Endowment Effect: From the Perspective of Employees' Loyalty, Perceived Value and Used Car Pricing

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Abstract. The "endowment effect," a central cognitive bias in behavioral economics, represents individuals' tendency to assign a higher value to items they own compared to identical or similar items they don't possess. This research paper presents a comprehensive exploration of this effect and its diverse applications in three significant areas: bolstering employee loyalty, understanding the moderating role of emotional states in the perceived value of goods, and discerning pricing mechanisms in the secondhand car market. By leveraging the endowment effect, businesses can enhance employee loyalty and develop more effective pricing strategies in secondhand markets. Inherent in these applications is the opportunity to capitalize on inherent cognitive biases to optimize outcomes across different economic activities. Furthermore, understanding the interaction between emotional states, particularly positive emotions, and the endowment effect provides insights into consumer behavior, influencing their perceived value and purchasing intentions. The interplay between the endowment effect and emotional states offers a nuanced understanding of the multifaceted nature of consumer behavior. Thus, this research underscores the far-reaching implications of the endowment effect, highlighting its pervasive influence in our economic decision-making processes.

Keywords: Endowment effect, Employee loyalty, Emotional factors, Secondhand car pricing.

1. Introduction

Endowment is a famous bias in behavioral economics. Endowment effect's definition is individuals tend to place a higher value on the items they already possess compared to their estimation of the value of acquiring equivalent items [1]. This psychological phenomenon has significant implications for people's economic decision-making, as it reveals the presence of cognitive biases and behavioral patterns in the decision-making process [2]. For instance, it has implications in areas such as purchasing, selling, exchanging, and negotiating. The discovery of the endowment effect provides valuable insights into understanding individuals' value perceptions, decision biases, and market behaviors. It has had a profound impact on the fields of economics and behavioral economics, and it has substantial implications for real economic activities.

2. Application 1: Endowment Effect in Employees' Loyalty

2.1. Background

The loyalty is principled, and it is precisely due to loyalty to these principles that individuals decide whether or when to cease allegiance to a person or group. In the present era, loyalty is seen as conditional and relative [3]. When the rewards provided by a company meet or exceed employees' expectations, their loyalty will increase; otherwise, it will decrease or even cease. However, contemporary society has a biased understanding of human beings, treating human resources as costs and burdens for companies, undervaluing their worth and role. Insufficient trust, respect, and care for employees have resulted in a decline in employee loyalty. Thus, enhancing employee "stickiness" is crucial. Higher stickiness reduces employee turnover costs and willingness to leave. The endowment effect, an ownership effect, causes people to hold onto what they have and resist losing it.

To cultivate employee loyalty, enterprises must provide preferred and unexpected endowments, leveraging the pronounced effect. Satisfaction with these endowments generates a psychological

reward response, creating a sense of obligation and motivation to repay. Employees often take action to repay, fostering loyalty. Therefore, from the perspective of the endowment effect, this paragraph explores how to enhance employee loyalty. Endowment effect reflects employee's psychological law, and the enterprises can apply this law to improve the methods to increase employee loyalty, and design and adjust training plan based on enterprise need and employee's skills to produce win-win effect.

2.2. Model

In the subsequent sections, the author has developed a model shows in the Figure 1 that categorizes the influencing factors into explicit endowment and implicit endowment.

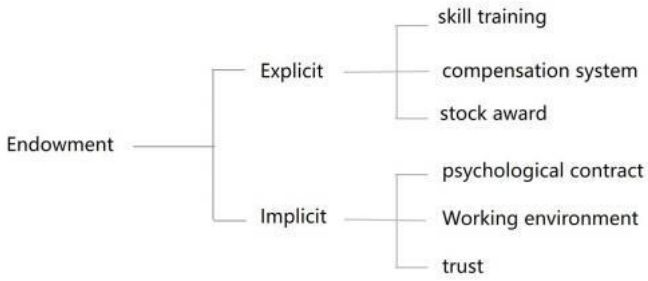

Figure 1. Classification of endowment bias (Photo/Picture credit: Original)

Each company should have a general understanding of the needs of employees and to "appeal to their preferences" and effectively fulfill their needs. These needs include explicit endowment and implicit endowment.

2.3. Explanation

As shown in the model, the present research presents a new concept termed “explicit” and “implicit”. These concepts are based on the established literature on the endowment effect [4].

In this study, explicit endowment refers to tangible and observable resources, benefits, or advantages that are explicitly provided to individuals. These can include physical possessions, financial rewards, special privileges, or specific rights, and are formally outlined in agreements or contracts. On the other hand, implicit endowment refers to intangible or unspoken resources that individuals perceive or assume to possess. These can include social status, reputation, trust, emotion, skills, or knowledge. While explicit endowments are clearly communicated and consciously acknowledged, implicit endowments are inferred based on societal norms and expectations.

Both explicit and implicit endowments are essential in the employee endowment needs model. Explicit endowments, being more direct and objective, should be showcased when employees are newly onboarded to make a lasting impression. As employees and the organization interact over time, it becomes crucial to emphasize implicit endowments by providing subjective care and attention. Implicit endowments, which may not be easily quantifiable, influence employees' attitudes, behaviors, and decision-making processes. Explicit and implicit endowments complement each other in enhancing employee loyalty. While explicit endowments create a tangible foundation, implicit endowments contribute to the overall perception of value and well-being. By recognizing and nurturing both types of endowments, organizations can foster a supportive and loyal workforce.

2.4. Universal Influencing Factors

Regular skills training: Companies often hesitate to invest heavily in employee training due to concerns about wasted investment when employees leave [5]. This hampers both the improvement of existing employees' efficiency and their motivation, leading to a "training-resignation" cycle.

From the endowment effect perspective, training is an investment that enhances employees' human capital. Employees need to continuously develop their skills to thrive in society and secure their job

prospects. Therefore, employees appreciate training programs that promote their skill growth and performance improvement. Conversely, the lack of targeted skills training hinders employees' skill development, resulting in stagnant job performance, overall company performance, and employee satisfaction.

To achieve mutual benefits, companies should design or adjust training programs based on the company's needs and employees' skill characteristics and training requirements. Cutting costs should not come at the expense of employee morale and development.

Timely adjustment of the compensation system: Compensation plays a vital role in human resource management, being a significant concern for employees and directly impacting their loyalty [6]. In a dynamic market environment where prices and employees' living costs are continuously increasing, companies should conduct regular market surveys to gauge compensation levels and make necessary adjustments to their compensation system. This ensures that the company remains competitive and can retain employee satisfaction and productivity. By sending a signal of care and consideration through timely compensation adjustments, companies can foster a positive work environment and enhance employee loyalty.

Psychological contract: In simple terms, the psychological contract refers to the implicit agreement formed between employees and the company, with employee satisfaction being its core [7]. The more satisfied employees are with the decisions, measures, and organizational culture of the company, the more stable the psychological contract between the two parties becomes, resulting in stronger employee loyalty. Although the psychological contract cannot be precisely measured, companies can fulfill employees' various needs to foster a strong sense of belonging and high level of commitment to the organization.

2.5. Summary

The endowment effect theory demonstrates that when you provide someone with what they most need or value, they are likely to genuinely reciprocate and willingly help you in times of difficulty.

3. The Impact of Consumer Emotional Factors on Perceived Value of Goods

3.1. Background

Recent studies have found that participants' emotional states may moderate the occurrence and manifestation of the endowment effect [8]. However, there is limited understanding of how positive and negative emotions influence consumers' value perception and purchase intentions towards for-sale products. Thus, the objective of this research is to scrutinize the intermediary function of emotional states in relation to the endowment effect, with an aim to gain a more profound understanding of how positive and negative emotions affect consumers' perceived value and propensity to purchase. Through elucidating the interplay between emotions and the endowment effect, this study endeavors to enrich our comprehension and provide valuable insights for the studies of consumer behavior and the realm of marketing practice.

3.2. Experiment

3.2.1 Research Method

In this experiment, a total of 160 graduate students participated, including 91 females and 69 males, all of whom were randomly distributed across four distinct experimental conditions. At the beginning of the experiment, half the students were each presented with a large water bottle, while the remaining half weren't given any water bottle. Subsequently, participants were manipulated to experience either a positive (joyful) or negative (sorrowful) emotional state. Emotion and memory manipulation techniques were utilized for the induction of these emotional states. The method employed for the induction of pleasant and unpleasant emotions utilized a similar technique. During the phase of

emotion induction, participants were instructed to reminisce past occurrences or events to stimulate specified emotions, this was then followed by broad-based queries in relation to those experiences.

Once the emotional states were instigated, participants were posed with the question, "How joyous do you feel at this moment?" To express their current emotional condition, they were provided with a scale from "1" (extremely unhappy) to "7" (extremely happy). Following this, all participants were directed to reassess the value of the water bottle. They were tasked to estimate the worth of the water bottle in their possession and the selling price they would find acceptable. For the water bottle they didn't possess, they were asked to quote the amount they would be ready to pay to acquire it. Post the valuation, participants' emotional states were also classified into different tiers.

3.2.2 Results and Discussion

Test of Emotional Manipulation: The results indicated a high correlation between the two items assessing self-assessed emotions ($r = 0.81$). After the emotional induction, participants reported feeling happier when induced with positive emotions ($M_{positive} = 4.5$, $SD = 0.89$) compared to when induced with negative emotions ($M_{negative} = 3.9$, $SD = 1.3$), $t(158) = 2.39$, $p < 0.05$. At the end of the experiment, it was found that participants induced with positive emotions ($M_{positive} = 4.27$, $SD = 0.91$) felt happier than those induced with negative emotions ($M_{negative} = 3.95$, $SD = 0.95$), $t(158) = 2.01$, $p < 0.05$. This finding suggests the impact of emotional manipulation.

The Impact of Emotional Factors on Value Estimation: The study focused on the influence of emotional induction on the cognitive pricing of the water cups. The statistical value, $F(1, 156) = 56.89$, $p < 0.001$, revealed a significant main effect of ownership: owners ($M = 2.59$) perceived the cognitive value of the water cups significantly higher than non-owners ($M = 2.07$). Importantly, the research found a significant interaction between the endowment effect and emotions, $F(1, 156) = 39.96$, $p < 0.0001$.

Furthermore, under negative emotional states, the prices were found to be unrelated to those who "owned and wanted to sell" ($M = 1.8$, $SD = 0.31$) and those who "did not own and wanted to buy" ($M = 1.72$, $SD = 0.21$), $t(78) = 1.38$, $p > 0.1$. However, under positive emotional states, owners' cognitive prices ($M = 3.35$, $SD = 0.67$) were significantly higher than non-owners' cognitive prices ($M = 2.54$, $SD = 0.36$), $t(78) = 7.76$, $p < 0.0001$. This statistical result strongly supports our hypothesis, indicating that the endowment effect is smaller under negative emotional states compared to positive emotional states. The endowment effect reveals that individuals tend to ask for a higher price when selling items, they own compared to the price they would be willing to pay for the same item [9]. The two aforementioned experiments provide evidence that temporary emotional states can influence the magnitude of this effect, but only positive emotions lead to higher evaluations. Therefore, emotional factors play a significant role in shaping the endowment effect. This study highlights the dependence of the endowment effect on consumers' current emotional states. In positive emotional states, individuals exhibit a greater attachment to their possessions and subjectively overvalue their worth. Conversely, negative emotions can lead to undervaluation and exacerbate feelings of loss and restlessness. Negative emotions also have the potential to cause consumers to underestimate the value of new products. Consequently, manufacturers should avoid triggering negative emotions to prevent the devaluation of new products. Measures such as creating a pleasant shopping environment, using non-confrontational sales approaches, and avoiding situations that might evoke intense emotions in grieving or emotionally vulnerable consumers should be taken into account.

Therefore, manufacturers must comprehend the pros and cons of emotional influences and gain a better understanding of consumer psychology to employ appropriate marketing strategies. By doing so, they can effectively harness the power of emotions to enhance consumer satisfaction and optimize their marketing efforts.

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4. Application 3: Endowment effect in Used Car Pricing

4.1. Background

In recent years, the second-hand car market has been booming, with a large number of trading websites emerging. However, an interesting phenomenon has emerged: an asymmetry in transactions, which could be explained by the endowment effect [10]. In 2017 alone, there were 10.28 million vehicle owners involved in vehicle exchanges. However, along with the thriving second-hand car market, an interesting phenomenon has emerged: an asymmetry in transactions. For example, Citizen A wants to buy a relatively new second-hand car and selects a car through a certain second-hand car trading website. Citizen A contacts the car owner, Citizen B, but after test driving the car, Citizen A offers a price that is two thousand yuan lower than the price quoted by Citizen B. After multiple rounds of negotiations, the two parties ultimately fail to reach an agreement and the deal falls through. This asymmetric phenomenon in transactions is widespread, and people often encounter unsatisfactory deals. The differences in perceived value of the goods lead to many transactions being unable to be completed or resulting in a decrease in utility for one party. The endowment effect provides an explanation for this asymmetric situation.

4.2. Introduction

Loss aversion refers to the phenomenon where the pain of losing an equivalent amount is greater than the pleasure of gaining the same amount [11]. This asymmetry in the cost of loss and the benefit of gain forms the evolutionary basis of the psychological mechanism behind the endowment effect [12]. If loss aversion exists, it can lead to asymmetry in Willingness to Accept (WTA) and Willingness to Pay (WTP). This asymmetry in the cost of loss and the benefit of gain forms the evolutionary basis of the psychological mechanism behind the endowment effect. When individuals state their WTA, they are essentially willing to give up the item they possess and specify the lowest price they are willing to accept. Therefore, the valuation of the item is framed in the context of loss. On the other hand, when individuals state their WTP, they are expressing their desire to acquire a particular item and specifying the highest price they are willing to pay. Hence, the valuation of the item is framed in the context of gain. Due to people's heightened sensitivity to losses compared to gains, WTP tends to be lower than WTA, giving rise to the endowment effect.

When sellers price their used cars, they are also influenced by reference dependence and the endowment effect. Therefore, the hypotheses formulated in this study are as follows: When sellers determine the price of a used car, they anchor their pricing to the original price. As the car's usage time and mileage increase, the value of the car gradually decreases. Sellers will rationally adjust the value of the vehicle based on its condition, forming a neutral reference price for the used car. At the same time, sellers will also be influenced by the endowment effect due to their ownership of the

vehicle. Faced with the prospect of losing their existing car, sellers tend to overvalue the used car relative to the neutral reference price. This ultimately shapes the pricing of used cars.

4.3. Analysis

Assuming that the price of a used car (price) is derived from the original price of the car (sprice) based on objective factors such as the time of use (t) and the mileage displayed on the odometer (m). The discount rate for the time of use (measured in years) is denoted as α1, α2, ..., and the discount rate for mileage (measured in ten thousand kilometers) is denoted as β 1, β2, ... Additionally, the presence of the endowment effect introduces a discount rate γ. If the person who purchases the car and determines its price is the same individual, there will be only one instance of endowment effect discount in the process of pricing the used car. Therefore, the study can establish a basic model for used car pricing:

$$price = (\alpha 1 \alpha 2 ... \alpha t) \times (\beta 1 \beta 2 ... \beta m) \times \gamma \times sprice \quad (1)$$

Let α and β represent the geometric mean of the discount rates for time of use and mileage, respectively, i.e., $\alpha t = \alpha 1 \alpha 2 ... \alpha t$ and $\beta m = \beta 1 \beta 2 ... \beta m$, where α and $\beta \in [0, 1]$. The used car pricing model can then be written as:

$$price = \alpha t \times \beta m \times \gamma \times sprice \quad (2)$$

Equation (1) reflects the seller's behavior in pricing the used car. The seller uses the original price as an anchor and forms an objective reference point based on the time of use and mileage. The right side of the equation, $\alpha t \times \beta m \times sprice$, represents this objective reference point, which forms the neutral reference price P in the pricing of the used car. The endowment effect γ distorts this reference price, ultimately resulting in the seller's pricing (Willingness to Accept, WTA) for the used car. Thus, the endowment effect γ can be separated from the model, i.e., γ = WTA / P:

$$\gamma = price / (\alpha t \times \beta m \times sprice) \quad (3)$$

Furthermore, equation (1) can be further transformed by dividing both sides by sprice:

$$rate = \alpha t \times \beta m \times \gamma \quad (4)$$

Here, rate = price / sprice represents the proportion of used car pricing to the original price and can be interpreted as the retained value rate of the used car in the seller's perception, where $rate \in [0, 1]$. From the above process, the research can make the following inferences:

Inference 1: When the seller prices the car based on the reference point, γ = 1.

Inference 2: If the endowment effect exists, then γ > 1.

Inference 3: When γ < 1, it does not imply the presence of the endowment effect.

By comparing variables across different cities and conducting analysis, the study found that the stability of the sample data can be ensured.

Back to calculate, taking the logarithm of formula (4):

$$\ln(rate) = t * \ln(\alpha) + m * \ln(\beta) + \ln(\gamma) = \lambda 1 * t + \lambda 2 * m + \lambda 0 \quad (5)$$

In the equation, $\lambda 0 = \ln(\gamma)$, $\lambda 1 = \ln(\alpha)$, and $\lambda 2 = \ln(\beta)$. Therefore, the constant term in the regression results is λ0, and the coefficients of t and m are λ 1 and λ2, respectively. Since α and β are between 0 and 1, λ 1 and λ2 are expected to be non-positive (≤ 0). However, when the endowment effect is present (γ > 1), λ0 > 0. Depending on whether regional factors are controlled for, the study can perform the least squares regression.

Table 1. Final Regression Result

	(a)	(b)
Constant	0.0470***(0.0078)	0.0616***(0.0112)
t	-0.1497***(0.0021)	-0.1497***(0.0021)
m	-0.0053***(0.0015)	-0.0060***(0.0015)
R^2	0.8125	0.8172
Regional Control	NO	YES
Sample Size	4749	4749

The regression results show in the Table 1 indicate that the model as a whole is highly significant. The R-squared values for column (a) and column (b) are 0.81 and 0.82, respectively. The F-values are significantly greater than 0, indicating a strong explanatory power of the model. As expected, all variables pass the significance test at the 1% level. The coefficients for t and m are negative (column (a): λ 1 = -0. 1497, λ2 = -0.0053; column (b): λ 1 = -0. 1497, λ2 = -0.0060), while the constant term coefficient is positive (column (a): λ0 = 0.0470; column (b): λ0 = 0.0616). This suggests that both the usage time and mileage have a negative impact on the pricing of used cars, with the impact of usage time being more pronounced. On the other hand, the endowment effect has a positive influence on the pricing of used cars, indicating that sellers tend to overvalue the worth of their used vehicles.

By reverting back to equation (1), the original model can be expressed as follows:

$$\text{(a): price} = (0.8610)\ t \times (0.9947)\ m \times 1.0481 \times \text{sprice} \tag{6}$$

$$\text{(b): price} = (0.8610)\ t \times (0.9940)\ m \times 1.0635 \times \text{sprice} \tag{7}$$

Equations (6) and (7) reveals that, we can observe the following:

When not controlling for regional factors, the time discount rate for pricing used cars is 0.8610, the mileage discount rate is 0.9947, and the displayed endowment effect is 1.0481. This indicates that sellers tend to exhibit the endowment effect in their pricing, overestimating the value by approximately 4.81 percentage points relative to the reference point.

When controlling for regional factors, the time discount rate for pricing used cars is 0.8610, the mileage discount rate is 0.9940, and the displayed endowment effect is 1.0635. This suggests that sellers still exhibit the endowment effect in their pricing, overestimating the value by approximately 6.35 percentage points relative to the reference point. In the process of used car transactions, there exists the endowment effect, which is both pervasive and stable [13]. When sellers determine the price, they tend to select a reference point, known as a neutral reference price, based on the car's usage time, mileage, and original price. The seller's pricing decision is influenced by this neutral reference price, which tends to be higher than the actual value of the car.

4.4. Summary

In the process of used car transactions, there exists the endowment effect, which is both pervasive and stable [13]. When sellers determine the price, they tend to select a reference point, known as a neutral reference price, based on the car's usage time, mileage, and original price. The seller's pricing decision is influenced by this neutral reference price, which tends to be higher than the actual value of the car.

5. Discussion

This paper delves into an intriguing exploration of the endowment effect, a fundamental concept in behavioral economics established by Kahneman, Knetsch, and Thaler [1]. The exploration includes a comprehensive examination of the endowment effect across various domains - employee loyalty, consumer emotional factors in perceived value of goods, and used car pricing.

The observations about employee loyalty advocate for an equilibrium between explicit and implicit endowments to promote employees' stickiness, thereby strengthening their allegiance towards their

respective organizations [5]. This approach could have substantial implications for human resource management strategies and practices in the future, although it requires a nuanced understanding of individual and cultural differences that may impact the effectiveness of endowments. Moreover, the dynamic nature of employee needs and the increasing importance of non-monetary benefits represent potential areas for further research [6].

The examination of consumer emotional factors reveals the instrumental role of positive emotions in augmenting the endowment effect [9]. The understanding of this influence could prove critical for marketers, suggesting strategies that evoke positive emotions could potentially enhance consumers' perceived value of products. However, this research has its limitations in the form of its limited scope and context-specific findings. Future research should strive to validate these findings across different cultures, product categories, and purchase contexts.

The used car pricing section provides intriguing insights into sellers' pricing behaviors and elucidates the asymmetry often observed in transactions [10]. It highlights the need for potential buyers and sellers to recognize the role of the endowment effect in driving these behaviors, possibly informing negotiations and pricing strategies. However, this exploration is limited to one particular market, and further research would be necessary to verify the generalizability of these findings across different markets and products [8].

In summary, this exploration provides a comprehensive understanding of the endowment effect across different domains, illustrating its far-reaching implications. However, the complexity and context-dependent nature of the endowment effect necessitate continuous research and exploration. This research is just a small step towards understanding the immense impact of the endowment effect on our economic decisions [3]. Thus, more research is needed to demystify the nuances of this phenomenon across different cultures, industries, and contexts.

6. Conclusion

This paper provides a comprehensive study of the endowment effect, drawing conclusions across a variety of sectors - from employee loyalty to consumer emotional responses and used car pricing. The exploration unearths how this cognitive bias impacts our economic decisions and influences real-world applications, shedding light on the importance of understanding and leveraging it appropriately. While the findings are compelling, they also prompt intriguing questions and future research opportunities, calling for a deeper delve into the complexity and context-dependent nature of the endowment effect. Ultimately, this study represents a significant stride towards understanding the endowment effect, offering new insights and considerations for both theoretical understanding and practical applications in economics.

References

[1] Kahneman, D., Knetsch, J. L., & Thaler, R. H. Anomalies: The endowment effect, loss aversion, and status quo bias. Journal of Economic perspectives, 1991, 5(1), 193-206.

[2] Thaler, R. Toward a positive theory of consumer choice. Journal of EconomicBehavior & Organization, 1980, 1(1), 39-60.

[3] Carmon, Z., & Ariely, D. Focusing on the forgone: How value can appear so different to buyers and sellers. Journal of consumer research, 2000, 27(3), 360-370.

[4] Beggan, J. K. On the social nature of nonsocial perception: The mere ownership effect. Journal of personality and social psychology, 1992, 62(2), 229.

[5] Morewedge, C. K., & Giblin, C. E. Explanations of the endowment effect: an integrative review. Trends in cognitive sciences, 2015, 19(6), 339-348.

[6] Epley, N., Mak, D., & Idson, L. C. Bonus or rebate: The impact of income framing on spending and saving. Journal of Behavioral Decision Making, 2006, 19(3), 213-227.

[7] Ashby, N. J., Dickert, S., & Glöckner, A. Focusing on what you own: Biased information uptake due to ownership. Judgment & Decision Making, 2012, 7(3), 254.

[8] Weaver, R., & Frederick, S. A reference price theory of the endowment effect. Journal of Marketing Research, 2012, 49(5), 696-707.

[9] Johnson, E. J., Häubl, G., & Keinan, A. Aspects of endowment: a query theory of value construction. Journal of experimental psychology: learning, memory, and cognition, 2007, 33(3), 461.

[10] Peck, J., & Shu, S. B. The effect of mere touch on perceived ownership. Journal of Consumer Research, 2009, 36(3), 434-447.

[11] Tversky, A., & Kahneman, D. Loss aversion in riskless choice: A reference dependent model. The quarterly journal of economics, 1991, 106(4), 1039-1061.

[12] Strahilevitz, M. A., & Loewenstein, G. The effect of ownership history on the valuation of objects. Journal of Consumer Research, 1998, 25(3), 276-289.

[13] Loewenstein, G., & Adler, D. A bias in the prediction of tastes. Economic Journal, 1995, 105(431), 929-937.