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Customer Counterfactual Responses to Restaurant Service Failure and Its Recovery

Chang and Kim: Customer Counterfactual Responses to Restaurant Service Failure

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ABSTRACT

The objective of this study is to examine how customers build emotions, perception, and future intentions through counterfactual reasoning in situations of service failure and its recovery effort in a restaurant setting. The experiment survey was conducted online with the assistance of Gallup Korea. As confirmed by prior research in service failure, respondents in a normal event exhibit a rising degree of recovery satisfaction and revisit intention as the level of recovery increases. Training wait staff about first-time customers' counterfactual reasoning will help restaurant managers to expand their customer bases by increasing the market share of new customers.

Key Words: Counterfactual reasoning, normal event, exceptional event, service recovery

INTRODUCTION

Counterfactual, meaning contrary to the facts, is a mental representation of alternatives to the past (Roese, 1997). It allows us to judge reality by comparing it to what could have happened instead (Roese, Sanna, & Galinsky, 2005). Counterfactual refers something did not happen, but could have happened. It simply occurs in reflection upon opportunity cost (Roese et al., 2005). Counterfactual reasoning is also subject to causal thoughts and gives rise to emotions such as regret and disappointment (Byrne, 2002; Kahneman & Miller, 1986; Landman, 1987). Besides, it leads people to focus on how an actual negative outcome can be avoided in the future and suggests means by which they can achieve a more favorable future outcome (Mandel, 2003; Mandel & Lehman, 1996). For instance, Mary will go to a finer restaurant for her next birthday based on her counterfactual reasoning. Thus, counterfactual helps people learn from experience (Byrne, 2002) or imagination (Morris & Moore, 2000).

LITERATURE REVIEW

Regret and disappointment are evoked directly from counterfactual reasoning on a negative outcome (Byrne, 2002; Kahneman & Miller, 1986; Landman, 1987). Zeelenberg and Pieters (2004) suggest regret is typically felt after a bad choice of service provider and disappointment is felt when expectations are higher than the actual service experience. Further they exhibit that regret is connected to self-blame while disappointment is connected to assigning blame to a service provider. Kahneman and Tversky (1982) report that subjects were more likely to show the degree of regret on the victim of car crash who had taken an atypical route to work than on the victim who had taken his usual route. This indicates that subjects rate higher level of regret on an abnormal condition than a normal condition to a negative outcome. Kahneman and Miller (1986) also illustrate subjects' responses to the degree of regret that various types of victims might have been experienced. They confirm that the more easily undone or imagined alternatives to an outcome, the more regret subjects expected it to generate.

Wells and Gavanski (1989) illustrate that counterfactuals influence blame assignment through their effect on causal ascriptions. They contend that people assign causal significance by considering the likelihood of the counterfactual that would undo the outcome. They demonstrate this proposal in a scenario study involving a cab driver who refused to pick up a disabled couple and the couple was injured when they drove off a collapsed bridge following his refusal. Subjects were asked to rate the extent to which the cab driver caused, and was responsible for, the accident. Through the subjects' counterfactual reasoning process, the number of counterfactual alternatives involving the cab driver was greater than involving other alternatives.

RESEARCH HYPOTHESES

Hypotheses construction in the current study is based on two primary situational variables. One is a service failure situation in a normal event and a service failure situation in an exceptional event. The other is service recovery efforts divided into three levels: poor, limited, and full effort. The two situational variables are employed to build the following six hypotheses. With a scale of 1 to 7, respondents determine the degree of regret, disappointment, recovery satisfaction, revisit and switch intention.

Researchers in counterfactual issues have developed a normal and an exceptional situation to examine a counterfactual reasoning process. Miller and Turnbull (1990) find a difference in the degree of blame assignment on an accident occurring in a normal event (injured in a usual store one frequently visits) compared to an exceptional event (injured in a store one rarely visits). Subjects are more likely to assign blame to a person injured in a store he/she rarely visits than to a person injured in a store that he/she frequently visits. Similarly, Creyer and Gurhan's (1997) study exhibits differences in subjects' counterfactual process between a car accident caused by a piece of concrete falling from an overpass (exceptional event) and a car accident occurring in a busy intersection a few blocks away from home (normal event). Based on these previous studies, we created a service failure situation in a usual restaurant where the subject is aware of and expects some delay during busy weekends (normal event) and a service failure situation in an unusual restaurant where the subject rarely visits (exceptional event). Hypotheses 1-4 are formulated to test a difference in the number of counterfactual alternatives and customers' responses in a normal and exceptional event.

H1. Given a poor recovery effort (no apology, no compensation) following a service failure, there are differences in customer responses between a normal and an exceptional event.

H1-1: Given a poor recovery effort (no apology, no compensation) following a service failure, there is a difference in the level of regret between a normal and an exceptional event.

H1-2: Given a poor recovery effort (no apology, no compensation) following a service failure, there is a difference in the level of disappointment between a normal and an exceptional event.

H1-3: Given a poor recovery effort (no apology, no compensation) following a service failure, there is a difference in the level of post-recovery satisfaction between a normal and an exceptional event.

H1-4: Given a poor recovery effort (no apology, no compensation) following a service failure, there is a difference in the level of revisit intention between a normal and an exceptional event.

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H1-5: Given a poor recovery effort (no apology, no compensation) following a service failure, there is a difference in the level of switching intention between a normal and an exceptional event.

Hypothesis 1 was limited to the condition of poor recovery effort. We expect the patterns of counterfactual responses between normal and exceptional situations differ when the situational variable changes from no recovery to limited or full recovery efforts. Thus, Hypotheses 2 and 3 are proposed.

H2. Given a limited recovery effort (apology only) following a service failure, there are differences in customer responses between a normal and an exceptional event.

H2-1: Given a limited recovery effort (apology only) following a service failure, there is a difference in the level of regret between a normal and an exceptional event.

H2-2: Given a limited recovery effort (apology only) following a service failure, there is a difference in the level of disappointment between a normal and an exceptional event.

H2-3: Given a limited recovery effort (apology only) following a service failure, there is a difference in the level of post-recovery satisfaction between a normal and an exceptional event.

H2-4: Given a limited recovery effort (apology only) following a service failure, there is a difference in the level of revisit intention between a normal and an exceptional event.

H2-5: Given a limited recovery effort (apology only) following a service failure, there is a difference in the level of switching intention between a normal and an exceptional event.

H3. Given a full recovery effort (apology with compensation) following a service failure, there are differences in customer responses between a normal and an exceptional event.

H3-1: Given a full recovery effort (apology with compensation) following a service failure, there is a difference in the level of regret between a normal and an exceptional event.

H3-2: Given a full recovery effort (apology with compensation) following a service failure, there is a difference in the level of disappointment between a normal and an exceptional event.

H3-3: Given a full recovery effort (apology with compensation) following a service failure, there is a difference in the level of post-recovery satisfaction between a normal and an exceptional event.

H3-4: Given a full recovery effort (apology with compensation) following a service failure, there is a difference in the level of revisit intention between a normal and an exceptional event.

H3-5: Given a full recovery effort (apology with compensation) following a service failure, there is a difference in the level of switching intention between a normal and an exceptional event.

RESEARCH METHODS

Scenario-based experiments were adopted to investigate counterfactual reasoning due to difficulties in producing service failure and service recovery situations in real settings. Service failure circumstances were divided into two different situations. The scripts for each were very much alike except for where service failure occurred. A *normal event* describes two customers waiting 40 minutes for their entrée at their usual restaurant on a busy weekend where they are aware of previous service delays during weekends. An *exceptional event* depicts customers

waiting 40 minutes for their entrée at a restaurant that they seldom patronize. They choose the unusual restaurant because it is near the usual restaurant where they were unable to get a table on a given weekend. This manipulation is based on previous counterfactual and service failure recovery research illustrating a difference in construction of counterfactual alternatives in a normal event, or long past transaction history, versus in an exceptional event, or short past transaction history (Karande, Magnini, & Tam, 2007).

DATA COLLECTION AND ANALYSIS

This experiment survey was conducted online with the assistance of Gallup Korea from September 29 to October 3, 2007. Gallup Korea has 240,000 online panels nationwide, which closely represent the adult population in Korea. With the screening process, a total of 405 (204 normal event and 201 exceptional event) surveys were retained for further data analysis.

To test the postulated hypotheses, one-way analysis of variance (ANOVA) was utilized. To test H1-3, ANOVA was employed to distinguish which of customer responses (e.g., regret, disappointment, recovery satisfaction, revisit intention, switching intention) were significantly different between a normal and an exceptional event

RESULTS

We hypothesized that the degree of regret may differ during a service failure encounter between a normal and an exceptional event with regard to three service recovery efforts. When poor service recovery is delivered, there is a statistically significant difference in the level of regret between the experimental groups at the level of .001. As shown in Table 1, given poor recovery effort, respondents in a normal event showed higher regret level than those in the exceptional event. Therefore, H1-1 is accepted. With the delivery of a poor service recovery effort, there is a statistically significant difference in disappointment between a normal and an exceptional event at the level of .01. Therefore, H1-2 is confirmed. Given poor service recovery effort, respondents in a normal event showed a higher recovery satisfaction level than did those in the exceptional event at the significance level of .05, even though the levels are too low to say that some satisfaction level existed. Thus H1-3 is accepted. There is no statistically significant difference in revisit intention when no service recovery effort is given. Thus H1-4 is rejected. Results indicate that respondents' switching intentions were not statistically different between a normal and an exceptional event when poor service recovery is offered. Therefore, H1-5 is rejected.

Table 1
Counterfactual Responses after Poor Recovery Effort

Customer Responses	Poor Recovery Effort				
	Normal Event n=204	Exceptional Event n=201	F	P	Result
Regret	3.48 ^a (1.93) ^b	2.39 (1.80)	34.07	.000*** ^c	Accept
Disappointment	5.96 (1.22)	6.28 (1.10)	7.808	.005*	Accept
Recovery Satisfaction	1.22 (.46)	1.10 (.85)	6.448	.011*	Accept
Revisit Intention	1.28 (.62)	1.34 (.72)	.942	.332	Reject

Switching Intention	5.77 2.15	Customer Counterfactual Responses to Restaurant Service Failure	5.63 2.19	992	337	Reject
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Mean; b. Standard Deviation; c. *: $p < .05$, **: $< .01$, ***: $< .001$

As shown in Table 2, respondents in an exceptional event indicated a higher regret level upon medium recovery effort than did those in a normal event. The difference in the regret levels is exhibited at the significance level of .001. Therefore, H2-1 is confirmed. There is, however, no statistically significant difference in the degree of disappointment found between respondents in a normal and those in an exceptional event when “apology only” was delivered after service failure. Hence H2-2 is rejected. However, the mean scores on disappointments ranging from 5.77 to 5.93 in a 1-7 point Likert scale indicate that customers seriously show their disappointment upon service failure and the subsequent limited recovery effort. The satisfaction levels, when limited recovery effort was offered, suggest that respondents in the normal event indicated higher satisfaction level than those in the exceptional event at the significance level of .05. Thus H2-3 is accepted. By raising recovery effort to a limited from poor, respondents in the normal events indicated higher revisit intention than those in the exceptional events at the significance level of .001. Thus H2-4 is accepted. Respondents in experimental groups indicated that their switching intentions were significantly different at the level of .01. When a limited service recovery effort was made, respondents in an exceptional event showed higher switching intention than those in a normal event. Therefore, H2-5 is accepted.

Table 2
Counterfactual Responses after Limited Service Recovery Effort

Customer Responses	Limited Recovery Effort				Result
	Normal Event n=204	Exceptional Event n=201	F	P	
Regret	3.00 ^a (1.90) ^b	3.88 (1.82)	22.76	.000*** ^c	Accept
Disappointment	5.93 (1.29)	5.77 (1.27)	1.504	.221	Reject
Recovery Satisfaction	3.17 (1.29)	2.84 (1.28)	6.730	.010*	Accept
Revisit Intention	3.37 (1.31)	2.76 (1.35)	21.222	.000***	Accept
Switching Intention	4.22 (1.62)	4.73 (1.78)	8.957	.003*	Accept

Mean; b. Standard Deviation; c. *: $p < .05$, **: $< .01$, ***: $< .001$

As shown in Table 3, respondents in the exceptional event exhibited a higher degree of regret after full service recovery than those in the normal event. Statistically there is a difference in the degree of regret exhibited during full recovery effort between respondents in a normal and those in an exceptional event at the significance level of .001. Therefore, H3-1 is accepted. Given a full recovery effort, there is no significant difference in the level of disappointment in the normal and exceptional event. Thus, H3-2 is rejected. However, the mean scores on disappointments ranging from 5.70 to 5.78 in a 7 point Likert scale indicate that respondents seriously show their disappointment upon service failure and the subsequent full recovery efforts. Respondents in the normal event showed a higher level of satisfaction than did those in the exceptional event at the significance level of .05, when full recovery effort was provided. Thus H3-3 is accepted. Given full service recovery effort, respondents in the normal event indicated

higher revisit intention than those in the exceptional event at the significance level of .001. Thus H3-4 is accepted. Consequently, respondents in an exceptional event indicated higher switching intention than those in a normal event at the level of .001. Therefore, H3-5 is accepted.

Table 3
Counterfactual Responses after Full Recovery Effort

Customer Responses	Full Recovery Effort				Result
	Normal Event n=204	Exceptional Event n=201	F	P	
Regret	3.10 ^a (1.95) ^b	4.07 (1.89)	25.73	.000*** ^c	Accept
Disappointment	5.78 (1.35)	5.70 (1.24)	.388	.534	Reject
Recovery Satisfaction	5.27 (1.25)	4.77 (1.27)	15.637	.000***	Accept
Revisit Intention	5.35 (1.24)	4.66 (1.27)	40.373	.000***	Accept
Switching Intention	2.66 (1.39)	3.46 (1.54)	29.731	.000***	Accept

a. Mean; b. Standard Deviation; c. *: p < .05, **: < .01, ***: < .001

DISCUSSION

When poor service recovery follows a service failure, the results from the current study are consistent with previous investigations regarding blame assignment in the process of counterfactual reasoning. Prior research has shown that subjects indicate more regret on more easily undone or imagined alternatives to an outcome (Kahneman & Miller, 1986; Miller & Turnbull, 1990). When poor recovery is provided, there is a higher level of self-blame (regret) on the decision made to select the usual restaurant (normal event) where they are previously aware of service delay during busy weekends than on the decision made to select the rarely visited restaurant (exceptional event) instead. In contrast, the level of disappointment has shown the opposite when poor recovery is provided. Respondents in an exceptional event show a higher level of disappointment in service failure than do those in a normal event. As stated earlier, disappointment is regarded as the placing of blame on a service provider (Zeelenberg & Pieters, 2004). Therefore, respondents in a normal event are likely to show a better understanding of service failure and poor recovery from the usual restaurant than are respondents from the rarely visited restaurant. In short, they tend to exhibit lower level of blame for the poor service recovery during their encounter to the usual restaurant. The overall level of recovery satisfaction from poor recovery following service failure is considered extremely low since the figures are very close to 1, which is the lowest scale measured. Yet, it is very interesting to note that respondents in a normal event reveal a higher recovery satisfaction level than those in the exceptional event. Presumably, respondents' bond to the usual restaurant leads them to display higher recovery satisfaction than that of respondents in unusual restaurant in spite of poor recovery. The results of revisit and switching intention in both events do not show significant differences.

When limited recovery is offered, respondents in an exceptional event show a higher level of regret than respondents in a normal event. Unlike that of poor recovery, this result

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illustrates that respondents in an exceptional event are more likely to blame themselves for the decision to select the rarely visited restaurant (an extraordinary conduct). In other words, respondents in an exceptional event are likely to consider the decision more mutable than the other decision to select the frequented restaurant (an ordinary conduct). In sum, customers are more likely to blame themselves for acting out-of-character by selecting the rarely visited restaurant than on the routine behavior. When limited recovery is provided, the levels of disappointment in a normal and an exceptional event are not significantly different. It is possible that the levels of disappointment (the degrees of blame that respondents assign to the restaurant) are constant regardless of the types of service failure situations. Respondents in a normal event are more likely to show higher recovery satisfaction, revisit intention, and lower switching intention than those in an exceptional event when limited recovery is provided. On the one hand, a plausible reason is that customers to the frequently visited restaurant tend to be more tolerant of service failure when only limited recovery is offered. On the other hand, customers who patronize the restaurant less frequently are likely to exhibit lower recovery satisfaction, less inclination to revisit, and higher switching intention due to weak bond to the restaurant.

When there is full service recovery, there were no differences in customer responses from between a normal and an exceptional event. As when limited recovery is provided, the level of regret expressed by respondents in an exceptional event was greater than in a normal event when full recovery is provided. Therefore, respondents in an exceptional event place more blame on themselves, for having dined at a restaurant that they do not normally frequent, than do those in a normal event. Given full recovery effort, there is no difference in the level of disappointment between a normal and an exceptional event. The results of recovery satisfaction and revisit intention are the same as when limited recovery is provided. Switching intention level following full recovery is lower in a normal event than in an exceptional event.

MANAGERIAL IMPLICATION

With the findings indicated above, restaurant managers should adopt different service failure recovery tactics based on their types of patrons. Wait staff should greet customers and should make a note whether or not it is their first visit. When service failure occurs for first time customers, staff performing recovery effort for them should be aware that they created alternative counterfactuals against the exceptional situations that made them come and dine in the restaurant. While engaging in a counterfactual process, customers focus on avoiding a bad dining experience and they imagine ways to create a more favorable experience in the future. Their regret is generated by a counterfactual process in which people blame themselves for having chosen the restaurant regardless of the reasons for that choice. Regret convinces them that they should not have tried a new restaurant. Therefore, wait staff or managers who perform recovery effort should send the message to customers that the blame resides with the restaurant and not with the customers. That simple task is likely to generate a return visit. Thus, training wait staff about first-time customers' counterfactual reasoning will help restaurant managers to expand their customer bases by increasing the market share of new customers.

LIMITATIONS AND FUTURE RESEARCH

This study is not free from limitations. First, this experiment employed an online survey that might have produced different outcomes from face-to-face on-site surveys. Although an effort was made to eliminate responses from which respondents could recognize the three

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different recovery efforts in the screening process, the results might not be free from errors implicit in respondents' surveys, because online surveys preclude in-depth explanations. Unlike the current study which is limited to service-system failures in the restaurant core service, future researchers should investigate counterfactual responses from different types of service failures in the course of the entire service encounter in a restaurant setting, and adopt the level of service failure criticality as a situational variable.

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