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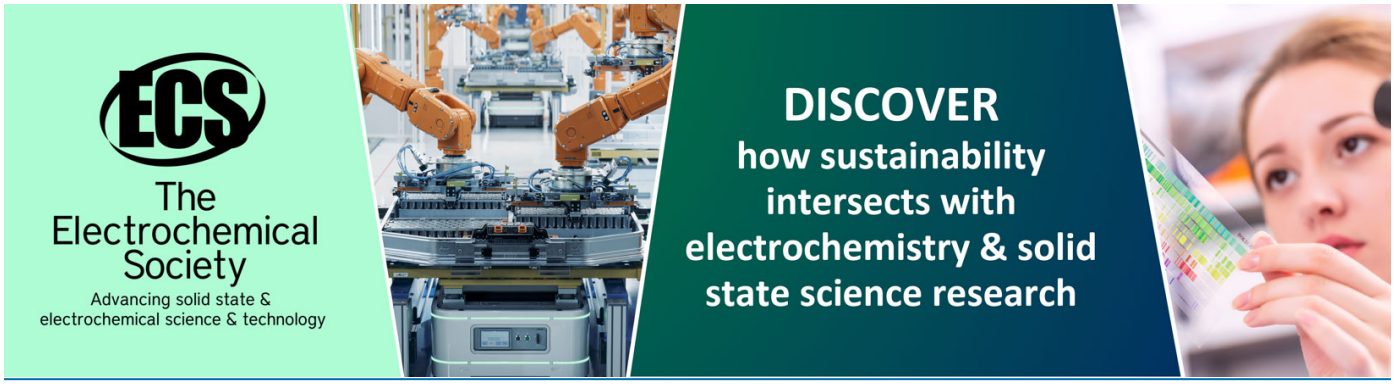


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# Research on the Perceived Value of College Students for Knowledge-Paying Products

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**Abstract.** In recent years, the rapid development of the knowledge payment industry has been widely concerned. Based on the current situation of college students' perceived value to customers of knowledge-paying products, the paper collected 395 valid questionnaires by questionnaire survey method, exploring the effect of perceived value on satisfaction and purchase intention. The results show that the main factor that affects consumers' intention to buy online knowledge-paying products is perceived value. Among them, functional value, emotional value, and social value all have positive and significant effects on the purchase intention, and the higher the perceived value and satisfaction are, the stronger the purchase intention is. In the perceived value, functional value has the most significant effect on the purchase intention.

## 1.Introduction

Since 2016, Zhihu, Himalayan FM and Dedao, and other knowledge payment platforms have emerged one after another. The knowledge-paying users have rapidly increased and the knowledge payment industry has begun to show a blowout development trend[1]. While the knowledge payment industry has been booming in recent years, relatively few studies have been done.

Therefore, the paper is of certain reference significance for the theoretical research of knowledge payment industry. Based on the big background of knowledge payment blowout development, the paper studies the perceived value, which the purchase intention and satisfaction of knowledgepaying products based on, of knowledge-paying products for college students. In order to improve the value of customer perception for enterprises in the knowledge payment industry, thus putting forward suggestions on the purchase intention and satisfaction.

## 2.Literature discussion

### *2.1 Online knowledge payment*

The essence of knowledge payment is to turn knowledge into a service and to realize its commercial value by selling knowledge products or services[2]. The online knowledge-paying product is to get rid of the original network information overload and uneven content environment， which assists consumers selecting information efficiently and learns about the relevant knowledge of new network of goods or services by means of classes, lectures or other paying reading[1].

### *2.2 Perceived value*

Customer perceived values considered that "customer satisfaction depends on their perceived value"[3]. Based on Sweeney & Soutar (2001), the research proposed the dimensions of perceived

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value, and classified customer perceived value into emotional value, social value and functional value. Emotional value is the function of the emotional or emotional state obtained from the product; Social value is the function of promoting self-social perception obtained from the product; Functional value is the function of the expected performance and perceived quality obtained from the product[4]. Past researches have shown that the higher the perceived value is, the stronger the intention of consumers buying products or services is[5]; at the same time, there are also a number of researches have shown that perceived value affects consumer satisfaction[6]. Combined with the above literature, the research proposes the following assumptions:

H1: (a) functional value, (b) emotional value, and (c) social value have a significant effects on purchase intention.

H2: (a) functional value, (b) emotional value, and (c) social value have a significant effects on satisfaction.

### *2.3 Satisfaction and purchase intention*

Customer satisfaction is the degree of comparison between the actual feelings of customers receiving knowledge-paying products and services and their expectations[7]. However, purchase intention refers to the probability that consumers will eventually be able to take action on knowledge-paying products or services, which is manifested as consumers' behavioral tendency towards certain things[8]; Past researches have shown that satisfaction has a significant and positive effect on consumers' purchase intention. Also, there is an intermediary effect on perceived value and purchase intention[9-10]. Combined with the above literature, the research proposes the following assumptions:

H3: satisfaction has a significant effect on the purchase intention.

H4: (a) the higher the functional value, (b) the emotional value, (c) and the social value are, the higher the satisfaction is, and then affecting the purchase intention.

## 3.Research methods

On the basis of literature collection and review, the research used questionnaire survey method and the Likert 5 point scale in designing questions. The respondents were domestic college students, and the scope of the survey was limited to those who had known or used knowledge-paying products. Also, the pre-survey and formal questionnaire of the research were conducted by online survey. A total of 33 valid questionnaires were collected in the pre-survey, and the cronbach's α coefficient for all variables were more than 0.7, which had certain credibility. A total of 689 questionnairs formal questionnaires were collected and the number of valid questionnaires was 395. Among them, 38.2% were men and 61.8% were women. Most respondents had potential knowledge-payment requirements (57.47%) and had access to knowledge-paying products for more than six months (57.47%); And the average monthly income was between1000-2000 (67.59%).

## 4.Analysis results

### *4.1 Analysis of reliability and correlation*

As can be seen from table 1 and table 2, cronbach's α> 0.7 for all variables, total item correlation > 0.5, factor load > 0.7, component reliability > 0.7, ave > 0.5, which show that the variable test has a high internal consistency and good convergence efficiency. Table 3 shows that the ave is higher than the relative coefficients between variables, which is after extracting a root, showing that there are good different effects between the variables.

Table 1 reliability

| Constructs & items | Internal reliability | |
|---|---|---|
| | Cronbach's α | Item-total correlation |
| **Social value (m = 3.017)** from Sweeney (2001) [4] | | |
| SOC1: make a good impression on | .922 | .816 |

| Constructs & items | Internal reliability | |
|---|---|---|
| | Cronbach's α | Item-total correlation |
| others | | |
| SOC2: help me get social recognition | | .828 |
| SOC3: win admiration of people around me | | .831 |
| SOC4: help me build a good personal image | | .805 |
| **Functional value (m= 3.548)** from Sweeney (2001) [4] | | |
| FUN1: value for money | .863 | .667 |
| FUN2: very helpful to me | | .763 |
| FUN3: quality is trustworthy | | .662 |
| FUN4: make learning better | | .694 |
| FUN5: satisfy learning of certain knowledge | | .642 |
| **Emotional value (m = 3.300)** from Sweeney (2001) [4] | | |
| EMO1: makes me pleasant | .863 | .748 |
| EMO2: it's an interesting thing | | .810 |
| EMO3: meet my psychological needs | | .667 |
| **Purchase intention (m = 3.330)** from Zeithaml(1988) [11] | | |
| INT1: want to buy or use products | .861 | .713 |
| INT2: the likelihood of buying products is high | | .754 |
| INT3: willing to continue using or buying products | | .715 |
| INT4: plan on buying or using products frequently | | .650 |
| **Satisfaction (m = 3.450)** from Olliver(1981) [12] | | |
| SAT1: overall, feel satisfied with it | - | - |

Table 2 convergent validity

| Constructs & items | Convergent validity | | |
|---|---|---|---|
| | Factor Loading | Composite reliability | AVE |
| **Social value (m = 3.017)** from Sweeney (2001) [4] | | | |
| SOC1: make a good impression on others | .898 | .945 | .811 |
| SOC2: help me get social recognition | .905 | | |
| SOC3: win admiration of people around me | .907 | | |
| SOC4: help me build a good personal image | .891 | | |
| **Functional value (m = 3.548)** from Sweeney (2001) [4] | | | |
| FUN1: value for money | .795 | .907 | .660 |
| FUN2: very helpful to me | .881 | | |
| FUN3: quality is trustworthy | .792 | | |
| FUN4: make learning better | .818 | | |
| FUN5: satisfy learning of | .772 | | |

| Constructs & items | Convergent validity | | |
|---|---|---|---|
| | Factor Loading | Composite reliability | AVE |
| certain knowledge | | | |
| **Emotional value (m = 3.300)** from Sweeney (2001) [4] | | | |
| EMO1: makes me pleasant | .893 | .917 | .786 |
| EMO2: it's an interesting thing | .924 | | |
| EMO3: meet my psychological needs | .841 | | |
| **Purchase intention (m = 3.330)** from Zeithaml(1988) [11] | | | |
| INT1: want to buy or use products | .845 | . 906 | . 707 |
| INT2: the likelihood of buying products is high | .872 | | |
| INT3: willing to continue using or buying products | .846 | | |
| INT4: plan on buying or using products frequently | .798 | | |
| **Satisfaction (m = 3.450)** from Olliver(1981) [12] | | | |
| SAT1: overall, feel satisfied with it | - | - | - |

Table 3 differential validity

| Constructs | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. SOC | **.901** | | | | |
| 2. FUN | .431** | **.812** | | | |
| 3. EMO | .576** | .601** | **.887** | | |
| 4. SAT | .324** | .530** | .445** | **1.** | |
| 5. INT | .290** | .533** | .488** | .534** | **.841** |

Note: The square root of AVEs is shown in bold on the diagonal of the matrix and diagonal elements are the association between constructs.

*4.2 Hypothesis test*

Regression analysis shows that the functional value ($\beta = 0.533$, $p < 0.001$), emotional value ($\beta = 0.488$, $p < 0.001$) and social value( $\beta = 0.290$, $p < 0.001$) in perceived value both have positive and significant effects on the purchase intention. So H1 (a), H1 (b) and H1 (c) are supported, that is, the higher the functional value, emotional value and social value are, the higher the purchase intention is. At the same time, functional value ($\beta = 0.530$, $p < 0.001$), emotional value ($\beta = 0.445$, $p < 0.001$) and social value($\beta = 0.324$, $p < 0.001$) in perceived value are also have positive and significant effects on satisfaction. So H2 (a), H2 (b), H2 (c) are supported, that is, the higher the functional value, emotional value and social value are, the higher the satisfaction is.

In addition, satisfaction has a positive and significant effect on the purchase intention ($\beta = 0.534$, $p < 0.001$), so H3 is supported, that is, the higher the satisfaction is, the higher the purchase intention is. However, after adding satisfaction, the impact of functional value ($\beta = 0.348$, $p < 0.001$), emotional value ($\beta = 0.313$, $p < 0.001$) and social value ( $\beta = 0.130$, $p < 0.001$) remain significant, but the coefficient value is lower than that without the addition of satisfaction. Also, the f values are 156.016, 123.150 and 35.971 respectively and the vif values are between 1.000-1.390, 1.000-1.247 and 1.000-1.117 respectively. Therefore, in the absence of a multicollinearity problem, it can be judged that satisfaction has some intermediary effects between perceived value (functional value, emotion value

and social value) and purchase intention. So H4(a),H4(b) and H4(c) are both supported, that is, the higher the perceived value (functional value, emotional value and social value) are, the higher the satisfaction is. Therefore, the purchase intention is positively and partly affected.

Finally, under the premise that the previous assumptions are true, the multivariate regression analysis of the purchase intention of three dimensions (functional value, emotional value and social value) of perceived value, functional value($\beta = 0.380$, $p < 0.001$) has the most significant effect on purchase intention. Also, the adjusted interpretation force of mode is 32.4% and the f value is 63.957 and the vif value is between 1.522-1.942, which do not have multivariate collinear problem.

## 5.Conclusion

Since knowledge-paying products are different from the previous free access to information at the Internet, the research concluded that users (college students) focus on functional value in their perceived value, which indicate that the satisfaction and purchase intention are more dependent on the functional utility of knowledge-paying products. Therefore, for enterprises in emerging industry, to develop products that meet users' needs and to enable consumers to perceive their effective functions is the key to consumer satisfaction and purchase intention. In addition to enhancing the emotional value and social value of users' perceived value, enterprises can improve users' satisfaction and then users' purchase intention. Future research suggests increasing the surveys of different consumer groups and expanding the survey scope, combined with the development process of this industry, so as to promote the sustainable development of relevant researches.

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