on factors influencing students' behavioral intention to use computer painting in primary schools in Chongqing, China. The research model offers key variables, including emotional value, economic value, social value, perceived usefulness, enjoyment, satisfaction, and behavioral intention. **Research design, data, and methodology:** Using quantitative method and questionnaire survey as a tool, sample data were collected from 500 parents on behalf of students. The index of item-objective congruence (IOC) and Cronbach's Alpha pilot test were used to test the validity and reliability of the questionnaire before sending out the questionnaire. Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) are used to analyze the data, verify the model's goodness of fit, and confirm the causal relationship between variables. **Results:** The results confirm that emotional value, economic value, and perceived usefulness significantly influence satisfaction towards behavioral intention. However, social value and enjoyment have no significant influence on satisfaction. **Conclusions:** These findings provide valuable insights into the relationships between these variables and contribute to a better understanding of the factors influencing satisfaction and behavioral intention in the study context.

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

JEL Classification Code: E44, F31, F37, G15

1. Introduction

The people pay attention to the value of the current Chinese fine arts education research. With the development of the primary school, outside the school fine arts education, the study of its value is also increasingly getting the attention of scholars and experts. Art education is an important part of aesthetic education, and national quality education has a definite function. The vigorous development of children's art education day benefits our country by expanding the art teaching category. Computer graphics courses are no longer the patent of big fine arts students; they have begun to spread into elementary school fine arts teaching activities (Yang, 2022). Computer graphics course into the primary school art curriculum to reposition the computer painting art education value and status in the field of children's aesthetic education, open up a new field of children's aesthetic education through learning computer graphics to study fine arts creation, thus improve the primary school of aesthetic perception and creation ability and the comprehensive and balanced development (Yu & Nagai, 2020).

As computer painting (CP) is widely used in various fields, whether it is on the street or at home, various advertising videos, leaflets, mobile phones, and computer displays are constantly transmitting information in the form of pictures, so "reading pictures" is one of the most convenient and popular communication methods in this era. It is also one of the biggest factors affecting people's visual

1*Mandan Li, Chongqing University of Posts and Telecommunications, China. Email: 6909234@qq.com

feelings. It also impacts students' art cognition (Khurana et al., 2023). Electronic pictures, books, cartoons, animation, and games are all factors that affect students' art cognition in this information age, and most of these factors are closely related to computer painting (Praveen & Srinivasan, 2022).

Now, computers, mobile phones, tablet computers, and other electronic displays delivered by computer graphics are loved by modern students. They are very fond of this bright, color-rich design sense of computer paintings. Therefore, students must constantly improve their art cognition level in recognizing society to meet the needs of the continuous development of society and science and technology (Schukei, 2019). Offering computer painting courses (CPC) in primary school can improve students' art cognition level, enable students to learn computer painting knowledge and skills earlier, promote the modern development of primary school art teaching (SPAT), and lay a foundation for training high-quality talents needed by society (Samah et al., 2016).

Modern children are very fond of these and have more contact with them than children in any previous era, and mobile phones, tablets, and computers are all tools that can draw pictures. Children also gradually like computer painting because computer painting combines children's two preferences: one is electronic technology products, and the other is painting. Children are curious about electronic products in daily life, and it is children's talent to like painting. Painting with electronic products brings convenience and creative space to children. Satisfaction is a key predictor and prerequisite for behavioral intention using computer painting. Thus, the purpose of this study is to explore the view of parents on factors influencing students' behavioral intention to use computer painting in primary schools in Chongqing, China.

2. Literature Review

2.1 Emotional Value

Emotional value can lead to experiencing a variety of emotional and behavioral intentions, and satisfaction is important to mention before. (Kim & Thapa, 2018). Emotional value is based on emotions and emotional state to judge; the emotion can include happiness, sadness, anger, and so on. The emotional value of positive feelings can let consumers experience the use of products and after-sales service to achieve the best social psychological attribute experience (Sheth et al., 1991).

Attention to the customer's emotional needs is closely related to emotional value, which is the foundation of emotional value. In the product, the emotional value can urge the product to the best development (Zellweger & Astrachan, 2008). Emotional value improves the degree of satisfaction, mainly because it meets the emotional needs of the consumers (Lee et al., 2011). Emotional value and customer satisfaction have obvious positive effects (Slack et al., 2020). Accordingly, the study proposes the following hypothesis:

H1: Emotional value has a significant influence on satisfaction.

2.2 Economic Value

Economic value is the best scale to measure perceived value (Eggert & Ulaga, 2002). Any economic value of the product is based on consumer sovereignty, whether the product is the trade-off between an important consumer satisfaction index (Bockstael et al., 2000). Economic value increases at the same time, the cooperation relationship is also more stable, and it can increase the trust of both parties (Caceres & Paparoidamis, 2007). According to Pearce's (2001) study, when the same product with economic value is zero, its price is zero. The huge economic value will affect the economy when it suffers serious losses. This is when we face the choice of products, which will be affected by the economic value. The price influences consumer choice (Sweeney & Soutar, 2001). Economic value influences consumer satisfaction (Schlager et al., 2011). The economic value of discovery could help to understand the perceived value in the bridge role of service quality and satisfaction of the overall consumption (Brady & Cronin, 2001; Han & Hwang, 2013; Sánchez-García et al., 2006). Therefore, the following hypothesis is proposed:

H2: Economic value has a significant influence on satisfaction.

2.3 Social Value

Social value is a part of the perceived value (Lee et al., 2011). Rasoolimanesh et al. (2016) point out that social value reflects the quality of the relationship between producers and consumers. Social value is derived from the improvement of product quality, the quality of service, the customer's social self-cognitive enhancement, and social resources to promote (Sweeney & Soutar, 2001). Social value in willingness to pay for the goods to users is an important influence (Hsu & Lin, 2015). Social and emotional values revealed a significant positive (Pura, 2005). Social value significantly influences satisfaction (Lee, 2020). According to Sánchez-García et al. (2006), the study is as follows: in the field of perceived value, emotional and social values are proportional to the consumer's satisfaction. Value perception of the emotional dimension, social dimension, and tourist satisfaction were positively correlated. Thus, a hypothesis is developed:

H3: Social value has a significant influence on satisfaction.

2.4 Perceived Usefulness

Perceived usefulness means that consumers use a specific system to improve the effect of product evaluation (Davis, 1989). To some extent, perceived usefulness and ease of use have a similar effect; the use of products affects consumer acceptance of a judge (Tajuddin et al., 2012). Use awareness refers to consumers using a product or a technology after using the experience of feeling good (Lee & Cheng, 2015). In a previous study, Chen et al. (2011) have proven that perceived usefulness will be affected by self-efficacy. For people using products, self-efficacy was found to be the perceived usefulness of a key predictor (Alalwan et al., 2016).

Liaw and Huang (2013) pointed out that in the study of user satisfaction influenced by many factors, the usefulness of perception is one factor that affects customer satisfaction. People in the study of the learning experience of technology, the results show that user-perceived usefulness influences their happiness, satisfaction, and perceived usefulness into a positive phase relationship between the results of the survey (Sørebø et al., 2009; Stone & Baker-Eveleth, 2013). Based on these assumptions, this study proposes the following hypothesis:

H4: Perceived usefulness has a significant influence on satisfaction.

2.5 Enjoyment

Enjoyment refers to the perceived activity as enjoyable and desirable (Venkatesh & Davis, 2000). Giovannini et al. (2015) pointed out that enjoyment refers to the happiness and interest users experience in using a product. The perceived level of enjoyment is determined by the level of pleasure gained while using the product (Van der Heijden, 2004). Studies have shown that enhancing the sense of enjoyment in learning will bring more positive motivation to learning and positively impact learning (Heafner, 2004).

The essence of enjoyment is the intrinsic motivation of user behavior, which can stimulate users to create a lasting and stable relationship with the product (Van der Heijden, 2004). The study found that happy product use satisfaction has a positive effect on the students and the well-being of students using the full meaning of products. Perceived ease of use, sex, and degree of satisfaction positively affect learning (Guo et al., 2017; Ifinedo, 2017; Padilla-Meléndez et al., 2013). A study has found that learning can encourage students into more pleasure to participate in class (Roodt & De Villiers, 2013). Consequently, a hypothesis is developed:

H5: Enjoyment has a significant influence on satisfaction.

2.6 Satisfaction

Satisfaction can be defined as consumers feeling emotional after using the product and the service (Halilovic & Cicic, 2013). The mood can also be referred to as emotional feedback. Hence, satisfaction neutralizes product interaction or the use of the product after service of emotional feedback (Hwang & Zhao, 2010). Users with feelings will affect the value of product satisfaction degrees (Gallarza & Gil-Saura, 2006; Timm, 2008). Satisfaction directly impacts all production sides of the market competitiveness (Ferrel & Hartline, 2010).

Consumers' continued behavior will come from consumer satisfaction (Wang, 2012). Satisfaction is to let people produce sustained consumer behavior intention as the main motivation (Bhattacherjee, 2001). Satisfied with the products of the consumer will not easily give up the familiar products and other products. People usually use its current products and services to build long-term cooperation relations and have the propaganda and promotion of behavior intention to build closer ties (Anderson & Srinivasan, 2003). Thus, the following hypothesis is indicated:

H6: Satisfaction has a significant influence on behavioral intention.

2.7 Behavior Intention

Behavioral intention is the perception of experience, understanding, and summarizing the individual behavior model (Spears & Singh, 2004). Good behavior intention, which can be defined as recalling events in the future, is still felt in people's memory to have good word of mouth (Zeithaml et al., 1996). People usually have behavior intention, which is another important thing for themselves or care about the person's attitude, the calendar, the influence of life habits, and hobbies (Zhou, 2012). The user's consumption, the change of attitude, and perceived usefulness factors will significantly impact behavior intention (Davis, 1989). The Gu et al. (2009) study also proved that enhanced trust can increase people's experience during the process of using the product, which is regarded as an important factor influencing behavior intention. Min et al. (2022) examined the link between satisfaction and behavioral intention among college students towards online education.

3. Research Methods and Materials

3.1 Research Framework

The framework of this study has three studies. The first research was developed by Lee (2020). Emotional, economic, and social values are three aspects of studying how to improve product satisfaction. The second conceptual framework was constructed by Ifinedo (2017), who studied blog learning for college students' degree of satisfaction and perception. It provides a perceived usefulness of research on customer satisfaction. The third study is adopted by Chih-Hung Wang (2012), which studies enjoyment, satisfaction, and behavioral intention. The conceptual framework of this study is constructed per Figure 1.

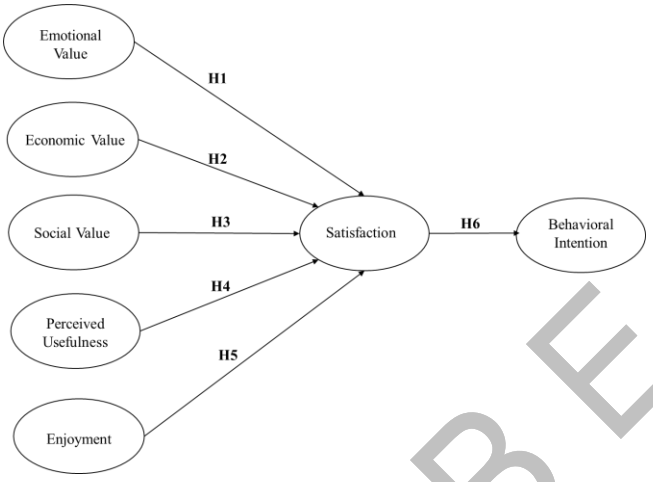

Figure 1: Conceptual Framework

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

Utilizing a quantitative approach and employing a questionnaire survey as the primary instrument, a dataset was compiled by gathering responses from 500 parents representing students. Before the questionnaire distribution, the instrument's validity and reliability were rigorously assessed using the Index of Item-Objective Congruence (IOC) and an initial pilot test of Cronbach's Alpha. Subsequently, Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) were employed for data analysis. These analytical techniques were employed to examine the dataset, assess the model's goodness of fit, and validate the causal relationships among the variables under investigation.

When using the items in the IOC evaluation questionnaire, experts were asked to use a range score of -1 to +1 (consistent =+1, suspicious =0, inconsistent =1). Where 1 means that the project can accurately measure a specific goal, 0 means that the project is likely to be able to measure the goal, and -1 means that the project cannot measure a specific goal. After three expert completes the content validity test, the score is calculated to obtain the IOC index for each project for each goal. All results are above 0.5, which is acceptable (Hiranrat et al., 2016).

A pilot study's sample size is usually less than large-scale studies, often between 10 and 50 participants. In this study, the researchers used Cronbach's Alpha reliability analysis between projects with 50 respondents to assess the reliability of each scale. Nunnally (1978) points out that the Cronbach Alpha coefficient is greater than 0.7, which is considered reliable. The results in the pilot study are acceptable, 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 ($\alpha = 0.913$).

3.3 Population and Sample Size

The population is parents whose children are in Grade 3 or above and have been using computer painting in selected three primary schools in Chongqing, China. After the researchers put all the necessary input for the calculator by Soper (n.d.), the minimum sample size is suggested to be 444. However, this study rounds up the target sample to be 500.

3.4 Sampling Technique

In this study, the researchers adopted the methods of judgmental, stratified random, and convenience sampling. Through the judgmental sampling, primary school parents of students in grades 3-6 who had learned computer drawing in a certain time. Per stratified random sampling, the number of sample units to be drawn from each type is then determined according to the ratio of the number of units of each type to the total number of units, as shown in Table 1. Finally, convenience sampling is accomplished by distributing online surveys to parents through the school’s communication channels.

Table 1: Sample Size

School	Population Size	Proportional Sample Size
Shuren Primary School in Chongqing University Town	3000	211
Chongqing Chenjiaqiao Primary School	1600	113
Chongqing Nanan District coral Experimental primary School	2500	176
Total	**7,100**	**500**

4. Results and Discussion

4.1 Demographic Information

In the Table 2, 254 participants (50.8%) are male, while 246 participants (49.2%) are female. The frequency of computer painting usage is 1-3 times/week: 92 participants (18.4%), 4-6 times/week: 137 participants (27.4%), 7-10 times/week: 171 participants (34.2%), and more than 10 times/week: 100 participants (20.0%). For satisfaction with computer painting, most respondents are satisfied in the total of 415 participants (83.0%).

Table 2: Demographic Profile

Demographic and General Data (N=500)		Frequency	Percentage
Gender	Male	254	50.8%
	Female	246	49.2%
Frequent Use of Computer	1-3 times/week	92	18.4%
	4-6 times/week	137	27.4%
	7-10 times/week	171	34.2%
	More than 10 times/week	100	20.0%
Satisfaction with Computer Painting	Satisfied	415	83.0%
	Neutral	71	14.2%
	Unsatisfied	14	2.8%

4.2 Confirmatory Factor Analysis (CFA)

As observed in Table 3, the measurement model underwent Confirmatory Factor Analysis (CFA) within the Structural Equation Modeling (SEM) framework. The results from the CFA analysis reaffirmed the significance of all items within their respective variables and, importantly, established discriminant validity through robust factor loadings.

To assess internal consistency, a reliability test employing Cronbach's alpha coefficient was executed, yielding consistently strong consistency values for all items. These values met or exceeded the recommended threshold of 0.6 (Hair et al., 2006). In the context of Confirmatory Factor Analysis, item loadings greater than 0.40, with associated p-values below 0.05, were deemed satisfactory.

Additionally, adhering to the guidelines put forth by Fornell and Larcker (1981), the convergent validity of the construct was thoroughly examined. The Average Variance Extracted (AVE) exceeded the criterion of 0.5, and the Composite Reliability (CR) surpassed the threshold of 0.6, thereby providing robust evidence of convergent validity for 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	0.745	0.686-0.719	0.745	0.493
2. Economic Value (ECV)	Lee (2020)	3	0.886	0.832-0.874	0.886	0.722
3. Social Value (SOV)	Lee (2020)	3	0.902	0.852-0.904	0.903	0.756
4. Perceived Usefulness (PU)	Sharma et al. (2014)	4	0.802	0.663-0.734	0.803	0.505
5. Enjoyment (EN)	Ifinedo (2017)	4	0.811	0.670-0.790	0.812	0.520
6. Satisfaction (SAT)	Ifinedo (2017)	5	0.794	0.615-0.702	0.798	0.442
7. Behavioral Intention (BI)	Gao and Bai (2014)	5	0.819	0.624-0.768	0.821	0.480

Utilizing statistical software, Table 4 was employed to evaluate the fit of the measurement model. The results indicate that the measurement model for the main campus group exhibited a satisfactory fit without necessitating any adjustments, as evidenced by the following goodness-of-fit measures. These measures consistently met widely accepted standards, affirming the validity of the confirmatory factor analysis model established 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)	429.683/303 = 1.418
GFI	≥ 0.85 (Kline, 2011)	0.941
AGFI	≥ 0.85 (Kline, 2011)	0.926
NFI	≥ 0.85 (Kline, 2011)	0.930
CFI	≥ 0.85 (Kline, 2011)	0.978
TLI	≥ 0.85 (Kline, 2011)	0.975
IFI	≥ 0.85 (Kline, 2011)	0.978
RMSEA	≤ 0.08 (Hooper et al., 2008)	0.029
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.

Adhering to the principles outlined by Fornell and Larcker (1981), the evaluation of discriminant validity involved calculating the square root of each Average Variance Extracted (AVE). As demonstrated in Table 5, the computed square root of AVE values exceeded all inter-construct or inter-factor correlations. With the successful establishment of both convergent and discriminant validity, there exists substantial and compelling evidence to affirm the construct validity of this study.

Table 5: Discriminant Validity

	SAT	EMV	ECV	SOV	PU	EN	BI
SAT	**0.665**						
EMV	0.605	**0.702**					
ECV	0.594	0.669	**0.850**				
SOV	-0.067	-0.117	-0.091	**0.870**			
PU	0.645	0.523	0.543	-0.140	**0.711**		
EN	0.256	0.238	0.294	-0.110	0.231	**0.721**	
BI	0.591	0.572	0.539	-0.059	0.533	0.208	**0.693**

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 6 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 = 2.536, GFI = 0.887, AGFI = 0.865, NFI = 0.868, CFI = 0.915, TLI = 0.906, IFI = 0.916, and RMSEA = 0.055.

Table 6: Goodness of Fit for Structural Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	806.422/318 = 2.536
GFI	≥ 0.85 (Kline, 2011)	0.887
AGFI	≥ 0.85 (Kline, 2011)	0.865
NFI	≥ 0.85 (Kline, 2011)	0.868
CFI	≥ 0.85 (Kline, 2011)	0.915
TLI	≥ 0.85 (Kline, 2011)	0.906
IFI	≥ 0.85 (Kline, 2011)	0.916
RMSEA	≤ 0.08 (Hooper et al., 2008)	0.055
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 7: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-value	Testing result
H1: Emotional value has a significant influence on satisfaction.	0.274	5.040*	Supported
H2: Economic value has a significant influence on satisfaction.	0.496	8.653*	Supported
H3: Social value has a significant influence on satisfaction.	0.035	0.794	Not Supported
H4: Perceived usefulness has a significant influence on satisfaction.	0.428	7.331*	Supported
H5: Enjoyment has a significant influence on satisfaction.	0.056	1.205	Not Supported
H6: Satisfaction has a significant influence on behavioral intention.	0.668	8.323*	Supported

Note: * $p<0.05$
Source: Created by the author

The analysis of the data, as presented in Table 7, provides valuable insights into the relationships between the variables and the hypotheses tested in the study:

H1: The standardized path coefficient (β) for emotional value is 0.274, with a t-value of 5.040*, 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 0.496, with a t-value of 8.653*, 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 0.035, with a t-value of 0.794. 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 0.428, with a t-value of 7.331*, indicating a statistically significant relationship. The hypothesis that perceived usefulness significantly influences satisfaction is supported.

H5: The standardized path coefficient (β) for enjoyment is 0.056, with a t-value of 1.205. The data does not support the first 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 0.668, with a t-value of 8.323*, indicating a statistically

significant relationship. The hypothesis that satisfaction significantly influences behavioral intention is supported.

In summary, the data analysis confirms that emotional value, economic value, perceived usefulness, and satisfaction have significant influences on satisfaction and behavioral intention. However, social value has no significant influence on satisfaction, and the influence of enjoyment on satisfaction depends on the specific path. These findings provide valuable insights into the relationships between these variables and contribute to a better understanding of the factors that influence satisfaction and behavioral intention in the context of the study.

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

The study aimed to gain insights into the factors that influence students' behavioral intention to use computer painting in primary schools in Chongqing, China, from the perspective of parents. The research model included key variables such as emotional value, economic value, social value, perceived usefulness, enjoyment, satisfaction, and behavioral intention. The data was collected from 500 parents through a quantitative method and questionnaire survey.

The study's results indicated that emotional value, economic value, and perceived usefulness significantly influenced parents' satisfaction with their children's behavioral intention to use computer painting. This finding suggests that parents place considerable importance on the emotional and economic benefits associated with computer painting. They recognize the potential for their children to experience emotional engagement and economic advantages through this technology. This insight is valuable for educators and policymakers, as it highlights the need to emphasize these aspects when promoting computer painting in primary education.

Interestingly, the study found that social value and enjoyment did not significantly influence parental satisfaction regarding behavioral intention. This result is somewhat unexpected and warrants further exploration. It may indicate that parents prioritize other factors, such as emotional and economic benefits, over social aspects and enjoyment when considering the use of computer painting in schools. Future research could delve deeper into why social value and enjoyment did not emerge as significant factors and whether this finding holds true in different contexts or with different demographic groups.

In conclusion, this study provides valuable insights into the factors influencing parents' views regarding students' behavioral intention to use computer painting in primary schools in Chongqing, China. The research model encompassed critical variables, and data collection and analysis were conducted meticulously using quantitative methods, including Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM).

The findings underscore the significance of emotional value, economic value, and perceived usefulness in shaping parents' satisfaction and, consequently, their support for their children's behavioral intention to use computer painting. 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 associated with this technology.

However, the study also raises questions about the limited influence of social value and enjoyment on parental satisfaction. These aspects may need to be further explored to better understand parental priorities and expectations regarding technology in education.

In sum, the study's findings offer valuable guidance for educational policymakers, institutions, and practitioners seeking to promote the use of computer painting in primary schools. Recognizing the importance of emotional and economic value while considering the nuanced role of social value and enjoyment can lead to more effective strategies for integrating technology into the primary education experience.

5.2 Recommendation

The study examined parents' perspectives on the factors influencing students' behavioral intention to use computer painting in primary schools in Chongqing, China. The research model encompassed crucial variables such as emotional value, economic value, social value, perceived usefulness, enjoyment, satisfaction, and behavioral intention. To further guide educational policymakers, institutions, and practitioners, this essay presents a set of recommendations based on the study's findings.

The study underscores the significance of emotional and economic values in shaping parental satisfaction. To leverage this insight, educational institutions should emphasize the emotional engagement and economic advantages that computer painting offers. Awareness campaigns and educational materials should highlight how this technology can nurture students' emotional connection to learning and provide economic benefits in terms of skill development and future opportunities.

While the study found that social value and enjoyment did not significantly influence parental satisfaction, it is essential to investigate why these factors ranked lower. Future research should delve into parental priorities and expectations regarding social aspects and enjoyment in technology-assisted learning. Educational institutions should

consider incorporating collaborative and interactive elements into computer painting to enhance its social and enjoyable aspects.

To enhance parental involvement and understanding, schools should organize workshops, seminars, or information sessions. These events can educate parents about the benefits and potential challenges of computer painting. They should provide a platform for open discussions, allowing parents to voice their concerns and ask questions. Collaboration between educators and parents can foster trust and mutual support.

Incorporate continuous monitoring and evaluation processes to assess the impact of computer painting on students' academic performance, creativity, and social development. These findings should be transparently communicated to parents, reinforcing the advantages of technology integration and addressing any concerns.

Offer training sessions and resources tailored to parents, helping them understand how to support their children in using computer painting effectively. These resources can include tutorials on related software, platforms, and strategies to foster their children's creativity and learning.

Promote collaboration and open communication channels between schools and parents. Encourage schools to seek parental input when implementing technology-based educational initiatives. Parents should feel like valued partners in their children's education.

Educational institutions should actively integrate social value aspects into computer painting experiences. This can include group projects, collaborative assignments, and activities that emphasize social interaction and teamwork, enhancing the social aspects of learning.

Conduct longitudinal research to track changes in parental perceptions over time and evaluate the long-term impact of technology integration. This extended perspective can provide valuable insights into the sustained effects of computer painting.

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

Establish mechanisms for parents to provide feedback and suggestions regarding technology use in schools. Regularly seek their input and adapt strategies based on their feedback. This ongoing dialogue can strengthen the partnership between parents and educational institutions.

In conclusion, these recommendations offer a comprehensive framework for enhancing parental support and engagement in the effective integration of computer painting and similar technologies in primary education. By addressing the emotional, economic, and social aspects, and fostering a collaborative relationship between parents and schools, we can create a nurturing and informed environment that enriches students' overall learning experiences and development. Ultimately, this approach prepares students for the challenges of the digital age while ensuring their holistic growth.

5.3 Limitation and Further Study

While the study delving into parents' perspectives on students' behavioral intention to use computer painting in primary schools in Chongqing, China, provides valuable insights, it is prudent to recognize its limitations. These limitations offer valuable directions for future research, enabling the expansion and refinement of knowledge in this domain.

The study collected data from 500 parents in Chongqing, a significant urban area. However, it is essential to acknowledge that this sample may not entirely encompass the diverse range of parental perspectives prevalent across the entire region or country. Future research endeavors should strive to secure a larger and more diverse sample, spanning various geographic regions, to bolster the generalizability of the findings.

The study assumed that parents possessed a foundational understanding of computer painting and its associated benefits. To gain deeper insights into parental viewpoints, future research could explore the extent of parental knowledge and experience with computer painting. This inquiry could illuminate how prior familiarity shapes their perceptions and attitudes, offering a more nuanced understanding.

To enrich the comprehension of parental perspectives, future research avenues could include comparative analyses. These analyses could assess how computer painting fares in contrast to other educational technologies or teaching methodologies concerning parental perceptions. Such comparisons could provide valuable insights into the relative effectiveness and desirability of computer painting within the broader educational landscape.

By addressing these limitations in future research endeavors, we can further refine our understanding of parental perspectives on technology integration in primary education and develop more effective strategies for engaging parents in the educational process. These endeavors will contribute to the creation of well-informed and supportive educational environments that cater to the diverse needs and expectations of parents and students alike.

References

Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Williams, M. D. (2016). Consumer adoption of mobile banking in Jordan. *Journal of Enterprise Information Management, 29*(1), 118-139.

Anderson, R. E., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology & marketing, 20*(2), 123-138.

Bhattacherjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS quarterly, 25*(3), 351-370.

Bockstael, N. E., Freeman, A. M., Kopp, R. J., Portney, P. R., & Smith, V. K. (2000). On measuring economic values for nature. *Environmental Science & Technology, 34*(8), 1384-1389.

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.

Caceres, R. C., & Paparoidamis, N. G. (2007). Service Quality, Relationship Satisfaction, Trust, Commitment and Business-to-Business Loyalty. *European Journal of Marketing, 41*, 836-867.

Chen, K., Chen, J. V., & Yen, D. C. (2011). Dimensions of self-efficacy in the study of smart phone acceptance. *Computer Standards & Interfaces, 33*(4), 422-431.

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.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319-340.

Eggert, A., & Ulaga, W. (2002). Customer perceived value: a substitute for satisfaction in business markets?. *Journal of Business & industrial marketing, 17*(2/3), 107-118.

Ferrel, O. C., & Hartline, B. (2010). *Marketing Strategy* (5th ed.). Cengage Learning.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.

Gallarza, M. G., & Gil-Saura, I. (2006). Value dimensions, perceived value, satisfaction and loyalty: an investigation of university students' travel behavior. *Tourism Management, 27*(3), 437-452.

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.

Giovannini, C. J., Ferreira, J. B., Silva, J. F. D., & Ferreira, D. B. (2015). The effects of trust transference, mobile attributes and enjoyment on mobile trust. *BAR-Brazilian Administration Review, 12*, 88-108.

Gu, J. C., Lee, S. C., & Suh, Y. H. (2009). Determinants of behavioral intention to mobile banking. *Expert Systems with Applications, 36*(9), 11605-11616.

Guo, Y. R., Goh, D. H. L., & Luyt, B. (2017). Tertiary students' acceptance of a game to teach information literacy. *Aslib Journal of Information Management, 69*(1), 46-63.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed). Pearson Prentice Hall.

Halilovic, S., & Cicic, M. (2013). Antecedents of information systems user behaviour–extended expectation-confirmation model. *Behaviour & Information Technology, 32*(4), 359-370.

Han, H., & Hwang, J. (2013). Multi-dimensions of the perceived benefits in a medical hotel and their roles in international travelers' decision-making process. *International Journal of Hospitality Management, 35*, 100-108.

Heafner, T. (2004). Using technology to motivate students to learn social studies. *Contemporary issues in technology and teacher education, 4*(1), 42-53.

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.

Hsu, C. L., & Lin, J. C. C. (2015). What drives purchase intention for paid mobile apps?–An expectation confirmation model with perceived value. *Electronic commerce research and applications, 14*(1), 46-57.

Hwang, J., & Zhao, J. (2010). Factors influencing customer satisfaction or dissatisfaction in the restaurant business using AnswerTree methodology. *Journal of Quality Assurance in Hospitality and Tourism, 11*(2), 93-110.

Ifinedo, P. (2017). Students' perceived impact of learning and satisfaction with blogs. *The International Journal of Information and Learning Technology, 34*(4), 322-337.

Khurana, D., Koli, A., Khatter, K., & Singh, S. (2023). Natural language processing: state of the art, current trends and challenges. *Multimedia Tools and Applications, 82*, 3713-3744. https://doi.org/10.1007/s11042-022-13428-4

Kim, M., & Thapa, B. (2018). Perceived value and flow experience: Application in a nature-based tourism context. *Journal of destination marketing & management, 8*, 373-384.

Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling.* Guildford Press.

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.

Lee, D. H., & Cheng, X. X. (2015). Examining the relationships between corporate performance of convention and exhibition centers, service quality, and customer satisfaction. *International Journal of Tourism and Hospitality Research, 29*(1), 61-74.

Lee, J. S., Lee, C. K., & Choi, Y. (2011). Examining the role of emotional and functional values in festival evaluation. *Journal of Travel Research, 50*(6), 685-696.

Liaw, S. S., & Huang, H. M. (2013). Perceived satisfaction, perceived usefulness and interactive learning environments as predictors to self-regulation in e-learning environments. *Computers & Education, 60*(1), 14-24.

Min, Y., Huang, J., Varghese, M. M., & Jaruwanakul, T. (2022). Analysis of Factors Affecting Art Major Students' Behavioral Intention of Online Education in Public Universities in Chengdu. *AU-GSB E-JOURNAL, 15*(2), 150-158. https://doi.org/10.14456/augsbejr.2022.80

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.

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.

Pearce, D. W. (2001). The economic value of forest ecosystems. *Ecosystem health, 7*(4), 284-296.

Praveen, C. K., & Srinivasan, K. (2022). Psychological Impact and Influence of Animation on Viewer's Visual Attention and Cognition: A Systematic Literature Review, Open Challenges, and Future Research Directions. *Computational and mathematical methods in medicine, 2022*, 8802542. https://doi.org/10.1155/2022/8802542

Pura, M. (2005). Linking perceived value and loyalty in location-based mobile services. *Managing Service Quality, 15*(6), 509-539.

Rasoolimanesh, S. M., Dahalan, N., & Jaafar, M. (2016). Tourists' perceived value and satisfaction in a community-based homestay in the Lenggong Valley World Heritage Site. *Journal of Hospitality and Tourism Management, 26*, 72-81.

Roodt, S., & De Villiers, C. (2013). *Using Facebook© for Collaborative Learning for the Net Generation: An Undergraduate Case Study* [Paper Presentation]. Proceedings of the AIS SIG-ED IAIM 2013 Conference.

Samah, A. A., Putih, A. T., & Hussin, Z. (2016). Digital tools: Enhancing painting skills among Malaysian secondary school student, *The Turkish Online Journal of Educational Technology, 15*(3), 58-67.

Sánchez-García, J., Callarisa Fiol, L., Rodríguez-Artola, R., & Moliner, M. (2006). Perceived value of the purchase of a tourism product. *Tourism Management, 27*(3), 394-409. https://doi.org/10.1016/j.tourman.2004.11.007

Schlager, T., Bodderas, M., Maas, P., & Luc Cachelin, J. (2011). The influence of the employer brand on employee attitudes relevant for service branding: an empirical investigation. *Journal of Services Marketing, 25*(7), 497-508.

Schukei, A. (2019, May 29). *Digital Vs. Traditional Art: Is One Better Than the Other?*. https://theartofeducation.edu/2019/05/digital-vs-traditional-art-is-one-better-than-the-other/

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.

Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of business research, 22*(2), 159-170.

Slack, N., Singh, G., & Sharma, S. (2020). Impact of perceived value on the satisfaction of supermarket customers: developing country perspective. *International Journal of Retail & Distribution Management, 48*(11), 1235-1254.

Soper, D. S. (n.d.). *A-priori Sample Size Calculator for Structural Equation Models*. http://www.danielsoper.com/statcalc

Sørebø, Ø., Halvari, H., Gulli, V. F., & Kristiansen, R. (2009). The role of self-determination theory in explaining teachers' motivation to continue to use e-learning technology. *Computers & Education, 53*(4), 1177-1187.

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.

Stone, R. W., & Baker-Eveleth, L. (2013). Students' expectation, confirmation, and continuance intention to use electronic textbooks. *Computers in Human Behavior, 29*(3), 984-990.

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: the development of a multiple item scale. *Journal of Retailing, 77*(2), 203-220.

Tajuddin, N., Mustapha, M., Zaini, A. A., & Aziz, M. N. A. (2012). Investigating students' acceptance towards Blog. *Procedia – Social and Behavioral Sciences, 67*, 444-453.

Timm, P. R. (2008). *Customer Service: Career Success Through Customer Loyalty* (4th ed.). Pearson Education.

Van der Heijden, H. (2004). User acceptance of hedonic information systems. *MIS quarterly*, *28*(4), 695-704.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science, 46*(2), 186-204.

Wang, R. (2012). Investigations of important and effective effects of green practices in restaurants. *Procedia-Social and Behavioral Sciences, 40*, 94-98.

Yang, J. (2022). Chinese contemporary art teachers' professional development in the 20th and 21st centuries within the multicultural framework. *Heritage Science volume, 10*, 56. https://doi.org/10.1186/s40494-022-00692-8

Yu, L., & Nagai, Y. (2020). An Analysis of Characteristics of Children's Growth through Practical Art. *Healthcare (Basel, Switzerland), 8*(2), 109. https://doi.org/10.3390/healthcare8020109

Zeithaml, V., Berry, L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing, 60*, 31-46.

Zellweger, T. M., & Astrachan, J. H. (2008). On the emotional value of owning a firm. *Family business review*, *21*(4), 347-363.

Zhou, T. (2012). Understanding users' initial trust in mobile banking: An elaboration likelihood perspective. *Computers in human behavior, 28*(4), 1518-1525.