# Factors Affecting Satisfaction and Trust of Art Students in Senior High Schools in Chengdu

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## Abstract

**Purpose:** This study aims to examine the factors affecting student satisfaction towards trust of 500 students in art education in senior high schools (grade 10-12) in Chengdu, China. The conceptual framework is developed on how image, perceived value, service performance, positive affect, social environment influence student satisfaction and trust. **Research design, data and methodology:** Quantitative approach (n=500) was used to distribute online and offline questionnaires. The nonprobability sampling involves judgmental sampling, quota sampling random sampling, convenience sampling and snowball sampling. Before the data collection, Index of item-objective congruence (IOC) and Cronbach's Alpha for pilot test (n=50) were implemented. After the data collection, researcher accounted the Confirmatory Factor Analysis (CFA) and Structural Equation Model (SEM) were applied to confirm hypotheses and goodness-of-fit. **Results:** The results were that image had the strongest significant effect on student satisfaction, followed by positive affect on student satisfaction, student satisfaction on trust, social environment on student satisfaction. Nevertheless, non-supported relationships were perceived value on student satisfaction, image on perceived value, service performance on student satisfaction. **Conclusions:** Academic practitioners were recommended to focus on building high level of student satisfaction and trust by ensuring good social environment and facilities, high service standard, promoting school image properly and communicating efficiently.

**Keywords :** Perceived Value, Service Performance, Social Environment, Student Satisfaction, Trust

**JEL Classification Code**: E44, F31, F37, G15

## 1. Introduction[1][2]

The mainland of China has vigorously promoted the educational policy in the fields of moral, intellectual, physical, aesthetic, labor and art education in secondary schools. These fields have been greatly integrated and developed in the basic education of China. Art and physical education can elevate physical and personal quality of students. The quality of modern education has been improved and developed at all levels from primary school to universities (Yang, 2014).

Art education is an essential curriculum that cultivates people's aesthetic appreciation and quality in the country. It can determine and influence the direction and the quality of educational system due to the long history of arts as a heritage and the adoption of foreign cultures. China's fine arts education has evolved and made substantial developments which presents advantages and characteristics. However, art education in China has faced

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various challenges in the current development and future trends, which expect better breakthrough and promotion (Zhao et al., 2020). The significance and evolution of art education has been emphasized to accelerate art culture learning in the county as well as to promote internationally (Li & Hu, 2009).

Art education plays important role in Chengdu, China as the city has been renowned as a center of art and history since Qing Dynasty until present days. People who seek for art education and career mostly select Chengdu city as a learning destination. Art education can stimulate students' physical and mental quality. The quality of education both colleges and universities are required to be improved and developed. According to Yang (2014), Chengdu have faced some limitations and challenges to development the growth of countermeasures of art of secondary schools. Teachers are not adequate to cope with the new student's enrollment in this area as well as a critical high rate of turnover. Teachers' quality is uneven which limits the development of countermeasures of art capability in Chengdu. The fund allocation is insufficient which results an inadequate teaching materials and facilities. Consequently, the teaching standard cannot be arrested and grown.

Middle school includes primary and secondary school and has been operated under the guidance and influence of the national policy in China. In 2019, the gross enrollment rate of senior high school in Chengdu has reached 205,719 of students' enrollment, with 66,215 students graduated. The number of senior high schools was 156 and the amount of senior high school teachers was 19,001 (Chengdu Education Official Website, 2021).

The apparent limitations of Chinese art education are the problems that arise in the current development process, which includes regional development, economic conditions and so on (Yang, 2014). At this stage, more subtle changes are required such as actively acting based on correct cognition, abolishing conscience that violates the laws of art education and no profound in conduction and the development of modern art education. The development process enquires theoretical and practical understanding. The government must consider seriously and deeply promoting the great historical contributions in the human art education (Zhao et al., 2020).

Factors that were identified to have an effect on student satisfaction and trust in art education in the senior high schools, therefore, researcher states the problem relative to the topic in this section. Learning satisfaction and trust can influence student's learning efficiency which is obtained from the equality, quality and the understanding and implementation of the art education policy which can be formed as education system, study's curriculum, teaching materials and student services both inside and outside classroom.

# 2. Literature Review

## 2.1. Image

According to Kotler and Fox (1995), an image is an overall impression that an individual has about an object. It is explained as an information which is different among publics of an institution. Dowling (1988) added that due to companies have several different publics, a firm can have multiple images through different social groups. The assessment of image is applied to identify the key strengths that are needed to be emphasized and communicated to the target group. In this context, school image is known as the overall beliefs that an individual has towards the institution (Alves & Raposo, 2010). Image is a cognitive effect which incurs from a set of perception or memory input attached to a phenomenon.

Keller (1993) described the brand image as an attitude towards the brand that associated with customer's memory, thoughts and feelings. Customer mentally perceives the uniqueness of the particular brand which distinguishes from other brands and evaluates on product or service purchase (Faircloth, 2005). Bian and Moutinho (2011) dictated that brand image is a vital determinant in assessing the qualifications, benefits, and perception of the brand. Brodie et al. (2009) stated that the brand image influences perceived value of customers.

In educational context of China, the strategic planning and investment are required to enhance school/university image that has an influence on student satisfaction (Alves & Raposo, 2010). Such plan and strategy can be reputation, orientation and preparation of students, ease of entrance, quality of graduates and so on in attempt to promotes affective components towards target group (Shahsavar & Sudzina, 2017). For youth, the decision maker can be parents who consider what school is appropriate for their children. The first impression apart from location and curriculum is a satisfaction of choices. Hence, brand image is a fundamental and significant to serve satisfaction of parents, students and publics (Palacio et al., 2002). Per the statement on the casual relationship between image, perceived value and student satisfaction, hypotheses were derived:

**H1:** Image has a significant effect on perceived value in Chinese senior high schools.
**H2:** Image has a significant effect on student satisfaction in Chinese senior high schools.

## 2.2. Perceived Value

The perspective of students in perceived value is the

overall appraisal of using the service in accordance with their perception of what is received rather than what is offered. The value of education service pursues students in learning (Sanchez-Fernandez & Iniesta-Bonillo, 2006). The comparison between benefits and sacrifices is a favorable judgment that grants the perceptual aspect to fulfill objectives and satisfaction of customers, in turn, it can be described as perceived value (Zeithaml, 1988; Cronin et al., 2000).

Alves and Raposo (2010) investigated the determinants that have an impact on student satisfaction in higher education and found that student satisfaction is affected by perceived value. The impact of the perceived value is the strongest significant factors on student satisfaction. Consequently, it confirmed the positive relationship among perceived value and student satisfaction. To support this claim, the fulfillment derived from the value that school grants to target student can stimulate the high level of satisfaction among them (Shahsavar & Sudzina, 2017).

In linkage of perceived value and satisfaction, Woodruff and Gardial (1996) illustrated that the perceived value is what customer wants which can be satisfied by the product or service performance. The value is perceived by budget and timing during consumption which influence the judgement and evaluation of activities engaged with product/service. Value creation is a key direction that an organization must provide a clear direction to maintain or increase the level of satisfaction among its customers as demonstrated by the following hypothesis.

**H3:** Perceived value has a significant effect on student satisfaction in Chinese senior high schools.

### 2.3. Service Performance

Service performance is similar to service quality which is used as a tool to measure the customer satisfaction on the quality of service per a hypothesis below (Meng & Kevin, 2008). Service performance is referred to universities' service that is provided to students apart from academic services. It is considered as a social support which is vital for students to be able to achieve their academic purpose (Hill, 1995). Service performance also relates to service quality. Thus, education institutions are required to supervise and elevate the excellence of service granted to learners to upkeep their satisfactory (Mustafa et al., 2012).

Andreani and Wijayanty (2014) concluded that good service quality is similar to high level of service performance that may produce customer satisfaction. When customer is fulfilled by consumption or experience, he/she has positive attitude towards the product, service or brand. Customer satisfaction signifies customer's positive assessment during interaction with service provider.

Therefore, the dimensions of service performance, which includes tangibility, reliability, responsiveness, assurance and empathy, significantly effects on satisfaction of customers (Buttle, 2004).

In an academic setting, the quality of service has been applied to measure student's satisfaction of college/university. Satisfaction survey is usual way to assess the service quality which can provide valuable information and insights for improvement. Therefore, the casual association among service performance and student's satisfaction exists (Coleman et al. 1997; Edwards & Brown 1995). Service quality has already been signified as the service evaluation in a school performance by investigating the perceptions and expectations of learners within educational settings (Kerlin, 2000; Ham, 2003). The above statements stated in the following hypothesis:

**H4:** Service performance has a significant effect on student satisfaction in Chinese senior high schools.

### 2.4. Positive Affect

Positive impact reflects a participant's level of joyful contact with the ecosystem, described by sensation of eagerness, happiness, pride, affection, great vigor, and attention (Watson, 1988). Positive affect is defined as an individual's positive feelings or emotions i.e., pleasant, happy, cheerful etc. The positive emotions associate with the pleasant experience towards products and services. This study scopes positive affect, which is obtained from students' positive feeling on campus life, school facilities and study's programs that can help them to achieve their academic and future career goals (Kuppens et al., 2008). Accordingly, this research hypothesizes the following.

Kong et al. (2019) confirmed the relationship between positive affect and satisfaction is found in the research. Zeidner et al. (2012) cited that positive affect plays mediating role among emotional intelligence and satisfaction. Positive affect significantly promotes high level of satisfaction, which brings long-run benefits. Positive affect involves affective and satisfied experience of individual (Salovey et al., 2000; Sánchez-álvarez et al., 2016; Eid & Larsen, 2008). It ties to the pleasant emotion such as happy, lively, joyful etc., which leads to satisfaction and behavior (Kuppens et al., 2008).

Telef et al. (2015) claimed that positive affect directly impacts school and life satisfaction of students. Positive affect is the emotional state, subjected to individual's well-being, which enables positive school events to be raised by boosting interpersonal collaborations, managing with academic activities, flexibility and accountability and school-associated practices (Lewis et al., 2009). Positive affect protects youngsters from risky actions and dropping

out of school (Telef et al., 2015). Good relationships were noticed among positive affect, which can be exhibited as the support of teacher, peer and family relationship in learning, resulting in future development, the fulfilment of social support, problem-solving enhancement and self-confidence improvement (Reschly et al., 2008). The theoretical relationship was derived to determine a hypothesis:

**H5:** Positive affect has a significant effect on student satisfaction in Chinese senior high schools.

## 2.5. Social Environment

Social environment refers to the unpredictable external environmental conditions that determine the future living environment and the consequences of unit behavior (Milliken, 1987). Social environment is explained as campus environment that influences student satisfaction (Elliott & Shin, 2002). School facilities, internet infrastructure and administration structure can endorse social environment which influence student's satisfaction (Mustafa et al., 2012). Adequate social support can enhance the student satisfaction towards their study life (Zhu, 2015).

Social environment for student is similar to social support and learning environment (Kong et al., 2019). Salovey et al. (2000) attested that social environment positively links student's satisfaction in their campus life. The richer social network presents the greater level of student's well-being. The positive relation between learning environment and satisfaction of students has affirmed by many researchers (Perera & DiGiacomo, 2015; Kong et al., 2019; Schröder-Abé & Schütz, 2011). The perseverance of social life effects the higher sense of student's satisfaction (Koydemir et al., 2013).

The relationship between social environment and student's wellbeing is found to be correlated per the report of Tapia-Fonllem et al. (2020) The well-being of students generates satisfaction with their school life in this sense. The emotional experience that students have about their school, manifest the positive attitude (Ponferrada-Arteaga & Carrasco-Pons, 2010). Social environment is divided to be physical (buildings, facilities, school services), academic (teaching materials, staff, curriculum) and social (relationships, social existence). Tian et al. (2016) proved that social environment in school significantly supported to student's well-being and satisfaction. Consequently, H6 is formulated as:

**H6:** Social environment has a significant effect on student satisfaction in Chinese senior high schools.

## 2.6. Student Satisfaction

Satisfaction is defined as the evaluation by customers of a favorable response, related to emotional states that stimulates consideration on particular objects and probably influence continuous behavior (Shahsavar & Sudzina, 2017). Student satisfaction is identified as level of individuals' fulfilment with product or service (Elliott & Shin, 2002). In education context, the degree of satisfied students and school's services or performance meets or exceeds their expectations. The learning process can provide pleasure to students which affect the perceived value and education quality (Bay & Daniel, 2001).

Bairamzadeh and Bolhari (2010) investigated factors affecting website usage in the university and confirmed that students' trust had a positive influence on their satisfaction. Setyawan (2008) attested that brand trust had a moderating effect on satisfaction on the brand because consumers buy a product, they tend to express positive attitude which creates satisfaction of purchase. Chaudhuri and Holbrook (2001) referred that trust is the intention of consumer to depend on the ability, utility and functions of a brand. However, the brand trust had no significant impact on student's satisfaction per the study Usino et al. (2019) due to the brand image is not adequate to build positive feeling among students. The problem was found that teachers and staff have not provided good service, so these effects the satisfaction of students. Hosseini and Behboudi (2017) affirmed that trust positively affect satisfaction as indicated in the following hypothesis:

**H7:** Student satisfaction has a significant effect on trust in Chinese senior high schools.

## 2.7. Trust

Trust is the form of belief or faith that one party will behave in a socially responsible way to match the expectations of other party (Medina & Rufin, 2015). Warkentin et al. (2002) stated it decreases the social. Trust means the belief that the other party will act according to moral and social responsibility as expected (McKnight & Chervany, 2001). Trust explains parents or students believe that schools or universities are fair and honest and will provide the results requested of students (Nunkoo et al., 2012). It represents the student's confidence on schools' moral conduction and reputation management (Mayer et al., 1995).

Trust can be obtained by brand image or quality of product/service which encourages customers to make purchase (Chih-Chung et al., 2012). Thus, the capability to build customer trust is essential. Trust presents when one party feel confident to exchange other party reliability and

accountability (Morgan and Hunt, 1994). Trust arouses willingness to purchase, resulting on satisfaction

# 3. Research Methods and Materials

## 3.1. Research Framework

The conceptual framework was developed by researchers, adopted based on five previous research models for educational study in Chinese context. Firstly, Shahsavar and Sudzina (2017) adapted the European Performance Satisfaction Index (EPSI) to examine the direct impact of university's image on the expectation of students. Secondly, Mustafa et al. (2012) identified the antecedents to student satisfaction towards promotion by proposing a student satisfaction model. Thirdly, Kong et al. (2019) investigated the perceived social support and affective experience which include positive and negative affect, associated with emotional intelligence and life satisfaction. Next, Appuhamilage and Torii (2019) examined the effect of loyalty on satisfaction among students in higher education, using SEM approach to test the relationship of perceived value, financial support, environment, service, internationalization, facility, image on satisfaction. Lastly, Medina and Rufin (2015) analyzed the efficacy of the transparency policy deployed by higher educational institutes which has an influence on student satisfaction and trust. As a result, the conceptual framework of this study is developed as in Figure 1.
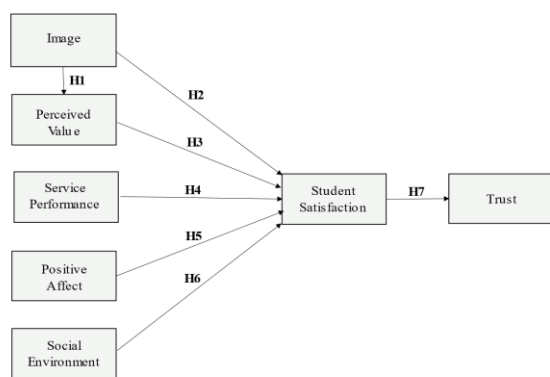


**Figure 1:** Conceptual Framework

The conceptual framework is developed on how image, perceived value, service performance, positive affect, social environment has an influence on student satisfaction and trust. Therefore, 7 variables and 7 hypotheses were proposed.

## 3.2. Methodology

The research methodology used is quantitative approach to distribute offline and online questionnaires to 500 participants. The questionnaire was designed in three parts. Firstly, screening questions were used to qualify the target group. Secondly, 5-point Likert Scale was applied to measure items used in this study. Lastly, the demographic questions were used to interpret the characteristics of the sample group. The questionnaire was also translated to Chinese for the best understanding among Chinese participants.

Before collecting the data, Item Objective Congruence (IOC) validity test with three experts' rating and Cronbach's Alpha reliability pilot test of 50 participants were deployed. IOC results showed that twelve items were removed out of the questionnaire from the total of 43 to 31 items. The acceptable value of alpha coefficient for each structure must be greater than or equal to 0.60 (Sekaran, 1992), resulting 31 items reserved. Later, the questionnaire was distributed to the target group. The sampling technique was applied by nonprobability sampling including judgmental sampling, quota sampling, convenience sampling and snowball sampling. The data analysis was ensured the normality of data and was proceeded to confirmatory factor analysis (CFA) and structural equation model (SEM), using SPSS and AMOS statistical software.

## 3.3. Population and Sample Size

The target population of this study was students who are studying art education in senior high schools (grade 10-12) in three secondary schools namely, Chengdu Pidu District No.1 Middle School (PDN1), Chengdu Shuangliu Yiti Middle School (SLYT) and Chengdu Shishi Shudu Middle School (SDMS) in Chengdu, Sichuan province, China. After inputting all necessary information into the statistical software of Soper (n.d.), the expected effect size (0.2), the expected level of statistical power (0.8), the number of latent variables (7), the number of observed variables (31), and the probability scale (0.05), the recommended minimum sample size showed 425. However, the researchers consider sample size of this study to be 500 participants.

## 3.4. Sampling Technique

The sampling techniques were employed, using nonprobability sampling method. Firstly, the judgmental sampling is accounted to selecting art students in three secondary schools in Chengdu, China. Secondly, quota sampling was applied to calculating ratio from total students at each school (Table 1). Convenience sampling was used for the third step for the survey distribution via offline and online channels. Lastly, the snowball sampling was accounted to

encourage students to refer and share with their peers.

**Table 1:** Quota Sampling by Three Secondary Schools in Chengdu

| School's Name | Total Students | Target Sample | % |
|---|---|---|---|
| Chengdu Pidu District No.1 Middle School (PND1) | 2930 | 247 | 50% |
| Chengdu Shuangliu Yiti Middle School Chengdu (SLYT) | 2211 | 186 | 37% |
| Shishi Shudu Middle School (SDMS). | 798 | 67 | 13% |
| **Total** | **5939** | **500** | **100%** |

Source: Created by the author

## 4. Results and Discussion

### 4.1. Demographic Information

The demographic results were shown as most of the participants were female of 53.8% (269), whereas male was 46.2% (231). For the class year, the majority was grade 12 at 39.8% (199), followed by grade 11 at 34.8% (174), and grade 10 at 25.4% (127) as shown in Table 2.

**Table 2:** Demographic Profile

| Demographic and Behavior Data (N=500) | | Frequency | Percentage |
|---|---|---|---|
| Gender | Male | 269 | 46.2% |
| | Female | 231 | 53.8% |
| Year of School | Grade 10 | 127 | 25.4% |
| | Grade 11 | 174 | 34.8% |
| | Grade 12 | 199 | 39.8% |

Source: Created by the author

### 4.2. Descriptive Analysis of Measurement Scales

Five-point scale is used to measure items to classify the judgement of rater. The central tendency of mean and standard deviation (SD) was accounted for descriptive analysis in this study. Mean defined the average set of value and standard deviation present how far the value from the mean (Lubiano et al., 2016). The mean scores of seven variables were above the mid-point and SD values were higher than 1.0 as presented in Table 3.

**Table 3:** Descriptive Analysis of Measurement Scales (n=500)

| Construct | Items | Senior High School | |
|---|---|---|---|
| | | Mean | Std. Deviation |
| **Image (IM)** | IM1 | 3.946 | 0.596 |
| | IM2 | 3.660 | 0.614 |
| | IM3 | 3.692 | 0.621 |
| | IM4 | 3.746 | 0.641 |
| | IM5 | 3.762 | 0.634 |
| **Perceived Value (PV)** | PV1 | 3.362 | 0.892 |
| | PV2 | 3.312 | 0.876 |
| | PV3 | 3.086 | 0.949 |
| | PV4 | 3.894 | 0.858 |
| **Service Performance (SP)** | SP1 | 3.238 | 0.927 |
| | SP2 | 3.318 | 0.965 |
| | SP3 | 3.228 | 0.971 |
| | SP4 | 3.114 | 1.041 |
| | SP5 | 3.166 | 0.927 |
| **Positive Affect (PA)** | PA1 | 4.124 | 0.655 |
| | PA2 | 4.054 | 0.648 |
| | PA3 | 3.998 | 0.662 |
| | PA4 | 4.076 | 0.644 |
| | PA5 | 4.102 | 0.617 |
| **Social Environment (SE)** | SE1 | 3.546 | 0.733 |
| | SE2 | 3.602 | 0.684 |
| | SE3 | 3.660 | 0.676 |
| | SE4 | 3.850 | 0.721 |
| **Student Satisfaction (SS)** | SS1 | 3.994 | 0.638 |
| | SS2 | 3.972 | 0.593 |
| | SS3 | 3.906 | 0.668 |
| | SS4 | 3.952 | 0.644 |
| | SS5 | 3.826 | 0.610 |
| **Trust (T)** | T1 | 3.638 | 0.738 |
| | T2 | 3.612 | 0.774 |
| | T3 | 3.768 | 0.769 |

Source: Created by the author

### 4.3. Confirmatory Factor Analysis (CFA)

CFA was used prior for analyzing the measurement model with structural equation model (SEM). The result of CFA indicated that all items in each variable were significant and had factor loading to prove discriminant validity. Guidelines recommended by Hair et al. (2006) is also employed in defining the significance of factor loading of each item and acceptable values in defining the goodness of fit. Factor loadings were higher than 0.50 and p-value of lower than 0.05. Furthermore, in case of Average Variance Extracted (AVE) was less than 0.5 but Composite Reliability (CR) was higher than 0.6, the convergent validity of the construct was still adequate (Fornell & Larcker, 1981) as shown in Table 4. The square root of average variance extracted is determined that all the correlations are greater than the corresponding correlation values for that variable as of Table 5.

Measurement model was tested using the fit model including CMIN/DF = 1.597, GFI = 0.922, AGFI = 0.907, NFI = 0.901, CFI = 0.960, TLI = 0.955, and RMSEA = 0.035. All estimates were acceptable with no model adjustment

required. Therefore, the convergence validity and discriminant validity were ensured. All results are shown in Table 6.1.

**Table 4:** 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 |
|---|---|---|---|---|---|---|
| Image (IM) | Teeroovengadum et al. (2019) | 5 | 0.807 | 0.643 - 0.708 | 0.807 | 0.456 |
| Perceived Value (PV) | Dlacic et al. (2014) | 4 | 0.784 | 0.632 - 0.726 | 0.785 | 0.477 |
| Service Performance (SP) | Rank et al. (2007) | 5 | 0.860 | 0.687 - 0.766 | 0.862 | 0.556 |
| Positive Affect (PA) | Brennan et al. (2006) | 5 | 0.827 | 0.675 - 0.725 | 0.828 | 0.490 |
| Social Environment (SE) | Beatton and Frijters (2012) | 4 | 0.876 | 0.772 - 0.834 | 0.878 | 0.643 |
| Student Satisfaction (SS) | Teeroovengadum et al. (2019) | 5 | 0.832 | 0.639 - 0.778 | 0.833 | 0.501 |
| Trust (T) | Medina and Rufín (2015) | 3 | 0.772 | 0.676 - 0.783 | 0.775 | 0.535 |

Note: CR = Composite Reliability, AVE = Average Variance Extracted
Source: Created by the author

**Table 5:** Discriminant Validity

|  | SS | IM | PV | SP | PA | SE | T |
|---|---|---|---|---|---|---|---|
| **SS** | **0.708** | | | | | | |
| **IM** | 0.483 | **0.675** | | | | | |
| **PV** | 0.042 | 0.022 | **0.691** | | | | |
| **SP** | 0.046 | 0.020 | 0.449 | **0.746** | | | |
| **PA** | 0.471 | 0.421 | 0.039 | 0.077 | **0.700** | | |
| **SE** | 0.218 | 0.211 | 0.062 | -0.020 | 0.187 | **0.802** | |
| **T** | 0.187 | 0.059 | 0.483 | 0.470 | 0.121 | 0.050 | **0.731** |

**Note:** The diagonally listed value is the AVE square roots of the variables
Source: Created by the author

**Table 6.1:** Goodness of Fit for Confirmatory Factor Analysis (CFA)

| Index | Acceptable Values | Values |
|---|---|---|
| CMIN/DF | < 3.00 (Hair et al., 2006) | 1.597 |
| GFI | ≥ 0.85 (Sica & Ghisi, 2007) | 0.922 |
| AGFI | ≥ 0.80 (Sica & Ghisi, 2007) | 0.907 |
| NFI | ≥ 0.80 (Wu & Wang, 2006) | 0.901 |
| CFI | ≥ 0.80 (Bentler, 1990) | 0.960 |
| TLI | ≥ 0.80 (Sharma et. al., 2005) | 0.955 |
| RMSEA | < 0.05 (Browne & Cudeck, 1993) | 0.035 |

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 = Normed fit index, CFI = Comparative fit index, TLI = Tucker-Lewis index, and RMSEA = Root mean square error of approximation
Source: Created by the author

**Table 6.2:** Goodness of Fit for Structural Equation Model (SEM)

| Index | Acceptable Values | Values |
|---|---|---|
| CMIN/DF | < 3.00 (Hair et al., 2006) | 2.194 |
| GFI | ≥ 0.85 (Sica & Ghisi, 2007) | 0.894 |
| AGFI | ≥ 0.80 (Sica & Ghisi, 2007) | 0.873 |
| NFI | ≥ 0.80 (Wu & Wang, 2006) | 0.863 |
| CFI | ≥ 0.80 (Bentler, 1990) | 0.920 |
| TLI | ≥ 0.80 (Sharma et. al., 2005) | 0.910 |
| RMSEA | < 0.05 (Browne & Cudeck, 1993) | 0.049 |

Source: Created by the author

### 4.3. Structural Equation Model (SEM)

According to Jöreskog and Sörbom, (1993), SEM was used to test relationships among constructs and hypotheses in this study. SPSS AMOS was used to verify the model fit for a structural model. For SEM model, the results were Chi – Square (χ2/df) of 2.194, Goodness-of-fit statistic (GFI) = 0.894, Adjusted Goodness-of-fit statistic (AGFI) = 0.873, Normed Fit Index (NFI) = 0.863, Comparative Fit Index (CFI) = 0.920, Tucker-Lewis index (TLI) = 0.910, and Root Mean Square Error of Approximation (RMSEA) = 0.049. Accordingly, the structural model presented model fit as concluded in Table 6.2.

### 4.4. Research Hypothesis Testing Result

The regression weights and R2 variance verified significant relationship as displayed in Table 6 when p is equal to 0.05. Image had the strongest significant effect on student satisfaction at the value of β = 0.466 and t-value =7.461. Secondly, positive affect had significant effect on student satisfaction at the value of β = 0.410 and t-value = 7.191. Next, there was a significance influence between student satisfaction had significant effect on trust at the value of β = 0.222 and t-value = 3.766. Social environment and student satisfaction were supported at the level of β = 0.103 and t-value = 2.165. Nevertheless, perceived value had no significant effect on student satisfaction at the level of β = 0.045 and t-value = 0.891. Image had no significant effect on perceived value at the level of β = 0.018 and t-value = 0.325. Service performance had no significant effect on

student satisfaction at the value of β = 0.008 and t-value = 0.170. In conclusion, the significance influence was

confirmed H2, H5, H6, and H7, whereas H1, H3 and H4 were found not supported.

**Table 7:** Hypothesis Result of the Structural Model

| Hypotheses | Paths | Standardized Path Coefficients (β) | t-value | Tests Result |
|---|---|---|---|---|
| H1 | IM → PV | 0.018 | 0.325 | Not Supported |
| H2 | IM → SS | 0.466 | 7.461* | Supported |
| H3 | PV → SS | 0.045 | 0.891 | Not Supported |
| H4 | SP → SS | 0.008 | 0.170 | Not Supported |
| H5 | PA → SS | 0.410 | 7.191* | Supported |
| H6 | SE → SS | 0.103 | 2.165* | Supported |
| H7 | SS → T | 0.222 | 3.766* | Supported |

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

The results from Table 7 and Figure 2 can be signified that:

H1: The standardized path coefficient between image and perceived value was 0.018 (t-value = 0.325). Therefore, H1 was not supported.

H2: Image significantly influenced student satisfaction as the standardized path coefficient was 0.466 (t-value = 7.461*). Henceforth, H2 was supported.

H3: The standardized path coefficient between perceived value and student satisfaction was not supported with the value of 0.045 (t-value = 0.891).

H4: There was no significant relationship between service performance and student satisfaction due to the standardized path coefficient was 0.008 (t-value = 0.170).

H5: Positive affect was significant at the standardized path coefficient of 0.410 (t-value = 7.191*). Thereby, H5 was supported.

H6: The standardized path coefficient between social environment and student satisfaction was 0.103 (t-value = 2.165*). Therefore, H6 was supported.

H7: The standardized path coefficient between student satisfaction and trust was 0.222 (t-value = 3.766*). As a result, H7 was supported.
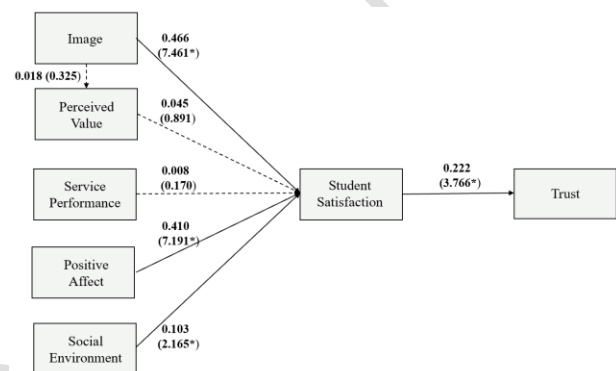


**Figure 2:** The Results of Structural Model

## 4.5. Direct, Indirect and Total Effects of Relationships

Table 7 presented direct, indirect and total effect for this study. Image had a direct effect on perceived value at 0.018. For the direct effect on student satisfaction, social environment was 0.103, positive affect was 0.410, service performance was 0.008, image was 0.466 and perceived value was 0.045. Image also had an indirect effect on student satisfaction at 0.001, resulting total effect at 0.467. Student satisfaction had a direct effect on trust at 0.222. For the indirect effect on trust, social environment was 0.223, positive affect was 0.091, service performance was 0.002, image was 0.104 and perceived value was 0.010.

**Table 7:** Direct (DE), Indirect (IE) and Total Effects (TE)

| Independent Variable | Dependent Variables | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Perceived Value (PV) | | | | Student Satisfaction (SS) | | | | Trust (T) | | | |
| | DE | IE | TE | R² | DE | IE | TE | R² | DE | IE | TE | R² |
| SE | - | - | - | .000 | .103 | - | .103 | .398 | - | .023 | .023 | .049 |
| PA | - | - | - | | .410 | - | .410 | | - | .091 | .091 | |
| SP | - | - | - | | .008 | - | .008 | | - | .002 | .002 | |

| Independent Variable | Dependent Variables | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Perceived Value (PV) | | | | Student Satisfaction (SS) | | | | Trust (T) | | | |
| | DE | IE | TE | $R^2$ | DE | IE | TE | $R^2$ | DE | IE | TE | $R^2$ |
| IM | .018 | - | .018 | | .466 | .001 | .467 | | - | .104 | .104 | |
| PV | - | - | - | | .045 | - | .045 | | - | .010 | .010 | |
| SS | - | - | - | | - | - | - | | .222 | - | .222 | |

Source: Created by the author

## 5. Conclusions and Recommendation

### 5.1. Discussion & Recommendation

The recommendations are accounted for academic practitioners and school management for further developing better student satisfaction and trust. Firstly, school image had no significant effect on perceived value as contradicted with numerous studies (Shahsavar & Sudzina, 2017; Kotler & Fox, 1995; Dowling, 1988; Alves & Raposo, 2010; Keller, 1993). However, academic practitioners and school management could focus on building good reputation of the school by promoting positive activities and core value of the institution in order to satisfy exiting students and attracts prospective one. Secondly, image significantly affected student satisfaction per proven by previous literatures (Shahsavar & Sudzina, 2017; Alves & Raposo, 2010; Palacio et al., 2002). The positive social voice about the school image could make parents and students proud to be at the school.

Thirdly, perceived value had no significant effect on student satisfaction which can be assumed that art education may not serve their career focus but more likely to be an optional program. Nevertheless, a school is required to define the value of educational program that can leverage their emotional and mental state which results in their soft skills and school life. Next, service performance did not significantly affect student satisfaction. However, the service performance offered by a school can be varied. Apart from the academic services, a school could consider student's journey as well as their parents since the provision of school tours, admission, consultation, orientation, and supervision of their satisfaction. Fifthly, positive affect had a significant effect on student satisfaction (Lewis et al., 2009; Telef et al., 2015; Reschly et al., 2008; Tian et al., 2016). A school could focus on the consultation for both students and parents on what their needs in order to maximize the student's potential. Some students are probably interest in music, sports or arts.

Sixthly, social environment had a significant effect on student satisfaction in both groups (Kong et al., 2019; Salovey et al., 2000; Perera & DiGiacomo, 2015; Schröder-Abé & Schütz, 2011; Koydemir et al., 2013). Social environment for student is similar to social support and learning environment (Kong et al., 2019). A school could consider engagement activities for students to socialize to their friends such as sport days, school plays, prom night etc.

Lastly, satisfaction significantly affected trust which is consistent with many literatures (Medina & Rufin, 2015; Bay & Daniel, 2001; Bairamzadeh & Bolhari, 2010; Setyawan, 2008). Satisfaction can build trust among parents and students. School management can seek ways to continuously improve and maintain the high level of satisfaction and trust by providing satisfaction survey as well as open to receive feedback. As a result, they can spread the positive word of mount to the community as well as prospective students to attend a school.

The findings of this study can contribute to academics or practitioners in China, referring academic knowledge in the education and management area. Art program in secondary school has been an important part of basic education in China which was used as sample of interest in this study. Hence, Chinese government, academic practitioners and educators are recommended to find the solutions for the problem statement to assure equality, quality and the understanding and implementation of the art education policy which can be formed as education system, study's curriculum, teaching materials and student services.

### 5.2. Conclusion

The research objectives were accomplished to examine factors affecting student satisfaction towards trust in among art students who are studying in senior high schools (grade 10-12) of secondary schools in Chengdu, China. The variables were developed from pervious literatures which include image, perceived value, service performance, positive affect, social environment, student satisfaction and trust. The population and sample size were 500 participants. The quantitative approach of nonprobability sampling method was accounted, including judgmental sampling, quota sampling, convenience sampling and snowball sampling. Prior to the data collection, IOC validity and Cronbach's Alpha reliability were employed. Afterwards, CFA was used to determine factor loading, convergent validity, discriminant validity and data fit model. Lastly, SEM was utilized to test the relationships among variables and hypotheses.

The findings showed that image had the strongest significant effect on student satisfaction, followed by positive affect on student satisfaction, student satisfaction on trust, social environment on student satisfaction. Nevertheless, non-supported relationships were perceived value on student satisfaction, image on perceived value, service performance on student satisfaction.

## 5.3. Limitation and Further Study

There are three limitations in this research which can be further extended in the future study. Firstly, the population and sample used in this study merely target students in secondary school in Chengdu China. The different regional area or higher education in China potentially produces different findings. Secondly, the variables selected for this study were image, perceived value, service performance, positive affect, social environment student satisfaction and trust. The variables can be further extended such as social support, university performance, promotion and loyalty. In addition, there are numerous studies on factors impaction student and trust which can be further explored. Thirdly, this research only focuses on quantitative methodology for the data collection. Qualitative approach can be expanded for better insights, which includes interview or focus group.

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