Research on the Impact of Customer Perceived Value of Remanufactured Products on Purchase Intention

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Abstract: Remanufacturing is an environmentally-friendly and energy-saving production concept and manufacturing technology, but it is low in China's consumer level. Therefore, it is especially important to explore the factors that Chinese consumers purchase remanufactured products. This paper uses empirical methods to analyze the impact of perceived value on the purchase intention of remanufactured products and the adjustment of consumer psychological variables. Studies have shown that: (1) the lack of perceived gains and the exaggeration of perceived gains and losses have a negative impact on purchase intention. (2) The degree of price sensitivity and risk avoidance play a regulatory role between perceived value and purchase intention. The higher the price sensitivity and risk aversion, the more obvious the effect of perceived profit on purchasing intention. Finally, management proposals for the development of the remanufacturing market have been proposed for governments and remanufacturing companies.

Key words: Remanufacture, perceived value, purchase intention, price sensitivity, risk avoidance.

1. Introduction

As resources become increasingly depleted and the environment continues to deteriorate, energy conservation and environmental protection have become a global concern. As an industry with high resource consumption and high pollution emissions, how to respond to the wave of green manufacturing has become an important issue. Based on the concept of green, energy saving and environmental protection, remanufacturing has developed into an advanced technology for large-scale repair, transformation and performance upgrade of eliminated equipment and components (Hongdan Zhang, 2011). The remanufacturing industry in developed countries is very mature and has formed a complete upstream and downstream industrial cluster. China's remanufacturing industry is currently in its infancy, and there are still many obstacles to its development in China. Most Chinese consumers are not aware of remanufactured products. Judging by subjective feelings, the quality of remanufactured products is not as good as new ones, and they are regarded as "refurbished products" or "second-hand products" (Shihua Ma, 2006). This ubiquitous cognitive misunderstanding has greatly affected the development of China's remanufacturing industry and the marketing of remanufactured products. Therefore, studying factors affecting consumers' purchasing intentions is crucial to promoting the development of the remanufacturing industry. In view of the widespread dissatisfaction and disapproval of remanufactured products by Chinese consumers, this paper attempts to pass the consumer's perceived value from the perspective of consumers, combining the research and perceptual value theory of predecessor purchase intentions. To obtain consumers' overall
evaluation of remanufactured products and to predict purchase behaviour.

2. Literature Review

2.1. Perceived Value

Customer perceived value analysis originated in Porter (1985), who pointed out that consumers only buy the product when they feel the value that the company provides to them. Since then, many scholars have interpreted the perceived value from different angles, which are summarized as follows: (1) Although the definition of perceived value is different, the mainstream view is that the perceptual value proposed by Zeithaml (1988) is divided into perceptual gain and perceived gain and loss. Dimensions. He defines perceived profit as the product attributes and performance perceived by consumers in the process of purchasing and using products, and defines perceived profit and loss as the total cost of purchasing products, such as purchase price, acquisition cost and time spent. [1] (2) The connotation of perceived value is gradually deepened, not only limited to the two levels of quality and price. Carothers (1991) proposed that perceptual quality should include quality of service in addition to product quality [2]. With the development of green economy and ecological economy, green value is also included in the elements of perceived value.

2.2. Purchase Intention

Will is a concept in the field of psychology, referring to the subjective feelings of an individual about a particular behavior. The consumer's willingness to purchase consists of the consumer's own attitude toward the product and the role of external factors. Ajzen (1970) and others believe that consumers buy products based on their own willingness to purchase products, and only purchases will be taken if they have the willingness to purchase [3]. Therefore, the consumer's willingness to purchase is the premise and basis of the purchase behavior, and the purchase behavior is driven by the willingness to purchase. The willingness to purchase can be seen as a subjective tendency of consumers to choose a product, which can be used as an indicator to predict whether a consumer has purchased behavior (Sebastian Bamberg, 2003).

2.3. Consumer Psychological Variables

Previous studies have shown that consumer psychological variables have a significant impact on purchase intentions (Gandal, 2001; Ceylana, 2014), and price sensitivity and risk aversion are two typical variables in the field of consumer behavior. Goldsmith (2005) argues that price sensitivity is the degree of consumer response to product price volatility [4]. The main influencing factors include product differentiation, consumer subjective differences, and consumer product knowledge. Different consumers have different price sensitivities, while consumers are different. The price sensitivity of the types of goods is also different. For consumers of commodities such as daily necessities, the price sensitivity of consumers is low, and the price changes of daily necessities will not directly cause consumers to increase or decrease their purchase behavior; for consumers of durable goods such as automobiles, the price is more sensitive, depending on the price of durable goods. Fluctuations adjust your buying behavior. Hofstede (2005) defines the degree of risk aversion as “the degree of perception of the potential threats contained in a situation where uncertainty exists. [5]” The higher the risk aversion of consumers, the higher the accuracy of the product and the tolerance for ambiguity. The lower the degree. The utility of goods and services perceived by customers with different levels of risk aversion is different (Gupta, 2004). Perceived value is the overall utility evaluation of products made after the customer comprehensively analyzes the perceived profit and perceived profit and loss of the product. (Zeithaml, 1988), it can be seen that the degree of risk aversion is different, and the perceived value of consumers for remanufactured products will be different [6].
3. Theoretical Model and Research Hypothesis

In view of the characteristics of the above remanufactured products and the classification criteria of the previous literature, this paper divides the perceived profit of remanufactured products into perceived quality and green value, and divides perceived profit and loss into perceived price and perceived risk (Holbrook, 1999; Oliver, 1997; Bigné, 2001, Snoj et al., 2004).

3.1. The Impact of Perceived Loss on Purchase Intention

Perceived quality is a consumer's overall assessment of product attributes and a subjective judgment of consumers on the objective quality of products (Steenkamp, 1990; Szybillo & Jacoby, 1974). The root cause of perceived quality is the product quality “information asymmetry” that exists between the buyer and the seller (Wang Xinxin, 2007). The consumer’s basis for judging product quality based on clues is called a cue, which is released by the coder and accepted by the decoder (Wheatley, 1981). Zeithaml (1988) argues that consumer perception of quality is based on product intrinsic cues and extrinsic cues [7]. The internal clue refers to the actual quality and performance of the product; the external clue is related to the product, but it is not the constituent elements of the product, such as brand awareness and word of mouth. Chinese consumers have insufficient knowledge of their own products and lack the ability to judge information related to products, so external clues are most likely to influence consumer judgment. However, China’s remanufacturing market started late, with short running time and low market maturity. The company has not yet formed a scale and does not have brand awareness. As a result, consumers’ perceived quality of remanufactured products is lacking, thereby holding a neutral or even negative attitude toward remanufactured products, inhibiting the willingness to purchase remanufactured products.

The green value of a product refers to the satisfaction of consumers in the pursuit of environmental and ecological values when purchasing products (Yang Xiaoyan, 2006). There are a wide variety of green products on the market, and remanufactured products are one of them. However, there is a phenomenon of inconsistent attitudes and behaviors in the market of remanufactured products, that is, consumers recognize the green value of products, but it is difficult to evolve from attitudes to actual purchases. On the one hand, consumers pay more attention to the physical properties such as price and quality of products when choosing products (Boulstridge & Carrigan, 2000), and subjectively believe that the green nature of products conflicts with the basic physical properties of products (Kronrod, 2012). In such cases, consumers tend to consider remanufacturing products less. Further research by Enrich and Irwin (2005) found that consumers are even evading the green value information of remanufactured products in order to avoid bad emotional experiences [8]. Consumers do not pay enough attention to the green value of remanufactured products, and at the same time selectively ignore the green value of remanufactured products, so the willingness to purchase remanufactured products is not strong.

In summary, in the actual purchase process of remanufactured products, consumers are missing in the two dimensions of perceived profit - perceived quality and green value, so this article assumes:

H1: The lack of consumer perceived profit has a hindrance to the purchase intention of remanufactured products.

3.2. The Impact of Exaggerated Perception of Loss on Purchase Intention

Under the condition that the product information is incomplete, the consumer's evaluation standard for the product is its own subjectively perceived price and quality. Perceived price reflects the monetary cost of the customer’s purchase of the product (Tse, 2001). Perceived quality reflects the consumer’s subjective judgment on the objective quality of the product (Pitic, 2014). Consumers trade off perceived price and perceived quality. After making a purchase decision (Monroe, 1985). In general, consumers follow the principle of “good quality and low price” when purchasing products. However, consumers in the
remanufacturing market do not make purchasing decisions based entirely on this logic. Ovchinnikov (2011) conducted an empirical study using a Dell laptop as an example. The results showed that consumers paid a significant difference in the price paid for remanufactured products and new products [9]. With the increase in new product discounts, the number of consumers who choose to purchase new products is increasing monotonously; and as the discount on remanufactured products increases, the number of consumers who choose to purchase remanufactured products increases first and then decreases in an inverted U-shaped distribution. There are upper and lower limits on the acceptance of product prices by consumers, namely the price threshold (Williams, 1982). When the price of the product is higher than the upper limit of the acceptable price, the consumer thinks it is not worth buying. When the price of the product is lower than the lower limit of the acceptable price, the psychology of “cheap and not good” makes the consumer think that the price is too low and the quality is not good. When the price of remanufactured products is much lower than that of new products, consumers are worried about the quality of products. Although the price of remanufactured products is low, consumers still choose to pay more attention to product quality in the trade-off between quality and price. Domestic remanufactured products generally adopt a pricing strategy of 40%-60% lower than the new products (Binshi Xu, 2011), which causes consumers to doubt the quality of remanufactured products [10]. It is believed that product quality problems may occur frequently after purchasing remanufactured products. It also requires more money and time, and subjectively magnifies the price costs that it may pay, so the willingness to purchase is not strong.

Consumers are more sensitive to expected risks than expected returns, and therefore have strong risk aversion claims (Kahneman and Tversky, 1979). In 1960, Bauer proposed the concept of perceived risk. He believes that perceived risk comes from the uncertainty of consumers’ products, including the uncertainty of decision-making results and the consequences of decision-making failure. For remanufactured products, the perceived risk of consumers is manifested in three aspects. At the consumer level, remanufacturing as a new concept has not been widely recognized (Binshi Xu, 2010). On the other hand, customers are more inclined to reduce potential purchase risks by choosing a company or brand they trust (Mooman & Deshpande (1992), while the domestic remanufacturing industry is not sufficiently publicized and consumer acceptance is not high [11]. At the remanufacturing level, companies lack remedies and consumer protection mechanisms to deal with product failures (Liden & Skalen, 2003), resulting in insufficient consumer confidence. In terms of market regulation, the system of enterprise certification, product identification, and product information filing for remanufactured products is still not perfect (Xu Binshi, 2010), causing consumers to worry about the possible consequences of purchasing remanufactured products. The above three levels of problems indicate that consumers are amplifying the risks they may face in purchasing remanufactured products, so the willingness to purchase is not strong.

In summary, in the actual purchase process of remanufactured products, consumers have an exaggerated tendency in the two dimensions of perceived profit and loss—perceived price and perceived risk. Therefore, this paper assumes:

H2: The exaggeration of consumer perception of profit and loss has a hindrance to the purchase intention of remanufactured products.

3.3. Mediating Role of Price Sensitivity

Goldsmith et al. (2005) pointed out that Price Sensitivity reflects the degree of consumer's own reaction to price changes of products or services, and is mainly affected by four factors: product characteristics, individual consumer differences, and product involvement [12]. Chu et al. (2008) found that when interviewed families purchase certain products, the price sensitivity of online shopping is higher than the price sensitivity of online shopping [13]. At the same time, it is also found that the price sensitivity of the family is closely related to the demographic variables, and is negatively correlated with the distance from
the family to the physical store. Hoch et al. (1995) found that consumer education levels and salary levels are inversely proportional to price sensitivity, the higher the level of education and salary of consumers, the higher the acceptance of price changes [14]. Fullerton (2005) pointed out that customers who are more sensitive to price are usually based on the consideration of their own interests to make a purchase relationship with the merchant, while customers with low price sensitivity take the purchase behavior from the emotional side of the product. James et al. (2005) found that customers with low price sensitivity have a high probability of purchasing products multiple times and are more likely to spend more on the same brand than customers with higher price sensitivity [15]. On the whole, customers' price sensitivity is different, which leads to different consumption behaviors, customer loyalty and perceived value. Therefore, it can be inferred that the degree of price sensitivity has a certain adjustment effect on the perceived value of consumers of remanufactured products.

H3a: The higher the sensitivity of the customer’s price, the stronger the customer's perceived profitability is in promoting the purchase intention of the remanufactured product.

H3b: The higher the customer price sensitivity, the stronger the hindrance of customer perceived profit and loss to the purchase intention of remanufactured products.

3.4. Mediating Role of Risk Aversion

Donthu & Gilliland (1996) argues that risk aversion is a trend to avoid risks and the psychological tolerance of consumers making purchasing decisions [16]. In general, the lower the risk avoidance, the more risk and uncertainty can be accepted; the higher the risk aversion, the higher the certainty requirement, the lower the tolerance to ambiguity, and the more demanding the product service. When psychological expectations are the same, consumers with high risk aversion are more conservative, preferring to buy regular goods that have been on the market for a long time; on the contrary, consumers with low risk aversion are more willing to try new products (Ke Xue, 2014). Consumers with high risk aversion have perceived that marginal utility decreases with increasing risk, and in the game of risk cost and return, they tend to make low-risk purchase choices (Zou, 2014). Consumers with high risk aversion tend to gain higher profits when choosing to purchase remanufactured products, and avoid risks and losses to the greatest extent, so consumers will maintain brand loyalty by acquiring more detailed product information to increase purchases. Certainty, or the result of a product failure by purchasing the lowest price product, purchasing the smallest quantity, obtaining a guarantee or guarantee, and lowering the expected level (Liu Chun, 2004). On the whole, the degree of risk aversion of customers is different, which leads to different purchasing tendencies, consumption habits and perceived value. Therefore, it can be considered that the degree of risk aversion has a certain adjustment effect on the perceived value of consumers of remanufactured products.

H4a: The higher the risk aversion of the customer, the stronger the customer perception gains the promotion of the purchase intention of the remanufactured product.

H4b: The higher the risk aversion of the customer, the stronger the hindrance of the customer's perceived profit and loss to the purchase intention of the remanufactured product.

4. Research Design

4.1. Questionnaire Design

Based on the maturity scale, this study designed the questionnaires needed for this paper. The questionnaire consists of six parts. The first part is the scale for measuring perceived gains; the second part is the measurement scale for assessing perceived profit and loss; the third part is the scale for measuring consumer price sensitivity; the fourth part is the scale for measuring consumer risk avoidance. The fifth
part is the scale of consumers' purchase intention; the sixth part is the basic information of the respondents.

4.2. Sample Selection

This paper considers the extensiveness of the experimental objects and the popularity of the experimental items, and finally selects the remanufactured notebook computer as the experimental item of this paper according to the characteristics of the remanufactured product and the research content of this paper. Remanufacturing notebook computers as durable goods, consumers tend to consider more comprehensively when making choices, and they will be more cautious when making purchasing decisions. In this process of thinking, the perceived value and the psychological changes of consumers will play a role, so the requirements of this paper will also have a wide range of reference for other similar types of remanufactured products.

4.3. Samples and Data Collection

A total of 405 questionnaires were collected, and all the questionnaires with the same options and too short time were excluded, and 382 valid questionnaires were obtained. The effective rate of the questionnaire was 94%. In this questionnaire, the number of samples that did not understand and did not purchase remanufactured laptops was 196, accounting for 51.31% of the total; the number of samples that were not purchased but was 114, accounting for 29.84% of the total; The number of samples is 72, accounting for 18.85% of the total. It can be seen that the proportion of consumers who have purchased remanufactured laptops is very low.

The subjects involved in different regions of the country, the ratio of male to female was 48.17%, 51.83%, basically flat; more than 75% of the sample age was 18-30 years old, the proportion of undergraduate and above accounted for 77%, and the occupation included employees, Students, government and institutional employees, as well as individual industrial and commercial households, at the same time, the proportion of employees and students is 40.84% and 31.41% respectively. The disposable monthly income is mainly concentrated around 2000-6000. Sex and effectiveness.

5. Test Results and Analysis

5.1. Reliability and Validity Analysis

In this study, the reliability of each variable was tested by Cronbach's α value, and the results are shown in Table 1. The Cronbach's α values of the variables were all within an acceptable range (greater than 0.7), indicating that the scale designed by the Institute was highly reliable. The high construct validity in terms of validity test is shown in Table 1. As shown in Table 2, when using the confirmatory factor to verify the model fitness, the indicators show that the model has a high degree of fit, the measurement terms show good internal consistency, and the aggregation efficiency of the indicators is better.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's α</th>
<th>Construct validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived gains</td>
<td>0.938</td>
<td>0.7661</td>
</tr>
<tr>
<td>Perceived loss</td>
<td>0.95</td>
<td>0.8510</td>
</tr>
<tr>
<td>Price sensitivity</td>
<td>0.855</td>
<td></td>
</tr>
<tr>
<td>Risk avoidance</td>
<td>0.872</td>
<td></td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>0.920</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Reliability and Validity Analysis Results
Table 2. Result of Variable Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th>Fitting indicator</th>
<th>χ2/df</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>CFI</th>
<th>RMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived gains</td>
<td>3.051</td>
<td>0.918</td>
<td>0.908</td>
<td>0.926</td>
<td>0.936</td>
<td>0.04</td>
<td>0.062</td>
</tr>
<tr>
<td>Perceived loss</td>
<td>2.15</td>
<td>0.926</td>
<td>0.912</td>
<td>0.956</td>
<td>0.961</td>
<td>0.044</td>
<td>0.07</td>
</tr>
</tbody>
</table>

5.2. Main Effect Analysis

Firstly, SPSS 22.0 software is used to analyze the relationship between variables, that is, the correlation analysis is made by the variables such as perceived profit, perceived profit and loss, price sensitivity, risk avoidance and purchase intention.

Table 3. Internal Consistency Coefficient and Correlation Analysis of Each Variable

<table>
<thead>
<tr>
<th>Perceived gains</th>
<th>Perceived loss</th>
<th>Price sensitivity</th>
<th>Risk avoidance</th>
<th>Purchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived gains</td>
<td>1</td>
<td>-0.687**</td>
<td>0.632**</td>
<td>0.597**</td>
</tr>
<tr>
<td>Perceived loss</td>
<td>-0.687**</td>
<td>1</td>
<td>-0.478**</td>
<td>0.559**</td>
</tr>
<tr>
<td>Price sensitivity</td>
<td>0.632**</td>
<td>-0.478**</td>
<td>1</td>
<td>0.549**</td>
</tr>
<tr>
<td>Risk avoidance</td>
<td>0.597**</td>
<td>0.559**</td>
<td>0.549**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: * indicate \( P<0.05 \), ** indicate \( P<0.01 \), *** indicate \( P<0.001 \)

It can be seen from the Table 3 that there is a significant negative correlation between perceived profit and perceived profit and loss. The effects of perceived profit and perceived profit and loss on purchase intention are 0.750** and -0.660**, respectively, and the independent variables and causes are preliminarily verified. The relationship between variables; and the degree of price sensitivity, risk aversion and perceived value, and purchase intention.

In this study, the purchase intention is put into the model as the dependent variable, and then the gender, age, disposable monthly income, education level, and occupational five control variables are put into the regression equation, and the independent variable perceptual gain and perceived loss are placed separately. In the regression equation, the results of the data obtained are shown in the following Table 4:

Table 4. Perceived Value Returns to Purchase Intention

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Gender</th>
<th>Age</th>
<th>Disposable monthly income</th>
<th>educatio n level</th>
<th>Professi on</th>
<th>Perceive d gains</th>
<th>Perceive d loss</th>
<th>R²</th>
<th>ΔR²</th>
<th>F</th>
<th>ΔF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
<td>0.074</td>
<td>0.043</td>
<td>0.001</td>
<td>-0.042</td>
<td>0.004</td>
<td>0.57***</td>
<td>-0.246**</td>
<td>0.607</td>
<td>0.599</td>
<td>82.365</td>
<td>261.979</td>
</tr>
</tbody>
</table>

Note: * indicate \( P<0.05 \), ** indicate \( P<0.01 \), *** indicate \( P<0.001 \)

As can be seen from Table 4, under the control of the control variables, the perceived profit has a positive impact on the purchase intention of the remanufactured notebook, and the path coefficient is 0.57, that is, the lack of perceived profit will have a negative impact on the purchase intention, support It is assumed that H1 is established; and the exaggeration of perceived profit and loss has a negative impact on the purchase intention, and the path coefficient is -0.246, supporting the establishment of hypothesis H2.

5.3. Analysis of Regulation

This study used a multi-level regression analysis method to verify the adjustment of customer price sensitivity. In this study, the five variables of gender, age, disposable monthly income, education level, and occupation were set as control variables, and purchase intention was used as the dependent variable. In
order to avoid the multi-collinearity problem caused by the addition of interactive items, the independent variables are centralized separately. Then, the effects of price sensitivity on the relationship between perceived profit, perceived profit and loss and purchase intention are examined. The results of the adjustment effect test in Table 5 and Table 6 below are obtained.

Table 5. The Effect of Price Sensitivity and Perceived Profit Interaction on Purchase Intention

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Gender</th>
<th>Age</th>
<th>Disposable monthly income</th>
<th>education level</th>
<th>Profession</th>
<th>Perceived gains</th>
<th>Price Sensitive</th>
<th>Perceived gains*Price Sensitive</th>
<th>R²</th>
<th>ΔR²</th>
<th>F</th>
<th>ΔF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable</td>
<td>0.081</td>
<td>0.067</td>
<td>0.005</td>
<td>-0.064</td>
<td>-0.035</td>
<td>0.517***</td>
<td>0.351***</td>
<td>0.122***</td>
<td>0.663</td>
<td>0.643</td>
<td>86.596</td>
<td>211.264</td>
</tr>
</tbody>
</table>

Note: * indicate P<0.05, ** indicate P<0.01, *** indicate P<0.001

It can be seen from the above table that the path adjustment coefficient of price sensitivity to perceived profit and purchase intention is 0.122, P<0.05, so the price sensitivity has a significant regulatory effect on perceived profit and purchase intention, so it is assumed that H3a is established.

Table 6. The Influence of Price Sensitivity and Perceived Profit and Loss on Purchase Intention

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Gender</th>
<th>Age</th>
<th>Disposable monthly income</th>
<th>education level</th>
<th>Profession</th>
<th>Perceived loss</th>
<th>Price Sensitive</th>
<th>Perceived loss*Price Sensitive</th>
<th>R²</th>
<th>ΔR²</th>
<th>F</th>
<th>ΔF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable</td>
<td>0.096</td>
<td>0.086</td>
<td>0.011</td>
<td>-0.038</td>
<td>0.013</td>
<td>-0.418***</td>
<td>0.482***</td>
<td>-0.098***</td>
<td>0.613</td>
<td>0.605</td>
<td>73.999</td>
<td>179.531</td>
</tr>
</tbody>
</table>

Note: * indicate P<0.05, ** indicate P<0.01, *** indicate P<0.001

It can be seen from the above table that the path adjustment coefficient of price sensitivity to perceived profit and loss and purchase intention is -0.098, P<0.05, so the price sensitivity has a significant regulatory effect on perceived profit and purchase intention, so it is assumed that H3b is established.

In order to verify the regulation of risk aversion, this study used a multi-level regression analysis method for analysis. In this paper, the five variables of gender, age, disposable monthly income, education level and occupation are set as control variables, and purchase intention is used as dependent variable. In order to avoid the multi-collinearity problem caused by the addition of interactive items, the independent variables are centralized separately. Then, the effects of risk avoidance on the relationship between perceived profit, perceived profit and loss and purchase intention are examined. The results of the adjustment effect test of Table 7 and Table 8 are obtained as follows.

Table 7. The Effect of Risk Avoidance and Perceived Profit Interaction on Purchase Intention

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Gender</th>
<th>Age</th>
<th>Disposable monthly income</th>
<th>education level</th>
<th>Profession</th>
<th>Perceived gains</th>
<th>Risk avoidance</th>
<th>Perceived gains*Risk avoidance</th>
<th>R²</th>
<th>ΔR²</th>
<th>F</th>
<th>ΔF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable</td>
<td>0.051</td>
<td>0.067</td>
<td>0.005</td>
<td>-0.064</td>
<td>-0.035</td>
<td>0.517***</td>
<td>0.351***</td>
<td>0.122***</td>
<td>0.663</td>
<td>0.643</td>
<td>86.596</td>
<td>211.264</td>
</tr>
</tbody>
</table>

Note: * indicate P<0.05, ** indicate P<0.01, *** indicate P<0.001

It can be seen from the above table that the path adjustment coefficient of the risk avoidance degree for perceived profit and purchase intention is 0.167, P<0.05, so the risk avoidance degree has a significant adjustment effect on perceived profit and purchase intention, so it is assumed that H4a is established.

It can be seen from the above table that the path adjustment coefficient of the risk avoidance degree for perceived profit and loss and purchase intention is -0.135, P<0.05, so the degree of risk aversion has a significant regulatory effect on perceived profit and purchase intention, so it is assumed that H4b is established.
Table 8. The Effect of Risk Avoidance and Perceived Profit and Loss on Purchase Intention

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Gender</th>
<th>Age</th>
<th>Disposable monthly income</th>
<th>education level</th>
<th>Profession</th>
<th>Perceived loss</th>
<th>Risk avoidance</th>
<th>Perceived loss*Risk avoidance</th>
<th>R²</th>
<th>ΔR²</th>
<th>F</th>
<th>ΔF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable</td>
<td>0.037</td>
<td>0.059</td>
<td>-0.051</td>
<td>-0.054</td>
<td>0.005</td>
<td>-0.51***</td>
<td>0.462***</td>
<td>-0.135***</td>
<td>0.598</td>
<td>0.605</td>
<td>73.999</td>
<td>179.531</td>
</tr>
</tbody>
</table>

Note: * indicate P<0.05, ** indicate P<0.01, *** indicate P<0.001

6. Conclusion

In this paper, the re-manufacturing of notebook computers as an example of remanufactured products, the conclusions of empirical research mainly have the following aspects.

1) Consumers who knew and purchased remanufactured products accounted for only 18.85% of all investigators, and 51.31% of the respondents did not understand and did not purchase remanufactured products. It shows that the consumption level of remanufactured products in China is low, and many consumers do not understand remanufactured products.

2) Analysis of the relationship between perceived value and consumer purchase intention

By controlling the variables of demographic factors, regression analysis shows that the neglect of perceived gains and the exaggeration of perceived gains and losses have a significant negative impact on the purchase intention of remanufactured laptops. It can also be seen from the perceived profit and the path coefficients of its two dimensions that consumers not only pay attention to the quality of remanufactured notebooks, but also pay attention to the green value of products.

3) The effect of price sensitivity on perceived value and purchase intention

The higher the consumer price sensitivity, the stronger the perceived benefit of the purchase intention of the remanufactured laptop. At the same time, the results of regression analysis confirmed that the price sensitivity has a negative impact on perceived profit and loss and purchase intention. The path coefficient is -0.098. It can be seen that when the consumer price sensitivity is high, the perceived profit and loss is in the purchase intention. The stronger the hindrance.

4) The adjustment effect of risk avoidance on perceived value and purchase intention

The higher the risk aversion of consumers, the stronger the contribution of perceived benefits to the purchase intention of remanufactured laptops. The path coefficient of risk avoidance and perceived profit and loss has a path coefficient of -0.135 for purchase intention, indicating that the degree of risk aversion has a negative impact on perceived profit and loss and purchase intention. When the degree of consumer risk aversion is high, the perceived effect of perceived loss on the purchase intention of the remanufactured notebook is more obvious.

Conflict of Interest

The authors declare no conflict of interest.

Author Contributions

Qi Zhang conducted the research, Yue Hou analyzed the data and wrote the paper, and both authors had approved the final version.

References


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