

## 家具產品設計與消費者購買傾向關係之研究

### A Study of the Relationships between the Furniture Product Design and Customers' Purchase Trends

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#### 摘要

本研究旨在探討家具產品設計與消費者購買傾向關係之研究，以及不同消費族群對家具產品設計與購買傾向之差異。本研究樣本為來自台灣地區之受測者共計 581 人，而此研究工具採用 SPSS 統計軟體的描述性分析與單因子變異數分析(One-way ANOVA)作為量化分析工具。透過 Cronbach  $\alpha$  信度檢定、Pearson 相關分析與單因子變異數分析等統計方法進行實證分析，研究結果發現：功能設計、人因設計與外觀設計三項家具產品設計特徵與消費者購買傾向的  $p < .01$ ，皆顯示具有正向關係；而最受消費者認同與重視的是人因設計特徵，其次是功能設計特徵，最後則為外觀設計特徵。另外，不同年齡層與教育程度高低之消費者對家具產品設計的看法與產品的購買傾向均無顯著差異。至於消費者薪資所得高低，對家具產品設計的看法與產品的購買傾向，則持有不同觀點，亦即不同薪資所得的消費族群對人因設計特徵、功能設計特徵與外觀設計特徵持不同程度的看法與認同，因此在購買傾向程度亦呈現顯著差異。

**關鍵字：**家具產品設計、消費者購買傾向

#### Abstract

The study explores the relationships between furniture product design and customer purchase trends and the differences in the furniture product design perspectives of different customer groups and their Purchase trends. The samples are total 581 people who are from Taiwan area. The research tools of the study were employed by descriptive analysis and one-way ANOVA of SPSS. An empirical analysis conducted using the Cronbach  $\alpha$  reliability test, the Pearson Correlation Analysis, and the One-Way ANOVA statistical methods yields the following findings: The  $p < .01$  result of the three furniture product design features (functional design, human factor design, and exterior design) and customer purchase trends indicates a positive correlation between the two variables. The feature which customers could highly identify with and held the highest regard is the human factor design feature, followed by the functional design feature, and the exterior design feature is rated the lowest. However, no significant difference is noted in the furniture product design viewpoints and product Purchase trends of customers who belong to different age brackets and have different educational attainments. On the other hand, it is also found that customers from different salary income brackets hold varying perspectives in



terms of product design viewpoints and product Purchase trends; likewise, customer groups of varying salary income brackets hold different degree of viewpoints and identification with the human factor design feature, functional design feature, and exterior design feature of the product; hence difference is noted in the degree of Purchase trends of each level.

**Keywords: Furniture Product Design, Customer Purchase Trends**

### **1. Introduction**

On the highly competitive global market, changes in customer demands have compelled businesses to search for new product design strategies so as to create distinction for their products and meet customer demands. Kotler and Keller (2006) perceived that design was the best thing that could provide products and services with differentiation and market positioning potential. Under a fast-paced market environment, merely relying price and technological advantages would not be enough, as design is usually the essential factor providing the companies with the needed competitive edge.

Related researches on furniture product design and customer purchase trends show that these two aspects belong to two different fields of profession. In light of which, The study shall consolidate these two essential factors, furniture product design and customer purchase trends, to analyze how furniture product designers or product developers, during the development process of new product designs, use furniture product design features to influence customer purchase trends. This is a topic worth in-depth exploration as it could provide furniture product designers or product developers with valuable reference for future new product design development. Moreover, it could also be regarded as design criteria for enhancing the new product design development efficiency of businesses.

### **2. Study Objectives**

The study aimed to understand the relationships between the customers' points of view on a furniture product design and their Purchase trends, and whether demographic statistical variables could affect changes in furniture product design perspective and customer purchase trends. The study hopes that the findings of this research could serve as a communication bridge between furniture product designers and customers, and thereafter foster stronger customer purchase trends. The primary research objectives are as follow:

- (1) To understand the relationships between furniture product design and customer purchase trends.
- (2) To understand the differences in the furniture product design perspectives of different customer groups and their Purchase trends.

### **3. Limitations**

The study was primarily designed to understand the viewpoints and attitudes behind the furniture product design Purchase trends of customers from the perspective of furniture product buyers and users; thus, the



product designs under analysis were mainly furniture product designs. This design provided a limitation to the study. Moreover, the sample collection scope of the study was limited to the customer group patronizing furniture warehouse outlets to facilitate random sampling work, thus creating another limitation to the study.

#### 4. Literature Review

##### (1) Furniture product design

According to Chiu, Hung& Chen (2008) indicated that the term furniture refers to “home implements”, and thus may be regarded as a collective noun meaning movable living props. A piece of furniture is a man-made object, produced either by hand or with the help of machinery, and the differences in its design concept, material, and functions create its distinctive style. It may then be used widely to serve the dining, storage, living, and relaxation needs of its users. Hence, it is imperative for all furniture product designers to understand the demands of these users in order to satisfy the usage habits of customers from different walks of life and produce a product that they could successfully market.

The term “design” refers to the overall features of a product required by a customer and shapes the exterior appearance, functional features, and problem-solving qualities of a product. According to Nussbaum (1988), a product design is a creative strategy that could foster the competitive edge of a business enterprise in a market. McDonagh, Bruseberg and Haslam (2002) classified the functions of design into specific functions, such as practical applications of the product, human factors engineering, and the ability to project an aesthetic sense.

Nixon (1998) and Walsh (1995) classified human factors engineering under the umbrella of the product design. On the other hand, Nussbaum (1988) propounded that product design plays a significant role in conveying product usage and operating procedures to the customer, since product design is the interplay and coordination of the surface configurations and elements of a product that enhances the functional and economic benefits of the product and, at the same time, delights the customer. Hence, in the interaction between people and objects, it serves as a communication link that could directly influence customer behavior, such as, the product functions, operation, and exterior appearance and the intentions and preferences of a customer. In another research, Veryzer (1995) proposed the following product design perspectives:

- a. Functional perspective: The functional perspective of product design mainly expresses a physical form and configuration; it determines the manner by which an object may be put to use.
- b. Informational perspective: the informational perspective uses visual and image leads to help people understand the purpose and operation or usage of an object, thus enhancing the interaction between the user and the object.
- c. Aesthetic perspective: The aesthetic perspective of a design is a kind of aesthetic response that the exterior appearance of a product may elicit from customers. Aesthetic response is defined as the interactive feedback customer perceptions to the exterior appearance of an object.



In a furniture product design study conducted, Chang and Hsu (2005) classified product design features under three categories: functional feature, exterior design feature, and operational feature. It was apparent from this classification that there is a positive interactive relationship between the exterior appearance of a product and product perception of customers. In a study conducted by Page and Herr (2002) on the product preference and quality of customers, product design was classified into the following aspects: product functions and exterior appearance of product.

(2) Customer purchase trends

At present, the customer behavior model has developed a more sophisticated model, the EKB customer behavior model proposed by Engel, Kollat and Blackwell (EKB) in 1968. This model was amended in 1984. The EKB customer behavior model explores the decision making process of a customer through the customer's behavior, and this decision making process is the core of the EKB customer behavior model study. It is composed of five essential stages:

a. Problem Recognition Stage

Problem recognition is spurred by internal and external stimuli. A problem is recognized when people begin to feel there is a difference between the actual situation and the ideal situation, and thus a need is born.

b. Information Search Stage

Once a customer need is born, the quest for information pertaining to that need begins. The customer begins to search for the needed information within his or her memory and external sources to find a solution to the problem, and ultimately, achieve a satisfaction of that need.

c. Information Evaluation

The customer evaluates different options available and determines the feasibility of an option based on his or her personal intentions, preferences, attitude, needs, and criteria to find the option that could best satisfy his or her needs.

d. Decision

Once all options have been evaluated, the customer starts to decide on which to purchase.

e. Outcome

When the customer finds a product design that meets his or her personal needs, emotionally, he or she feels a sense of satisfaction and stores that sense of satisfaction with the product into memory. That memory shall become a stored reference of a future purchase decision he or she would make. On the contrary, if the customer feels dissatisfied with a product, it would affect his or her next purchasing behavior.

The information search and outcome stages are the stages in which both the product designer and the customer should communicate and reach an agreement. The product designer needs to understand the customer's preferences and needs for certain product qualities in order to design a product that the customer would fancy, and thus, foster the Purchase trends of the customer. The customer would then develop the intent to take action and buy the product.



Schiffman and Kanuk (2000) deemed that Purchase trends measures the probability that a customer may purchase a particular problem, or in other words, the degree of a customer’s inclination to use the product. Furthermore, Swinyard (1993) measured the Purchase trends through the time the customer spent in search for product information, the priority order by which the customer samples the product, and the probable priority order by which customer plans to sample the product. In certain studies, Boyd and Mason (1999) and Fisher and Linda (1992) measured the Purchase trends through the length of time at which the customer has intended to purchase a particular product. If the customer wants to make a purchase immediately, it means Purchase trends are very strong. If customer makes the purchase a year later, Purchase trends is about middling, and if the customer makes the purchase three years later, a weak Purchase trends is indicated.

Furthermore, Lo & Fang (2006) also propounded another theory in customer purchase decision-making process and stages. They deemed that the decision-making process of a customer includes the following five stages: problem determination, information search, situation evaluation, decision, and after-purchase behavior. It is apparent that an important step in the decision-making process of a customer is whether the degree of Purchase trends would influence the decision of customer to make a purchase and act on it.

## 5. Research Methodology

### (1) Research Design

#### a. Research Framework

The study mainly explores the relationships existing between “furniture product design” and “customer purchase trends” and the differences in the furniture product design perspectives of different customer groups and their Purchase trends. Research framework is as illustrated in Figure1.

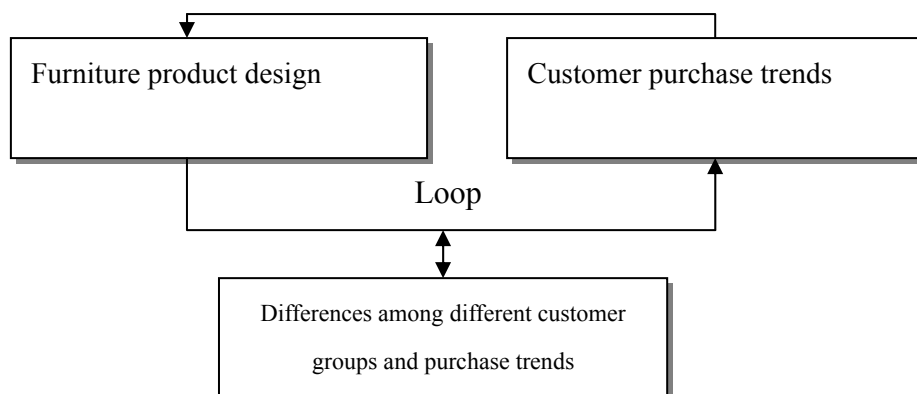


Figure 1 The research framework between “furniture product design” and “customer purchase trends” from the differences in the furniture product design perspectives of different customer groups and their Purchase trends

b. Research Hypotheses

According to Yamamoto and Lambert (1994), product design can cheer up a person and foster a positive preference and assessment from a customer. The discussions presented in the aforementioned studies showed that furniture product design has a positive influence on the product assessment and decision of a customer at the time of purchase. The study infers that product design features may influence the customer purchase trends. Moreover, the study also explores the background variables of the customer, such as age, educational attainment, and salary income, to understand the differences in the customer purchase trends towards a furniture product design of different customer groups. In light of which, the study presents the following hypotheses:

H<sub>1</sub>: A positive correlation exists between furniture product design and customer purchase trends.

H<sub>1-1</sub>: A positive correlation exists between the functional design features, human factor design features, exterior design features and the customer purchase trends.

H<sub>2</sub>: There is a difference in the Purchase trends elicited by furniture product designs from different customer groups.

H<sub>2-1</sub>: There is a difference in the Purchase trends elicited by furniture product designs from customers of varying age brackets.

H<sub>2-2</sub>: There is a difference in the Purchase trends elicited by furniture product designs from customers of varying educational attainments.

H<sub>2-3</sub>: There is a difference in the Purchase trends elicited by furniture product designs from customers of varying salary income brackets.

c. Operation, Definition, and Measurement of the Research Variables

(a). Product design

A summary of the analysis and discussions conducted on furniture product design in the previous studies would reveal that many researchers explained the implications and nature of designs through the functions and aesthetic perspectives of a furniture product design. The study following the design functions presented by McDonagh, Bruseberg and Haslam (2002) may be divided into specific functions – including actual properties of the product, human factors engineering, the aesthetic functional perspective relayed by the product, and the perspectives of the researchers of aforementioned studies. A general compilation showed that the main area of research of the study covers the furniture product design aspects; that is functional design feature, human factor design feature, and exterior design feature.

a) Functional design feature:

The functional perspective of product design mainly indicates that the functions of a particular product may provide users with usage convenience, structural simplicity, multiple purposes, and a solution to problems.

b) Human factor design feature:

The term refers to the employment of design to upgrade user efficiency, to enhance user's



understanding of the product, and to reduce the psychological burden of the user whenever product is used. These features include safety, comfort, and easy-to-operate features.

c) Exterior design features:

The term refers to the employment of design to attract customer purchases through the exterior appearance and features of the product. These features include style, color, dimensions, and material.

(b).Customer purchase trends

The study, following the contention of Schiffman and Kanuk (2000) on customer purchase trends defines the customer purchase trends as the measurement of the probability by which a customer may purchase a particular product and the degree of a customer's inclination towards buying the product. The study measured the differences in customer purchase trends using the following demographic statistics variables: age bracket, educational attainment, and salary income.

(c).Demographic statistics variables

In the cause-effect structural model presented by Korgaonkar, Lund and Price (1985), demographic statistics variables, such as age, income, and ethnic grouping would affect the purchasing behavior of a customer. Kotler (1998) divided demographic statistical variables into ten variables; namely, age, gender, family size, family life cycle, income level, profession, education, religion, ethnic group, and nationality. Since The study mainly explores the differences in the Purchase trends of customers purchasing a furniture product towards certain product design features, the study has compiled and used the following demographic variables - age bracket, educational attainment, and salary income bracket – to measure the differences in the Purchase trends of customers towards certain product design features.

(2) Research subjects

As the study explores the relationships between furniture product design and customer purchase trends, the scope of the study revolves around the different types of furniture products. In light of which, The study chose customer groups patronizing furniture product warehouse outlet as the subjects of this research to facilitate the random selection of sample subjects for the study.

(3) Questionnaire design and execution

The study employed the questionnaire survey method as the main research data gathering tool. A compilation of data gathered from related studies provided the principles for the variable operation and definition and the questionnaire examination of the study. The expert panel conducted an interview to verify the meaning of the questionnaires; thereafter, 100 pretest questionnaires were produced for proper adjustments and amendments. Thus, the amended questionnaire would possess a certain degree of content validity. Moreover, the Cronbach's  $\alpha$  value of each aspect of the study is greater than 0.7, as shown in the following table. According to the recommended standards of Nunnally (1995), Cronbach's  $\alpha$  value which is greater than 0.7 may indicate that the questionnaire contents possess a high degree of



reliability; thus, we started to distribute the official questionnaire. A total of 650 questionnaires were distributed; 69 were cancelled and invalidated, thus leaving a total of 581 valid questionnaires for analysis and study. The questionnaire was designed to contain two parts. The first part contains the background information of the individual; such as the gender, age bracket, educational attainment, and salary income bracket of the respondent. The second part contains the questions pertaining to the sense of identification and viewpoints of the respondent on the functional design feature, human factor design feature, and exterior design feature of the product design. The Likert five-point scale (1 point for “strongly disagree”, 2 points for “disagree”, 3 points of “undecided”, 4 points for “agree”, and 5 points for “strongly agree”) was used to quantify customers’ sense of identification and viewpoints regarding furniture product design and the extent of their Purchase trends.

## **6. Results Statistics and Analysis**

### **(1) Results of Narrative Statistical Analysis**

The sample structure of the study is as shown in Table 1. All of the 581 respondents expressed a sense of identification with the furniture product design and gave “agree” (4 points) and “strongly agree” (5 points) responses. As shown in Table 3, the mean value for the functional design feature is 4.3, the mean for human factors design feature is 4.6, and mean for exterior design feature is 3.9. The data indicate that customers hold the highest concern for human factors design feature, followed by functional design feature, with exterior design feature falling last in their concerns. The results manifest that the degree of influence of human factor design feature, functional design feature, and exterior design feature on the Purchase trends of customers purchasing furniture products will be as in the order of its presentation. Furthermore, customers always regard human factor design feature, functional design feature, and exterior design feature to be the three product design features they need to consider when making a purchase.





Table 1 Analysis of the Sample Demography

Demographic Variables		Sample Size (n=581)
Gender	Male	181
	Female	400
Age bracket	Under 20 years old	225
	20 - 29 years old	198
	30 – 39 years old	92
	40 years old and above	66
Educational attainment	Junior high school or lower	46
	Senior or vocational high school	68
	Junior college graduate	68
	College graduate	331
Salary income	Masters graduate or higher	68
	Under NT\$20,000	90
	NT\$20,000 - NT\$29,000	243
	NT\$30,000 - NT\$39,999	68
	NT\$40,000 - NT\$49,999	112
	NT\$50,000 and above	68

Table 2 Questionnaire Reliability Analysis

Item	Cronbach's $\alpha$ Value
Furniture product design	.883
Customer purchase trends	.851

- (2) Questionnaire reliability analysis includes two parts, which are Furniture product design and Customer purchase trends. The reliability value of the questionnaire part for furniture product design is .883. The reliability value of the questionnaire Customer purchase trends is .851.

Table 3 Degree of Customer Preference for the Furniture Product Design

Furniture product design	Mean	Std. Deviation
Functional design feature	4.3	.55
Human factor design feature	4.6	.47
Exterior design feature	3.9	.65

- (3) Determining the Pearson Correlation Test on the Functional Design Feature, Human Factor Design Feature, and Exterior Design Feature

The study employed the Pearson correlation coefficient as the empirical proof for determining the



relationships between the functional design feature, human factor design feature and exterior design feature and the customer purchase trends. (For details, please see Table 4). It was learned that the relative coefficient of functional design feature, human factor design feature, exterior design feature and customer purchase trends is  $p < .01$ , indicating a significant positive correlation between the two aspects. Hence, from the relative coefficient analysis, it is apparent that the relative coefficient of Purchase trends vis-à-vis human factor design feature is highest at 0.863, followed by functional design feature at 0.851, and exterior design feature at 0.793. Apparently the three product design features and customer purchase trends are correlated, thus supporting Hypothesis H<sub>1</sub>-1 of the study.

Table 4 The Pearson Correlation Test on the Functional Design Feature, Human Factor Design Feature, and Exterior Design Feature and the Customer purchase trends

		Customer Purchase trends	Functional design feature	Human factor design feature	Exterior design feature
Customer purchase trends	Pearson Correlation	1			
	p value	.			
Functional design feature	Pearson Correlation	.851(**)	1		
	p value	.000	.		
Human factor design feature	Pearson Correlation	.863(**)	.742(**)	1	
	p value	.000	.000	.	
Exterior design feature	Pearson Correlation	.793(**)	.392(**)	.451(**)	1
	p value	.000	.004	.001	.

Note: \* stands for  $p < .05$ ; \*\* stands for  $p < 0.01$

(4) One-Way ANOVA

Results of the analysis on age brackets and customer purchase trends through the One-Way ANOVA test did not reach a level of significant difference, as shown in Table 5,  $F(3, 577) = 11.773$  and  $p = .423 > .05$ . This indicates that customers of different age brackets maintain similar views in terms of functional design feature, human factor design feature, and exterior design feature; no significant difference could be noted. It was perceived that viewpoints on functional design feature, human factor design feature, and exterior design feature would not vary with age; however, Purchase trends towards product design feature manifested a difference. These empirical results do not support Hypothesis H<sub>2</sub>-1 of the study. The empirical results indicate that the ages of customers would not influence their Purchase trends towards product design feature; in other words, all customers pay the same serious attention to the product design feature.

Table 5 One-Way ANOVA Test on Age Brackets and Customer purchase trends

Source	Type III Square	Degree of Freedom	Mean Square	F Test	Significance (p value)	Net Correlation Eta Square
Amended mode	6.597(a)	3	2.199	11.773	.423	.057
Age brackets	6.597	3	2.199	11.773	.423	.057
Deviation	107.816	577	.204			

a R Squared = .057 (Adjusted R Squared = -.002)

Note:  $p < .05$ ; significant difference



The One-Way ANOVA test on the educational attainment and Purchase trends of customers, as shown in Table 6, produced  $F(4, 576) = 15.367$  and  $p = .298 > .05$ ; analysis results did not reach significant difference. This indicates that customers of different educational attainment maintain similar views in terms of functional design feature, human factor design feature, and exterior design feature; no significant difference could be noted. It is perceived that viewpoints on functional design feature, human factor design feature, and exterior design feature would not vary with educational attainment; however, in the matter of Purchase trends towards product design, a difference was manifested. These empirical results do not support Hypothesis H<sub>2</sub>-2 of the study. The empirical results indicate that the educational attainment of customers would not influence their Purchase trends towards product design feature; in other words, all customers pay the same serious attention to product design feature.

Table 6 One-Way ANOVA Test on Educational Attainment and Customer purchase trends

Source	Type III Square	Degree of Freedom	Mean Square	F Test	Significance (p value)	Net Correlation Eta Square
Amended mode	11.014(a)	4	2.753	15.367	.298	.096
Educational attainment	11.014	4	2.753	15.367	.298	.096
Deviation	103.399	576	.200			

a R Squared = .097 (Adjusted R Squared = .021)

Note:  $p < .05$  significant difference

The One-Way ANOVA test on the salary income and Purchase trends of customers, as shown in Table 7, produced  $F(4, 576) = 55.755$  and  $p = .001 < .05$ . The empirical results of the analysis reached significant difference. A further Post Hoc comparison test was conducted thereafter, and the Bonferroni Follow-up was used for a multiple comparison of the different salary income brackets. Data in Table 8 indicate that customers of different salary income brackets hold different viewpoints on functional design feature, human factor design feature, and exterior design feature, and a significant difference is noted. This indicates that viewpoints on functional design feature, human factor design feature, and exterior design feature would vary in different salary income brackets; moreover, a difference was likewise manifested in the matter of customer purchase trends towards product design feature. These empirical results support Hypothesis H<sub>2</sub>-3 of the study. Table 9 clearly shows that customers belonging to the “under NT\$20,000” salary income bracket posted a mean of 3.8, those of the 29,999 bracket posted a mean of 4.1, and those of the “50,000 and above” salary bracket posted a mean of 4.7. This means that salary income of customers would influence a huge difference in their Purchase trends towards product design feature; in other words, customers of higher income brackets and customers of lower income brackets would hold different viewpoints and preferences in terms of product design feature, and thus, their Purchase trends for a particular product would vary.



Table 7 One-Way ANOVA Test on Salary Income and Customer purchase trends

Source	Type III Square	Degree of Freedom	Mean Square	F Test	Significance (p value)	Net Correlation Eta Square
Amended mode salary income	33.044(a)	4	8.761	55.755	.001	.293
Deviation	81.368	576	.157			

a R Squared = .292 (Adjusted R Squared = .232)

Note: p value < .05 significant difference

Table 8 Bonferroni Follow-up Test on Salary Income

	(I) Salary income	(J) Salary income	Significance	95% Confidence Interval	
			(p value)	Minimum	Maximum
Bonferroni	Under NT\$20,000	NT\$20,000 - 29,000	1.000	-.5603	.3808
		NT\$30,000 - 39,999	.177	-1.1527	.1020
		NT\$40,000 - 49,999	1.000	-.6185	.4895
		NT\$50,000 and above	.017*	-1.3533	-.0935
	NT\$20,000 - 29,000	Under NT\$20,000	1.000	-.3927	.5722
		NT\$30,000 - 39,999	.210	-.9742	.1021
		NT\$40,000 - 49,999	1.000	-.4183	.4693
		NT\$50,000 and above	.014*	-1.1687	-.0955
	NT\$30,000 - 39,999	Under NT\$20,000	.187	-.1033	1.1527
		NT\$20,000 - 29,999	.217	-.1002	.9724
		NT\$40,000 - 49,999	.275	-.1401	1.0627
		NT\$50,000 and above	1.000	-.8692	.4766
	NT\$40,000 - 49,999	Under NT\$20,000	1.000	-.4858	.6177
		NT\$20,000 - 29,999	1.000	-.4701	.4187
		NT\$30,000 - 39,999	.278	-1.0627	.1403
		NT\$50,000 and above	.033	-1.2595	-.0565
	NT\$50,000 and above	Under NT\$20,000	.018*	.0917	1.3524
		NT\$20,000 - 29,999	.014*	.0955	1.1677
		NT\$30,000 - 39,999	1.000	-.4667	.8600
		NT\$40,000 - 49,999	.024	.0547	1.2503

Based on observed means.

Note: p < .05 significant difference in mean

Table 9 A Descriptive Analysis of the Correlation between Salary Income Bracket and Customer purchase trends

Salary Income	Mean	Standard Deviation
1 Under NT\$20,000	3.8	.10812
2 NT\$20,000 - NT\$29,999	4.1	.47751
3 NT\$30,000 - NT\$39,999	4.5	.45375
4 NT\$40,000 - NT\$49,999	4.1	.35760
5 NT\$50,000 and above	4.7	.22739
Total	4.2	.45085



## 7. Conclusion and Recommendations

The research findings indicate the following:

- (1) A positive correlation exists between the functional design features, human factor design feature, exterior design feature and the customer purchase trends. This indicates that customers, when buying a furniture product, would all identify that the three furniture product design features have a positive correlation with Purchase trends.
- (2) Customers value the human factor design feature most highly, functional design feature next, and exterior design feature last. Tests indicate that customers, when buying a furniture product, seriously regard the furniture product design and value them in the following order: human factor design feature, functional design feature, and exterior design feature last.
- (3) The differences in the ages of customers buying a furniture product would make no significant difference on their Purchase trends towards furniture product design features. In other words, customers of all ages hold a serious regard for product design features and their ages would not change or give them a different perspective on the matter.
- (4) The educational attainment of customers would not influence a significant difference on their Purchase trends towards product design features, as customer all hold the same serious regard for furniture product design features. This indicates that the educational attainment of customers would not change or give them a different regard for furniture product design features.
- (5) The salary income level of customers would cause a difference in their Purchase trends towards furniture product design features. In short, customers of different salary income brackets hold different viewpoints on the product design features of furniture, and thus their Purchase trends would also differ. This is especially true among customer groups belonging to the “under NT\$20,000” salary income bracket and customer groups belonging to the “50,000 and above” salary income bracket. The product design feature perspectives and Purchase trends of these two types of customer groups differ vastly. In short, customers of higher income brackets and customers of lower income brackets would hold different viewpoints and preferences on human factor design feature, functional design feature, and exterior design feature, and thus, their Purchase trends for a particular product would be expressed in varied degrees.

A summary of the above would recommend that furniture product designers or product developers should use the three product design features - human factor design feature, functional design feature, and exterior design feature – as their design criteria during the development of a furniture product design; at the same time, they should include them into the product design process. Moreover, they should also give priority to human factor design feature in the design considerations, as such has the most influences on customer purchase trends, followed by functional design feature, and last, the exterior design features. Thus, they could enhance the Purchase trends of customers, upgrade the level of satisfaction elicited, and achieve the new product development objectives of the business enterprise.

As the study is a preliminary investigation, it is recommended that future studies in this area be conducted with a wider range and greater quantity of samples to obtain a more accurate set of study results. On the other



hand, the study mainly explored the Purchase trends perspective of customers for a particular product design based on the furniture product purchasing experiences of customers; hence, future studies could further classify furniture products, as there is a wide variety of furniture product types in the market, and obtain a more precise understanding of the subject matter.

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