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## "Refunds" or "Discounts"? Exploring the Compensation Framing Effect on Consumer's Perceived Fairness of Online Service Recovery

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Abstract: This paper studied the different impacts of two compensation frames, "giving refunds" and "offering discounts", on consumer's perceived fairness in the recovery of online pricing error. We found that people perceived more fairness from a negative frame "offering discounts" than from a positive frame "giving refunds" in general. Then we introduced the regulatory fit theory to elucidate the compensation framing effect and checked the moderating effect of regulatory focus, the results showed that there was a fit between compensation frames and regulatory focus, "giving refunds" was promotion-focused and "offering discounts" was prevention-focused. "Giving refunds" was perceived as more fair than "offering discounts" for participants with a promotion focus while "offering discounts" was perceived as more fair than "giving refunds" for participants with a prevention focus. We also checked the moderating effect of compensation depth, consumers perceived the negative frame "offering discounts" (the positive frame "giving refunds") as more (less) fair than the positive frame "giving refunds" (the negative frame "offering discounts") under high-depth compensation condition; but under low-depth compensation, the result was not salient.

Key words: compensation frame, "giving refunds", "offering discounts", regulatory fit, regulatory focus, compensation depth

## 1. INTRODUCTION

In recent years, online pricing error frequently occurred to online suppliers, when the low price came out, the suppliers received a large quantity of orders instantly, some suppliers took "violent" measures to cancel the huge orders, thus provoking consumers' strong dissatisfaction and complaints. Most of B2C mall suffered such events, Amazon, for example, sold Apple MD318CH/A 15.4-Inch Laptop at CNY1344.00 on its China web site, approximately 89% off of the usual price of CNY12288.00, which immediately stunned many netizens and they ordered the laptop, but Amazon found the error and modified the price, making many consumers dissatisfied.

Confronted with such events, companies didn't want to sell the high-valued product at such a low price, so they tried to take some recovery measures to avoid huge losses as well as repairing consumers' negative emotions. Compensation was widely used, some companies gave refunds to consumers, some offered discounts. When the expenditure on compensation is fixed, how can the compensation exert stronger effect on consumers? If framed in "giving 300 refunds" makes consumers feel less fair when a product's correct price is CNY1000, another manner framed in "offering a 30% discount" will improve their perception of fairness?

Yuan-Shuh Lii studied the joint effect of compensation frames (dollar terms and percentage terms) and product-price levels on consumer's attitudes and behavioral intentions after a service failure involving online pricing error <sup>[1]</sup>. Psychology characteristics and compensation depth are also important factors that influence people's attitudinal reactions in recovery, but previous research didn't explore the psychology process in their evaluations of recovery fairness. So our research endeavored to discover the impact of different compensation frames on consumers' feelings based on framing effect theory, and explored the influence of consumers' regulatory focus and compensation depth in compensation framing effect. Additionally, we focused on the pricing errors of high-priced product and didn't consider the influence of price, since the errors of low-priced products could have little impact on consumers which may not affect the retailers very much.

#### 2. LITERATURE REVIEW

#### 2.1 Online pricing error

When a pricing error occurred, it could exert different impact on offline and online retailers. If it occurred to online retailers, it would be known by thousands of people in few minutes, thus bringing lots of orders before the error was corrected. While if it occurred to offline retailers, it cost a period of time to spread to a few people, maybe the retailer had corrected the error before you rushed to the store. Compared to offline retailers, online retailers suffered more losses. Despite huge losses, the reputation of the retailer was also damaged and may cause anger if the company denied the price.

#### 2.2 Service recovery and fairness of recovery

A service failure occurred when the customer's expectations were not met <sup>[2]</sup>. Service recovery referred to how service providers responded to a service failure <sup>[3,4]</sup>. When consumers couldn't buy the item at the incorrect price and retailers couldn't satisfy their demands, service failures occurred.

Consumers were used to evaluate service recovery process through their perceived fairness <sup>[5]</sup>, if they felt fair about the recovery, repurchase intention could be heightened and negative wow was reduced <sup>[6]</sup>, which meant service recovery was successful. According to justice theory, perceived justice had three dimensions: distributive justice, procedural justice, and interactional justice <sup>[7]</sup>. Distributive justice focused on the perceived fairness of actual and tangible outcomes compared to inputs, including discounts, refunds and coupons; Procedural justice referred to the procedures and criteria used in recovery, it contained formal policies, structural considerations and flexibility; Interactional justice referred to the manner that interacted with customers <sup>[6,8,9]</sup>.

Tangible compensation was most useful in service recovery <sup>[10]</sup>, which could greatly influence people' perceived distributive fairness and decreased consumers' negative emotion and dissatisfaction, thus increasing people's trust, fairness perception and repurchase intention<sup>[6,11,12]</sup>. Compensation was so important that how to maximum its effect concerned all companies who suffered the error, so we suggested that they took different frames in different conditions to get the best recovery results.

#### 2.3 Frame effects on compensation

Consumers' perceptions and preferences were changed as to the same thing was presented in different descriptions, which was called framing effect <sup>[13]</sup>. Taking promotion for example, people perceived more deals from the promotion framed in dollars than in percentage terms when the promotion depth was high <sup>[14]</sup>. Information could be framed in a positive or negative way, a positive frame emphasized gains or non-gains and a negative frame emphasized losses or non-losses. Prospect theory demonstrated that people tended to avoid risk when they confronted with gains and they preferred risk-taking when they confronted with losses <sup>[13]</sup>.

Based on framing effect definition, we defined compensation framing effect as consumers' attitudes and behaviors were changed as to the same compensation depth was presented in different descriptions in recovery conditions. Usually, compensation frames could also be classified in two types: positive compensation frame and negative compensation frame. Companies were accustomed to using "refunds" or "discounts" to compensate people after a service failure. "Offering 30% discounts" meant that customers only needed to pay 70% of the total price and "giving refunds" meant that people could get money from the company. Thus, "giving refunds" strategy was a positive frame, it was promotion-oriented and emphasized gains. While "offering discounts" strategy was a negative frame, it was prevention-oriented and emphasized reducing expenditure.

## 2.4 The regulatory fit effects

According to regulatory focus theory (RFT), in the process of self-regulation, people showed a specific tendency which was called "regulatory focus". People's preferences and behaviors were affected by regulatory focus. RFT proposed two independent self-regulatory orientations: prevention focus and promotion focus. Some people were sensitive to gains or non-gains, they focused on whether they could gain benefits such as

advancements and strived to maximize the results, we called them the "promotion-focused". Whereas some were sensitive to losses or non-losses, they tried their best to avoid the occurring of bad results and minimize the losses, they emphasized safety and obligations, so they were called the "prevention-focused" [15].

RFT discovered a "regulatory fit" between regulatory focus and the strategy they used to realize their goal. The promotion-focused preferred approach strategies which pursued gains than avoidance strategies, while the prevention-focused preferred avoidance strategies which strived to reduce losses than approach strategies <sup>[16]</sup>.

#### 3. HYPOTHESIS

#### 3.1 The effect of online compensation frames on perceived fairness

Online compensation aimed to repair service failure and maximized consumers' perceived distributive fairness. We were to compare the difference of people's perceived fairness when compensation message was framed in different manner. Prospect theory demonstrated that people tended to avoid losses when confronted with equal "gains" and "reducing losses" [13]. Similarly, when people were confronted with compensation, they perceived more fairness from a negative compensation frame than from a positive one. Thus, we hypothesized:

H1: Confronted with compensation, people would perceive more fairness from a negative frame "offering discounts" than from a positive frame "giving refunds" in service recovery.

#### 3.2 The moderating role of regulating focus in online compensation framing effect

According to regulatory focus theory, there was a fit between people's regulatory focus and the strategy they use to achieve their goal. The promotion-focused had more positive attitudes toward the target and gave higher evaluations at the objects if the approaching strategy fit their regulatory goal; the prevention-focused gave higher evaluations at the objects if the avoidance strategy fit their regulatory goal <sup>[17]</sup>.

As we knew, a positive compensation frame "giving refunds" meant "gains", so the strategy was promotion-oriented; whereas a negative compensation frame "offering discount" indicated "avoiding losses", meant you could avoided some of the total expenditure, so the strategy was prevention-oriented. Thus, we assumed that there was a fit between compensation frames and their regulatory focus, which could influence their evaluations of recovery fairness, we hypothesized:

H2: Confronted with compensation, promotion-focused consumers would perceive more fairness from the positive frame "giving refunds" which fit their promotion focus than from the negative frame "offering discounts" in service recovery.

H3: Confronted with compensation, prevention-focused consumers would perceive more fairness from the negative frame "offering discounts" which fit their prevention focus than from the positive frame "giving refunds" in service recovery.

## 3.3 The moderating role of compensation depth in online compensation framing effect

People's avoidance to loss was moderated by absolute amount <sup>[18]</sup>, when the amount they gained or lost was little, the conclusion that people were inclined to avoid losses will be opposite, they became risk-taking and were more sensitive to "gains" than "losses". As the compensation depth became higher, they gave higher evaluations to measures that guarded against losses <sup>[19]</sup>. Low compensation depth meant that the absolute compensation amount was less, consumers had more favorable attitudes toward a positive frame; high compensation depth meant the absolute compensation amount was large, consumers had more favorable attitudes toward a negative frame. Thus, we hypothesized:

H4: when compensation depth was low, consumers would perceive the positive frame "giving refunds" (the negative frame "offering discounts") as more (less) fair than the negative frame "offering discounts" (the positive frame "giving refunds").

H5: when compensation depth was high, consumers would perceive the negative frame "offering

discounts" (the positive frame "giving refunds") as more (less) fair than the positive frame "giving refunds" (the negative frame "offering discounts").

#### 3.4 Research model

Based on the above analysis, we presented our research model in figure 1.

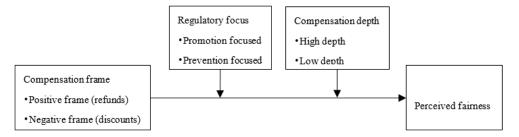


Figure 1. Research model

#### 4. METHOD

## 4.1 Subjects, design and procedure

The experiment had a 2 (compensation frame: positive vs negative)  $\times$  2 (regulatory focus: promotion versus prevention)  $\times$  2 (compensation depth: high versus low) mixed design, in which feature type was a within-participant factor. We conducted a pretest to check the appropriateness of compensation depth levels and compensation frames with 36 participants, the results met our expectations. Then we collected data for this study, 220 people participated in the research, of which 202 samples were valid. Of these 202 participants, 48.5% were female, 70.3% were students. According to the report of 2012 online shopping research published by CNNIC, 61.5% of people who preferred online shopping earn a month income from CNY 1000 to CNY 5000, 63.4% of them are people aging from 18 to 30, so our samples can met our research.

In this study, we designed a survey-based experiment with four scenarios to test the proposed hypotheses, experimental materials were adapted from true events. Participants read the experimental material on hand, then answer questions according to experimental situations. Four kinds of scenarios were designed according to compensation frames and compensation depth. "Giving refunds" represented positive compensation frame and "offering discounts" represented a negative. "30% discount" and "CNY4197 refund" mean high compensation level; "5% discount" and "CNY700 refund" meant low compensation level. For example, in the "positive frame and high compensation depth" scenario, participants were instructed that they were the one who suffered an online pricing error, they ordered a laptop at CNY1344 whose true price was CNY13990. Then the order was canceled, and the company committed to give you a CNY4197 refund if you continued to buy the laptop at a correct price. After reading the material, we checked their cognition of compensation frame, compensation depth, perceived distributive fairness and regulatory focus.

#### 4.2 Measures

Compensation frame was measured by answering a 7-point scale (1= "I felt it decreases my losses or reducing my expenditure", 7= "I feel I get extra benefits") [20]. Compensation depth was measured by answering a 7-point item "I felt that the compensation depth is high" (1=strongly disagree, 7= strongly agree). Then we used a scale developed by Mattila & Patterson to measure perceived fairness about the compensation [21], they were required to complete a 4-item 7-point scale (1=strongly disagree, 7= strongly agree). Eventually, a 10-item 7-point scale was selected to measure participants' regulatory focus (1=strongly disagree, 7= strongly agree) [22].

#### 4.3 Manipulation check

We computed the mean value of compensation depth and compensation frames in each group. In "discounts & high depth" group, "discounts" was perceived as reducing losses (M = 2.02), compensating depth was high

(M = 5.22); In "discounts & low depth" group, "discounts" was perceived as reducing losses (M = 3.64), compensating depth was low (M = 2.44); In "refunds & high depth" group, "refunds" was perceived as gains (M = 5.62), compensating depth was high (M = 5.08); In "refunds & low depth" group, "refunds" was perceived as gains (M = 4.64), compensating depth was low (M = 3.72); so all of our manipulation were successful.

#### 4.4 Result

#### 4.4.1 Main effect of compensation frame

We tested hypothesis 1 by comparing the mean value of perceived fairness between the promotion-oriented and prevention-oriented. The average perceived fairness of "refunds" group is 4.17, while the average perceived fairness of "discounts" group is 4.64. Then the result of a one-way ANOVA analysis demonstrated that people perceived higher fairness from the negative compensation frame "offering discounts" than the positive compensation frame "giving refunds" (F=3.932, p=0.049). When the compensation amount was fixed, its frames could exert different impacts on people's evaluations. Therefore, hypothesis 1 was supported.

### 4.4.2 The moderating role of regulating focus

To determine participants' regulatory focus, we used the subtracting score of the promotion items and prevention items (the score of reverse questions had been reversed). If the score was above 0.08, we defined them as promotion-oriented; and if it was below -0.08, we defined them as prevention-oriented [23]. Thus, we selected 168 samples from 202 participants, 77 people were promotion-oriented (33 in "refunds" group and 44 in "discounts" group); 91 people were prevention-oriented (53 in "refunds" group and 38 in "discounts" group).

We conducted a 2(compensation frame)  $\times$  2 (regulatory focus) analysis of variance (ANOVA), the results showed that the interaction of compensation frame and regulatory focus was significant (F(l, 164)=14.802, p<0.001). Then we tested the moderating effect of the two types of regulatory focus separately, we found that the main effect of compensation frame was significant for the promotion-oriented (F(l,33)=4.084, p=0.047), the promotion-oriented could perceive higher fairness from positive compensation frame ("refunds") (M=4.85) than from negative frame ("discounts") (M=4.06). The main effect of compensation frame was also significant for the prevention-oriented (F(l, 44)=12.533, p=0.001), the prevention-oriented could perceive higher fairness from negative compensation frame (M=5.01) than the positive frame (M=3.85). Both H2 and H3 were supported.

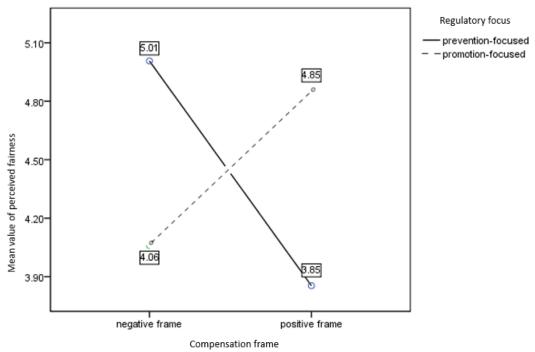


Figure 2. Perceived fairness as a function of type of regulatory focus and type of compensation frame

#### 4.4.3 The moderating role of compensation depth

We conducted a 2(compensation frame)  $\times 2$  (compensation depth) analysis of variance (ANOVA), the results showed that the interaction of compensation frame and compensation depth was significant (F(1, 198)=4.182, p=0.042).

Then we tested the moderating effect of the two levels of compensation depth separately, we found that the main effect of online compensation frames was not significant when the compensation depth was low (F(l, 94)=1.087, p=0.300), both of the two compensation frames ("refunds" and "discounts") were perceived as unfair, so hypothesis H4 was not supported. But the main effect of online compensation frames was significant when the compensation depth was high (F(1, 106)=16.108, p<0.001), people perceived higher fairness from negative compensation frame ("refunds") (M=6.02) than positive frame ("discounts") (M=5.11), supporting H5.

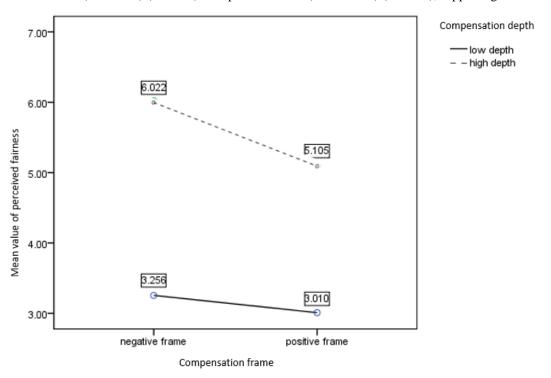


Figure 3. Perceived fairness as a function of type of compensation depth and type of compensation frame

### 5. CONCLUSIONS

#### 5.1 General discussion

The primary contribution of our study to the service literature was to provide experimental results that could shed additional light into the role of compensation frames, regulatory focus and compensation depth in consumer post-recovery evaluations. Existed literature studied less about compensation frames and its effect, we discovered compensation framing effect from a regulatory fit perspective. This paper combined framing effect with regulatory fit theory to explore the effect of compensation frames on consumer's perceived fairness in online shopping environment, and we also considered the moderating effect of compensation depth.

Firstly, we gave definition to compensation frames and distinguish positive compensation frame and negative compensation frame, then we tested their effect on consumer's perceived fairness. "Giving refunds" frame attracted consumer by emphasizing "gains", which was equal to "get money and gain benefit", so it was a positive frame; while "offering discounts" frame attracted consumer by emphasizing "losses", which reminded people that it endeavored to "decrease losses and pay less", so it was a negative frame. Our results were consistent with previous studies, which indicated that people preferred avoiding losses when they were

confronted with equal "gains" and "reducing losses", we found that negative compensation frame could be more effective in consumers' perceived fairness than positive compensation frame.

Then, we combined framing effect with regulatory fit theory to know whether the recovery evaluations were affected by people's psychology characteristics. Promotion-oriented people were more sensitive to "gains" or "non-gains" than the prevention-oriented, when a positive compensation frame emphasized the positive outcomes of complying with their advocacy, which was consistent with their promotion focus, they felt they would get money from the recovery and experienced higher fairness; whereas prevention-oriented people were sensitive to "losses" or "non-losses", when a negative compensation frame emphasized the negative outcomes of noncompliance, which was consistent with their prevention focus, they felt the recovery measure could reduce expenditure and experienced higher fairness. The results were consistent with the regulatory fit theory.

At last, we tested the moderating effect of compensation depth, which was not considered in compensation framing effect before. Negative frame was perceived much fair than the positive when compensation depth was high, the compensation depth concerned how much consumers needed to pay, so they increased their attention to losses when the amount of "losses" and "gains" were equal, so people feel more fairness when under negative compensation frame. When under low-depth compensation, the results was not salient, H5 had not been supported, consumers were not motivate to process "gains" or "lost", since they perceived themselves to be treated unfairly, so the recovery measure was not valid.

#### 5.2 Managerial Implications

This paper studied the different impacts of two compensation frames, "giving refunds" and "offering discounts", on consumer's perceived fairness in service recovery. "Giving refunds" made "gains" salient while "offering discounts" made "losses" salient. When the company decided the compensation depth, the better solution was to choose the compensation frame which could make the "loss" be salient.

Different online compensation frames had different influence on people with different regulatory focus. Managers could identify consumers' regulatory focus through their past consumption experience, such as promotion participation, since people with a prevention focus preferred a prevention-oriented promotion(eg. X% discount) while people with a promotion focus preferred a promotion-oriented promotion(eg. Free gift-giving).

When compensation depth was low, consumers all perceived little fairness from both compensation frames, it meant that they were not satisfied with the compensation level; When compensation depth was high, people gave much better evaluations at "offering discounts" than "giving refunds", so managers should made higher compensation level to achieve higher satisfaction and perceived fairness.

#### 5.3 Limitations

There were some limitations to address in the future. First, the discussed findings and implications were based on a customer group in China, the results may be influenced by people's cultural values. Second, we just considered the compensation measures and didn't incorporate other potential determinants of perceived recovery fairness into the model. Third, the method we used had some limitations. Future research is needed to generalize the findings of this study and extends the discussion to other national or cultural groups, researchers can study the framing effect of other compensation measures and use other method to makes it more realistic

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#### REFERENCES

- [1] Yuan-shuh Lii. (2012). The joint effects of compensation frames and price levels on service recovery of online pricing error. Managing Service Quality, 22(1):4-20.
- [2] Bell, C.R., Zemke, R.E. (1987). Service breakdown: the road to recovery. Management Review, 32–35.
- [3] Gronroos, C. (1988). Service quality: the six criteria of good perceived service quality. Review of Business, 9(3):10–30.
- [4] Chang Y P, Yao H P, Han D. (2009). Impact of service recovery on customer loyalty to Onine B2C Dealer. Management Review, 21 (11): 30-37.
- [5] Mattila A.S., Granage.D. (2005). The impact of choice on fairness in the context of service recovery. Journal of Services Marketing, 19(5):271-279.
- [6] Jooyeon Ha. (2009). Perceived justice in service recovery and behavioral intentions: The role of relationship quality. International Journal of Hospitality Management, 28(3):319-327.
- [7] Ha, J. and Jang, S. (2009). Perceived justice in service recovery and behavioral intentions: the role of relationship quality. International Journal of Hospitality Management, 28(3):319-327.
- [8] Jin X T, Chen Y N, Yu L. (2009). The Empirical Analysis of the Relationship between Customer Complaint Satisfaction and Customer Loyalty Based on the Justice Theory. Ruan Ke Xue, 23 (6): 116-134. (in Chinese)
- [9] Blodgett, J.G., Granbois, D.H., Walters, R.G. (1993). The effects of perceived justice on complainants' negative word of mouth behavior and repatronage intentions. Journal of Retailing, 69 (4): 399–428.
- [10] Grewal, D., Roggeveen, A.L. and Tsiros, M. (2008). The effect of compensation on repurchase intentions in service recovery. Journal of Retailing, 84(4): 424-34.
- [11] Hsin-Hui Lin et.al. (2011). The relationship of service failure severity, service recovery justice and perceived switching costs with customer loyalty in the context of e-tailing. International Journal of Information Management, 31 (4):350–359
- [12] Kuo Y, Wu C. (2012). Satisfaction and post-purchase intention with service recovery of online shopping websites: perspectives on perceived justice and emotion. International Journal of Information Management, 32(2):127-138.
- [13] Tversky, A, Kahneman, D. (1981). The framing of decisions and the psychology of choice. Science, 221(4481): 453-461.
- [14] DelVecchio D H, Krishnan S, Smith D C. (2007). Cents or percent? the effects of promotion framing on price expectations and choice. Journal of Marketing, 71(3):158-170.
- [15] Higgins, E.T. (1997). "Beyond pleasure and pain". American Psychologist, 52(12):1280-1280.
- [16] Higgins, E.T.et al. (2001). Achievement orientation from subjective histories of success: Promotion pride versus prevention pride. Europe Journal of Social Psychology, 31(1):3-23.
- [17] Higgins, E.T.et al. (2003). Transfer of Value from Fit. Journal of Personality and Social Psychology, 84 (6): 1140-53
- [18] Harinck F, et al. (2007). When gains loom larger than losses reversed loss aversion for small amounts of money. Psychological Science, 18(12): 1099-1105.
- [19] Diamond W D. (1992). Effects of formal and experience on the decision rules used to evaluate supermarket sales promotions. Journal of Business and Psychology, 6(4):465-481.
- [20] Diamond W D, Johnson R R. (1990). The framing of sales promotion: an approach to classification. Advances in Consumer Research, Association for Consumer Research, Provo, UT, 17: 494-500.
- [21] Mattila A.S, Patterson P. G. (2004). Service Recovery and Fairness Perceptions in Collectivist and Individualist Contexts. Journal of Service Research, 6(4):336-346.
- [22] Yao Q. (2008). Measurement of regulatory focus: the reliability and validity of chinese version of regulatory focus questionnaire. Chinese Journal of Applied Psychology, 114(14):318-323. (in Chinese)
- [23] Wang L. (2011). The coincidence between the regulatory fit effects based on chronic regulatory focus and situational regulatory focus. Acta Psychologica Sinica, 43(5):553–560 (in Chinese)