Moderating Effects of Mindfulness on Regret in Consumer Failure Situations

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Abstract

Background/Objectives: This study is to investigate whether consumers’ mindfulness plays a moderating role between regret and purchase behaviors in case of failure after the status quo or the non-status quo choice.

Methods/Statistical analysis: A total of 145 college students participated 2 (counterfactual condition: status quo vs. non-status quo) × 2 (mindfulness: high vs low) between-subject experiment. Subjects read the scenarios and responded to regret, behavioral intentions and demographic variables. The scenarios were as follows: Subjects chose one where they were going to use the existing beauty
salon or the new beauty salon, but the results are negative, no matter where they choose.

**Findings:** As for the regret by the selected alternative, there was only the main effect of the counterfactual condition, and the respondents of the non-status quo condition (compared to the respondents of the status quo condition) regretted more. For regret by a forgone alternative, there was an interaction effect, which means there was no difference in regret according to the level of mindfulness in the non-status quo condition, but respondents with lower mindfulness (compared to higher respondents) were more likely to regret in the status quo condition. For the intention to repeat the same choice, there was interaction effect, which means those with high mindfulness (compared to lower respondents) had the higher intention in the status quo condition but the opposite was observed in the non-status quo condition. For the intention to change to the other choice, only the main effect of the counterfactual condition was found.

**Improvements/Applications:** This study will raise the level of conceptual understanding about mindfulness and give implications for constructing persuasive communication based on it.

**Key Words:** Action effect, Counterfactual thinking, Mindfulness, Regret, Status quo bias

1 **Introduction**

The first optional alternatives consumers will face in a purchase situation are probably purchasing or not. If you decide to make a purchase at this time, the next alternatives would be to buy the same or similar one that is currently used, or buy a completely new one. In any case, the post-choice outcome may be positive, but the outcome of the choice may sometimes be negative. It is important to understand the thoughts and feelings of people in negative failure situations because in those situations the cognitions and emotions that people have in some way will affect future coping behaviors. When you experience a negative outcome, people often imagine a virtual situation or outcome that is in opposition with the negative outcome that actually happened. Roese conceptualizes
this thinking as counterfactual thinking. After this thought process people experience negative emotions, which are known to be mainly regrets.

Depending on the situation in which the failure occurred, the intensity of the cognitions and emotions may be varied. In other words, the strength of counterfactual thinking and regret seems to vary according to the status quo or the non-status quo condition. People tend to prefer alternatives that they have rather than what they do not have. This tendency is referred to as a status quo bias and may even appear even if you consider alternatives that you do not have as superior to your own 2.

But will this pattern always appear? How to deal with negative situations is not only a matter of buying but also a significant problem in many other situations. The reason is that the inability to escape from a negative situation can be undesirable in the subsequent rational decision making. Some people leave immediately in a negative situation, while others dwell in that situation. In this respect, mindfulness 3, one of the variables of interest in psychology recently, will provide important implications. Mindfulness is the awareness of one’s inner experience and the recognition of it as it is. There is a lot of research on coping in a failure situation, but research on the role of mindfulness in relation to regret is very poor. Therefore, this study aims to find out what moderating role mindfulness plays.

2 Regret by the status quo and the non-status quo

The discussions on the role of emotions in decision making are less than expected, but the feelings of regret have received considerable attention 4–6. In some studies 7, outcomes are not evaluated in isolation, but rather compared to imaginary alternatives that might have been. When experiencing regret, people need to think the imagined outcomes of a forgone alternative. Regret comes from a comparison between actual facts and imaginary counterfactual standards, so to experience regret, one must think about the achievements that can be gained by making choices and choosing different choices 4,8. In this sense, regret is defined as unpleasant
emotions based on cognition emerging from the mind that wants to reverse the current situation. Because of this association with counterfactual thinking, regret is classified as counterfactual emotion 9,10.

Many previous studies have shown how the experience of regret is varied when maintaining the status quo and when changing the status quo 11−13,9,14. The outcomes achieved by doing something (in the non-status quo condition) can be felt to be more regretful than the outcomes achieved by doing nothing (in the status quo condition). This phenomenon is called an action effect 14. On the other hand, the status quo effect means that the decision made by retention on the status quo is less regrettable than the decision by the status quo change 2.

These studies show that the regret by the non-status quo is more intense than the regret by the status quo, but other studies question the generality of the action effect 4,15. Action-inaction effect studies or the status quo effect studies may indicate that people are more likely to regret in certain situations. However, we need to note that this effect can vary with other factors such as individual differences. For example, Inman and Zeelenberg 16 showed that the status quo effect can be weakened if there are other reasons enough to switch to another justifiable product or service. In other words, they have shown that the inclusion of positive or negative experience through maintaining or changing the status quo or of brand use history affects the weakening of the status quo effect. Mannetti, Pietro & Kruglanski 17 also showed how consumers’ need for cognitive closure plays a moderating role in the status quo and non-status quo situations. And similarly, Seta, McElroy & Seta 18 showed that the amount of regret following an unsuccessful action relative to a failed action depends not only on the chronic orientation (e.g., action orientation and state orientation) of the decision maker but also on how consistent the action or inaction is. From the perspective of action oriented decision makers, inaction is inconsistent and undesirable, and so inaction is particularly regrettable. Roese, Hur & Pennington 19 found that regulatory focus orientation moderates the effects of action-inaction regret. Specifically, they proved that promotion failure leads to inaction regret, while protection failure leads to action regret.
3 Moderation of mindfulness

Mindfulness is a term from the Buddhist tradition and is the translation of sati, the Pali language of ancient India. The dictionary meaning of sati aims at full awareness. Here, full awareness is that the mind does not forget about the object and does not always miss it, so it can be understood clearly and correctly about the object. Current researchers are defining the mindfulness in a variety of ways. Goleman defines mindfulness as a process of getting away from an immovable perception, seeing every event as if it occurred first, confronting one’s experience as a bare fact, reacting acceptably without reacting reflexively to inner experiences. For Kabat-Zinn, mindfulness means paying attention in a particular way which means on purpose, in the present moment, and nonjudgmentally, so accepting the phenomenon or object as it is.

Though there is a difference in the arguments of each researcher, the common thread is pure attention and awareness. In other words, mindfulness is paying attention to and observing one’s own current internal experience (what I pay attention to now, what thoughts and feelings I experience, what attitudes and behaviors I am doing, etc.) and notices them as they are.

Since Kabat-Zinn developed the Mindfulness-Based Stress Reduction program by systematizing Buddhists vipassana meditation practices, there have been a growing number of studies on the positive function of mindfulness in terms of physical and psychological aspects. Hayes & Feldman showed that mindfulness can enhance emotional regulation. Other studies have also shown that mindfulness has a negative correlation with depressive symptoms and general negative emotions, and a positive correlation with psychological well-being and life satisfaction. It may be because of the nature of pure awareness and acceptance of the present situation that mindfulness makes this positive effect possible. This is because mindfulness stops the automatic and reflective response triggered by the current experience through full awareness and creates a psychological space in which to choose a new response, thereby giving it the ability to be immersed in internal experience.

These characteristics and functions of mindfulness will prevent the consumer from automatically reacting to the consumer’s own needs in the consumption or purchase situation and make them...
aware of their own desires and make them intentional and conscious decisions. Although mindfulness has already proven its role in several disciplines, research that addresses its role in the consumer psychology domain are still very limited.

4 Present research

One of the findings of many studies on regret is that regret by the non-status quo alternative is greater than regret by the status quo alternative when experiencing negative results of the same size. Although such status quo bias may occur universally, this study seeks to find out that the effect of the status quo bias may vary according to individual differences of mindfulness.

Previous studies suggest that there is a positive relationship between mindfulness and emotional regulation. However, these studies focus only on the ability of mindfulness to prevent emotional automatic reactions by increasing the individual’s ability to control emotions. This is not a direct indication of the weakening of the emotional intensity through mindfulness. In addition, the study of how mindfulness affects the intensity of certain emotional experiences such as regret is not satisfactory. If we keep in mind that mindfulness causes people to stop obsessions of the past and to accept the present state intentionally and nonjudgmentally, there will be no difference in regret by the selected alternative according to the level of mindfulness. In other words, for regret by the selected alternative, only the status quo effect or the action effect will be observed.

On the other hand, differences in individual’s propensity of mindfulness are likely to be observed in regret by a forgone alternative. In the status quo condition, regret by a forgone alternative signifies regret without a new attempt, and regret by a forgone alternative in the non-status quo condition refers to a regret that does not maintain an existing alternative. Therefore, people with low mindfulness will automatically experience regret by a forgone alternative (as compared to higher people), so the difference in the regret between the non-status quo condition and the status quo condition is not expected to be significant. However, for people with high mindfulness, lower regret is expected in the status quo
condition than in the non-status quo condition. This experience of regret seems to affect future behavioral intentions. For consumers with low mindfulness, the difference in the intention to repeat the same choice between the status quo condition and the non-status quo condition will not be large. On the other hand, in the case of consumers with high mindfulness, the difference in future repurchase intention between the two conditions will be large.

5 Method

5.1 Participants

One hundred and fifteen college students participated in this study. The sex of the respondents were 61 males (42.1%) and 84 females (57.9%). The age of the respondents ranged from 18 to 27 years, with a mean age of 20.7 years (SD = 2.0) and the mode age was 19 years.

5.2 Experimental design and material

Experiments were conducted on a $2 \times 2$ (counterfactual condition: status quo vs. non-status quo) × 2 (mindfulness: high, low) between-subject design. Subjects were given a scenario similar to that used by Hetts, Boninger, Armor, Gleicher & Nathanson. However, they did not set any of the two alternatives as the default alternative, but this study set one alternative as the default alternative. Respondents were asked to read and answer, thinking that they were the main characters of the scenario. The scenarios are described in the past recall method, and the contents are as follows: I mainly use P beauty salon. I had to trim my hair last weekend because of the important schedule this week. I met a close friend last week and shared various kinds of chat. Then I looked at my friend’s hair and asked where the friend had his own hair trimmed. The friend said he/she did it in the Q beauty salon near the P beauty salon. I was worried about where I was going to go to the P beauty salon or the Q beauty salon last weekend, and I trimmed my hair in one of those two places. However, the result was not good.
5.3 Measure and process

Respondents received a questionnaire consisting of questions about mindfulness, imagined choice scenario, regret related items according to the scenario, and demographic characteristics (gender, age), and responded at their own pace.

The Korean version of the mindfulness scale was used to measure mindfulness 26. This is the scale that based on the previous several measures of mindfulness, Park has appropriately made and validated it for Koreans. The 7-point scale (1 = strongly disagree, 7 = strongly agree) was measured and the reliability coefficient measured with Cronbach’s alpha was .904.

Two types of regret were measured: regret by the selected alternative and regret by a forgone alternative. Future behavioral intentions were measured in two ways: the intention to repeat the same choice and the intention to change to a forgone choice. These were also measured in the form of a 7-point Likert type (1 = strongly disagree, 7 = strongly agree).

6 Results

6.1 Influences of counterfactual conditions and mindfulness on regret

To investigate the effect of two counterfactual conditions and mindfulness levels on the regret by the selected alternative, two-way ANOVA was performed and the results are shown in Figure 1. Counterfactual conditions alone have a significant effect on the regret by the selected alternative, F(1, 141)=18.685, p<.001. Specifically, the regret by the selected alternative (M = 5.53, SD = 1.316) of the non-status quo group was higher than the regret by the selected alternative (M = 4.45, SD = 1.680) of the status quo group. The main effect of mindfulness level, F(1, 141)=.109, n.s., and the interaction effect of two independent variables, F(1, 141)=.587, n.s., were not significant.
The results of the two-way ANOVA for regret by a forgone alternative are shown in Figure 2. The main effect of counterfactual conditions, $F(1, 141)=26.157$, $p<.001$, the main effect of mindfulness, $F(1, 141)=6.459$, $p<.05$, and the interaction effect of two independent variables, $F(1, 141)=6.342$, $p<.05$ were significant.
6.2 Influences of counterfactual conditions and mindfulness on behavioral intentions

The results of ANOVA for the intention to repeat the same selection are shown in Figure 3. The main effect of the counterfactual conditions, $F(1, 141)=68.302, p<.001$, and the interaction effect of the two independent variables, $F(1, 141)=4.718, p<.05$, were significant. On the other hand, the main effect of mindfulness, $F(1, 141)=.061, n.s.$ was not significant.

![Figure 3. Result of ANOVA for the intention to repeat the same choice](image)

The results of ANOVA for the intention to change to a forgone alternative are shown in Figure 4. Only the main effect of the selection situation was significant, $F(1, 141)=52.991, p<.001$. The main effect of mindfulness level, $F(1, 141)=.002, n.s.$ And the interaction effect of two independent variables were, $F(1, 141)=2.298, n.s.$, not significant.
7 Discussion

One of the options that consumers place in the service purchase situation is whether they will repurchase the current using service or purchase a new one. The problem is that whatever they choose, there is a possibility of failure. The purpose of this study was to find out what different results would be in regret and behavioral intention according to individual differences of mindfulness when experiencing failure, either in maintaining existing alternative or choosing new alternative.

The results of analysis on regret experience are as follows. First, even if the service purchase experience is negative, consumers experienced more regrets when they chose to change than when they kept the existing alternative. These results were not related to the level of mindfulness. Second, for the regret by a forgone alternative, the interaction effect between counterfactual condition and the level of mindfulness was observed. In other words, for the regret experience according to the new alternative choice, there was no difference by the level of mindfulness. However, consumers with low mindfulness (compared to high consumers) are more likely to regret their negative experiences in the status quo condition.

The results of analysis on behavioral intentions are as follows.

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Figure 4. Result of ANOVA for the intention to change a forgone choice
Regardless of the level of mindfulness, the status quo group was intended to repeat the same choice over the non-status quo. However, for people with low mindfulness, there was no significant difference in the same-choice repetition intention between the status quo group and the non-status quo group. On the other hand, for those with high mindfulness, the difference was significant.

Regardless of the level of mindfulness, the intention to change to a forgone choice was found to be higher in the non-status quo group than in the status quo group. This means that if the experience of the new service is negative, people are willing to return to the service they were using previously.

This study has some implications. First, from the theoretical point of view, this study is meaningful in that it examined the role of mindfulness in the field of consumer psychology. Although attention to the variable of mindfulness was long, research on the role of this variable in consumer psychology was very limited. Second, from the practical point of view, this study is meaningful in that it provides basic knowledge that can help communication. Mindfulness is closer to the state than to the trait, and more appropriate to the cognitive style than to the cognitive ability, considering that mindfulness is an intentional nonjudgmental acceptance of the present state. This means that mindfulness can be created through meditation, counseling, or psychotherapy. This means that it is possible to transform consumers into mindfulness through communication such as advertising. It would suggest that mindfulness can help maintain a particular brand’s customer.

As with many other studies, this study will also have limitations. First, the scenario of this study deals only with the results of decisions (variance of regret and behavioral intention) that reflect only self-responsibility. But when we make decisions, we are also sensitive to the influences of others. Therefore, future studies will need to deal with how the outcome of their own decisions, which reflects the influence of others, varies according to the level of mindfulness, even though consumers themselves make final decisions. Second, this study has dealt only with beauty services among many kinds of products and services. Services are very diverse, depending on their characteristics. According to various services, the aspect of the attribution and the intensity of regret will be different, so the role of mindfulness may be also different. Therefore, future stud-
ies will need to examine whether the results of this study can be applied to other products or services.

References


