

YOUR CUSTOMERS MAY FEEL JILTED: THE HIDDEN RISK OF HIBRID E-CUSTOMIZATION SYSTEMS

Akinori Ono, Yusuke Iwama, Ryohei Kiyazawa
Keio University, Faculty of Business and Commerce, Tokyo, Japan

Abstract: *Recently, some firms adopt a system in which both mass-customized and mass-produced products are supplied and the latter options are recommended if the customer fails to complete ordering the former due to mass confusion. However, based on the new notion, the “jilting” effect, the results of our empirical studies show that contrary to the firms’ expectations, customers who give up customizing a product are likely to switch brands even if the competing brands are less attractive. It implies that manufacturers would rather prevent customization failure as opposed to offering mass-produced products after the failure.*

Key Words: *Mass Customization, Jilt, Aspirant Choice, Hybrid System, Brand Switching*

1. INTRODUCTION

In recent years, fostering strong and long-term customer relationships and maximizing customer value have become one of the key propositions for firms. Until the Industrial Revolution, manufacturers had adapted a “made-to-order” production system in which they made products one by one for each individual customer, and subsequently they could establish individual relationships with their customers. After the Industrial Revolution brought mass production, manufacturers shifted their production system from “made-to-order” to “make-to-stock”. As a result, whereas the shift enabled manufacturers to pursue economics of scale, the psychological distance between customers and products grew larger, and the product-mediated relationship dissolved.

However, in recent years, this situation has changed drastically as firms have adopted a system by which they can supply products designed for each individual customer on the same price level as mass produced products. This system was made possible by the accumulation of customer information through their online interactions. This system is called “mass customization” [1]. Nike’s online platform, NIKEiD, is a successful example of mass customization. NIKEiD offers customizable shoes. At this time, dozens of more options are presented for each base. After the choice,

customers are guided to arrange the colors to each segmented part of their shoes.

Providing customers with a wealth of choices when it comes to customization, such as with NIKEiD, allows them to meet their needs in detail. However, customers sometimes abandon customization due to “mass confusion”, caused by the complexity of selecting the optimal choices [2]. To overcome this problem, some firms including Nike have recently implemented a system in which they offer not only customized products, but also ready-made products. Using the new system, they expected that customers who find that they are less satisfied with any ready-made products would move into the customization system, whereas customers who find that they get confused with the customized system go back to the ready-made products. Firms can maximize the sales opportunity to sell their products with this multiple strategy. The paper defines the strategy as the “hybrid e-customization system”.

The hybrid e-customization system has been adopted more and more in recent years. Nonetheless, little is known about its effectiveness. Based on the new notion of the “jilting” effect, which can be defined as anticipation of receiving a highly desirable option followed by that option becoming inaccessible and attempted to explain the psychological processes that cause consumers to switch brands based on the concept [3], the paper points out the possibility that customers may not come back to any products under the same brand as the customized products when they fail to complete customization.

2. THEORETICAL BACKGROUND

2.1. Previous research on customization

Davis [4] was the first research in the world to use the term “mass customization” proposing its novelty and attractiveness with actual examples of products and services [5]. Mass customization has been defined as “a system that, through the use of information technology, elastic manufacturing processes, and organizational structures, provides a wide range of products and services that meet the specific needs of individual

customers on a close cost level to that of mass production” [4]. Kotler [6] also emphasized the importance of mass customization in marketing strategies in response to technological innovation on the firm side and the fragmentation of product demand on the customer side.

In addition, modern technological innovations have facilitated the collection and processing of customer information via the Internet, making electronic mass customization possible [1]. Firms have used this system to dramatically improve the efficiency of achieving their objective, that is, satisfying customer needs. In fact, a number of successful cases of mass customization have been reported for a variety of products and services, including personal housing, mobile phones, and personal nutrition management [7, 8, 9].

However, as mentioned above, for ordinary consumers, finding the ideal customized product among the vast array of choices can be challenging at times. Thus, too many choices can confuse consumers and consequently frustrate them or cause them to abandon the customization itself. Such harms of mass customization are called “mass confusion” [2]. To cope with these negative aspects of mass customization, more firms come to sell both mass customized and mass produced products. By doing so, they expect to offset mass confusion that may result in lost sales opportunities for less motivated customers who fail to obtain the ideal custom product. In this study, we define it as the “hybrid e-customization system”.

2.2. Previous research on the jilting effect

In our daily life, the situation occurs frequently where a person is unable to purchase a product that he or she wanted to get because of out-of-stock or delayed arrival. The situation of not achieving the desired outcome, as represented by these examples, is called “jilt” [10]. Litt, Kahn and Baba [10] investigated the psychological state of consumers who failed to obtain a product and, therefore, who faced with a kind of jilt. They found that the negative emotions evoked by failure to acquire the product were transferred to other products of its brand, and the evaluation of the brand as a whole was also damaged.

In a follow-up study, Garvey, Maloy, and Baba [3] explicitly defined the concept of “jilting” and claimed that the jilting effect proceeds through two stages. The first stage is the “anticipation phase,” which starts when consumers desire the acquisition of an alternative product that match their current needs. At this stage, they compare their tastes to an aspirant alternative, which results in a relative decrease in their evaluation of the incumbent product. The second stage is the “post-jilt phase,” which starts when the availability of an aspirant alternative product has completely disappeared. At this stage, brand switching occurs. They defined this shift in preference away from the incumbent option as the “jilting effect”.

According to them, brand switching occurs for the following two reasons: First, consumers have a tendency to negatively perceive attributes of a product that has fallen in value, and their evaluations rarely recover [11, 12, 13]. It has been argued that reduced attractiveness of

the currently preferred product would promote brand-switching behavior. Second, it has been contended that the sad feeling engendered by the failure to obtain a product can prompt brand switching. Sadness increases with unavailability of aspirant alternatives and the devaluation of the products that they currently favor. The mechanism that sadness drives brand switching behavior is as follows. First, along with sadness, consumers systematize their thinking to review their current preferences [14]. They also try to compensate for their sadness by seeking out other products [15, 16].

According to Garvey *et al.* [3], three conditions are required for jilting effect to occur—“attractiveness of the alternative products is high,” “availability of attractive alternatives can be anticipated,” and “availability of attractive alternatives disappears completely in the post-jilt phase.” They claimed that the jilting effect did not occur in the absence of any of these developmental conditions. Their claim may be summarized as Fig. 1.

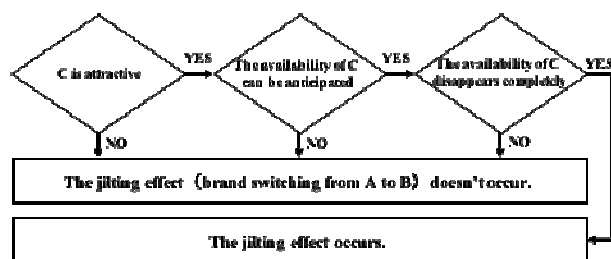


Fig. 1. Three antecedent conditions of the jilting effect

2.3. The limitation of the hybrid customization system

As overviewed in the previous sections, many of the firms that offer mass-customized products prevent lost sales to customers who fail to obtain the ideal customized product by selling mass-produced products in parallel, via a hybrid e-customization system. Utilizing this system, firms can offer mass-produced products to customers who find customization annoying due to low involvement with the product in question, and mass-customized products to customers who are not satisfied with the mass-produced products due to high involvement and prefer a product that fulfills their specific needs. Thus, since both needs can be fulfilled with the same brand, firms can maximize sales opportunities for their customers.

However, it is worth drawing attention to the circumstance where one tries to customize in an attempt to obtain the most desirable product—but fails to obtain the custom product due to mass confusion—is similar to the situation we overviewed in the previous sections, where the jilting effect occurs. Therefore, once consumers fail to obtain the ideal custom product, they may not purchase a mass produced product of the same brand as the mass-customized product, but instead purchase a mass-produced product of another brand. Therefore, it is conceivable that a firm’s aim to keep them as customers of its own brand through the hybrid e-customization system may not be successful.

3. STUDY 1: CUSTOMIZATION FAILURE CAUSES BRAND SWITCHING BEHAVIOR

3.1. Method

Participants and stimuli. Study 1 was conducted to test whether consumers switch from mass-produced product *A* to alternative mass-produced product *B* when the consumers who prefer mass-produced product *A* fail to obtain the aspirant mass-customized product *A'* offered by the same brand as *A* and, thus, they faced with a kind of jilt.

Fifty-eight undergraduate students (57% male, median age = 21) at a university participated in the study. Aromas were chosen as stimuli for following three reasons. First, as with bottles of chardonnay used by Garvey *et al.* [3] in their own experiments, it is possible to allow participants to randomly shape their preferences by having them try only *A* out of two alternatives, *A* and *B*. Second, there are indeed companies that offer aroma customization services. Third, the aroma services that allow consumers to customize various types of scent as they like can be preferred more than mass-production services.

The aromas used in the experiment was presented to the participants as a product from fictitious brands, with the actual brand name unclear. By doing so, we could exclude the influence of preferences being formed for a particular brand of aroma.

Procedure. First, participants were randomly assigned to the jilt group (the group challenging customization, $N = 31$) and the control group (the group not challenging customization, $N = 27$). Next, participants in each group were asked to try the scent of aroma *A* and rate the attractiveness of this on a scale from “Not at all attractive (1)” to “Extremely attractive (9).”

Participants in the jilt group were then informed of the existence of customization service *A'* offered by the same brand as aroma *A* and asked to rate the attractiveness of the customization service *A'* at this point on the same scale as aroma *A*. As a result, four participants rated the customization service *A'* lower than the aroma *A*. These four participants were not be considered to perceive the customization service *A'* as more attractive than the mass-produced product *A*. They were excluded from the sample of the jilt group because the condition for the jilting effect to occur “the attractiveness of the alternative products is high” were be considered unfulfilled. The remaining twenty-seven participants indicated the valence of their cognition directed at the mass-produced product *A* (“I would be thinking about the positives [/negatives] of aroma *A*”) during this same period on scales from “Strongly disagree (1)” to “Strongly agree (7).” They were then asked to complete customization to obtain the aspirant mass-customized product *A'*.

The detailed procedure is as follows. First, we prepared a set of ten aromas, which consisted of the aroma *A* and additional nine aromas, and had participants test each scent. Next, we let them actually mix the aromas without a time limitation in order to get the aspirant mass-customized product *A'*. After the mixing (i.e., customization) was completed, participants were

asked to respond yes or no to four items (“Does the aroma you’ve customized have a certain appeal that you don’t find in mass-produced products?” “Does the aroma you’ve customized have a scent that’s not too eccentric and can be used in everyday life?” “Is the aroma you’ve customized the only one in the world?” and “Is the aroma you’ve customized more ideal than any other aroma?”) to measure their satisfaction with the mixed aroma *A'*. Then, participants who responded “No” at least once were considered to be those who failed customization. Three participants were considered to succeed in customization. After excluding these three individuals from the sample of the jilt group, the remaining participants were informed of the existence of a mass-produced alternative *B* offered by another brand. Then, participants indicated their final selection (i.e., incumbent *A* versus comparable alternative *B*) and provided choice likelihood ratings for incumbent *A* and comparable alternative *B* on scales from “Definitely would not choose (1)” to “Definitely would choose (7).” After their selection, participants indicated their final rating for product *A* on a scale from “Not at all attractive (1)” to “Extremely attractive (9).”

Besides, as mentioned above, one of three conditions for the jilting effect to occur, “Attractiveness of the alternative products is high”, participants in the jilt group could be considered to fulfill the other two conditions, “Availability of attractive alternatives can be anticipated,” and “Availability of attractive alternatives disappears completely in the post-jilt phase”. This is because participants could be considered to anticipate obtaining the aspirant mass-customized product *A'* by having them try customization and the failure of customization without a time limitation could be attributed to the participants' lack of competence, making it impossible to expect to obtain it again.

After trying the scent of aroma *A*, without being informed of customization service *A'*, participants in the control group indicated the valence of their cognition of *A* (“I would be thinking about the positives [/negatives] of aroma *A*”) on scales from “Strongly disagree (1)” to “Strongly agree (7).” Participants then indicated their final selection and provided choice likelihood ratings for incumbent *A* versus comparable alternative *B*. After their selection, participants rated the attractiveness of *A* on a scale from “Not at all attractive (1)” to “Extremely attractive (9).”

3.2. Results

Preference for the incumbent mass-produced product. As expected, very few participants in the control group switched from the incumbent *A* to comparable alternative *B* (22.22%). In contrast, those in the jilt group switched from *A* to *B* significantly more often (58.33%). A binary logistic regression, with the experience of jilt (jilt vs. control) as the independent variable and final selection (switch from *A* to *B* vs. not switch from *A* to *B*) as the dependent variable, indicated that experiencing jilt significantly influence the intention to switch from *A* to *B* ($\beta = 1.589$; $Z = 2.559$; $p = 0.01$).

We next examined attractiveness ratings of the incumbent *A* across groups. The results of a Shapiro-Wilk test indicated that the assumption of normality of

the data was doubtful ($W = 0.867$; $p < .01$). Therefore, Wilcoxon rank-sum test was conducted. The result revealed that jilting significantly decreased the rated attractiveness of the incumbent option ($M_{\text{jilt}} = 6.00$; $M_{\text{control}} = 7.00$; $W = 186$; $p < .01$).

Choice likelihood ratings. We next examined the difference between the seven-point choice likelihood ratings for the mass-produced alternative *B* (reverse scored the incumbent option *A* rating and averaged) in the jilt group and the control group. The results of a Shapiro-Wilk test indicated that the assumption of normality of the data was doubtful ($W = 0.932$; $p < .01$). Therefore, Wilcoxon rank-sum test was conducted. The result of Wilcoxon rank sum test revealed that those in the jilt group ($M_{\text{jilt}} = 5.50$) were significantly more likely to choose the alternative *B* than those in the control group ($M_{\text{control}} = 4.00$; $W = 426$; $p = 0.05$).

Mediation analysis. To determine whether denigration influenced the post-jilt choice likelihood rating, we conducted a mediation analysis, with the experience of jilt (jilt vs. control) as the independent variable, positive incumbent *A*-related cognitions as the mediator, and alternative *B* choice likelihood as the dependent variable. Positive incumbent *A*-related cognitions were composite scores, a two-item composite of negative cognitions and positive cognitions, the former reverse scored as a function of condition, where a higher value corresponds to more positive thoughts about the mass-produced product *A*. The results indicated a significant indirect effect of the experience of jilt through incumbent mass-produced *A*-related cognitions upon choice likelihood (indirect effect = 1.915; 95% CI [0.878, 2.952]). This result consists with our proposition that jilting results in denigration of the incumbent mass-produced product and this, in turn, decreases choice likelihood for it.

3.3. Discussion

Study 1 provides evidence for the power of jilting to decrease preference for the incumbent mass-produced product. One issue that brand switching tendency that was observed in Study 1 might not be the jilting effect, but the spillover effect. We address this issue in Study 2.

4. STUDY 2: A DRIVER OF BRAND SWITCHING

Study 1 provides evidence that consumers are inclined to switch from mass-produced product *A* to alternative mass-produced product *B* when faced with a kind of jilt in which consumers who prefer mass-produced product *A* fail to obtain the aspirant mass-customized product *A'* offered by the same brand as *A*.

However, brand switching tendency that study 1 addresses might not be caused by customization failure, or the experience of jilt. As mentioned in the literature review section, Litt, *et al.* [10] found that the negative emotions evoked by failure to acquire the product were transferred to other products of its brand, and the evaluation of the brand as a whole was also reduced (i.e., the spillover effect). Brand switching tendency that study 1 revealed might not be the jilting effect, but the spillover effect Litt, *et al.* [10] found. Therefore, it is necessary to examine whether the brand switching after the failure to obtain the aspirant mass-customized product *A'* is the

jilting effect. If consumers who experience a jilt have a tendency to switch brands under circumstances in which the spillover effect cannot occur, then it could be said that the brand switching is caused by the jilt.

4.1. Method

Participants and stimuli. Study 2 was conducted to test whether consumers switch from mass-produced product *A* to alternative product *B* when faced with a kind of jilt in which consumers who prefer mass-produced product *A* fail to obtain the aspirant mass-customized product *C* offered by the third brand, rather than mass-customized product *A'* offered by the same brand as *A*.

Sixty-seven undergraduate students (61% male, median age = 20) at a university participated in Study 2. As in Study 1, aromas were selected as stimuli for this study. But, not as in Study 1, three fictitious brands were prepared for products. In this study, aromas were chosen for the same reasons as in Study 1.

Procedure. First, participants were randomly assigned to the jilt group (the group challenging customization, $N = 34$) and the control group (the group not challenging customization, $N = 33$). Next, participants in each group were asked to try the scent of mass-produced aroma *A* and rate the attractiveness of this on the same scale as in Study 1.

In this study, unlike Study 1, participants in the jilt group were then informed of the existence of customization service *C* offered by the different brand than *A* and asked to rate the attractiveness of *C* on the same scale as *A*. As a result, one participant rated the customization service *C* lower than *A*. This participant could not be considered to perceive the customization service *C* as more attractive than the mass-produced product *A*. He was excluded from the sample of the jilt group because the condition, "Attractiveness of the alternative products is high" could be considered unfulfilled. The remaining thirty-three participants were then asked to try customization to obtain the aspirant mass-customized product *C*.

The same procedure was followed as in Study 1. Three participants were considered to succeed in customization. After excluding these participants from the sample of the jilt group, the remaining participants were informed of the existence of a mass-produced alternative *B* offered by another brand. Then, participants were asked to answer their final selection (i.e., incumbent *A* versus comparable alternative *B*).

As in Study 1, participants in the jilt group could be considered to fulfill three conditions for the jilting effect to occur.

After trying the scent of mass-produced aroma *A*, without being informed of customization service *C*, participants in the control group were informed of mass-produced alternative. Then, participants indicated their final selection (i.e., incumbent versus comparable alternative).

4.2. Results

Preference for the incumbent mass-produced product. As expected, few participants in the control group switched from *A* to *B* (27.27%). In contrast,

participants in the jilt group switched from A to B significantly more often (53.33%). As in Study 1, a binary logistic regression was conducted. The result revealed that experiencing jilt (i.e., the failure of obtaining the aspirant mass-customized product C) significantly influence the intention to switch from A to B ($\beta = 1.114$; $Z = 2.081$; $p < 0.05$).

We next examined attractiveness ratings of the incumbent A across groups. The results of a Shapiro-Wilk test indicated that the assumption of normality of the data was doubtful ($W = 0.935$; $p < .01$). Therefore, Wilcoxon rank-sum test was conducted. The results indicated that jilting significantly decreased the rated attractiveness of the incumbent option ($M_{\text{jilt}} = 6.00$; $M_{\text{control}} = 7.00$; $W = 290.5$; $p < 0.05$). Thus, Study 2 revealed that consumers who experience a jilt have a tendency to switch brands, even in situations where the brand of the customization service differs from the mass-produced product they originally preferred, (i.e., situations where spillover effects cannot occur). This result implies that the brand switching caused by the failure of customization could be regarded as the jilting effect.

5. GENERAL DISCUSSION

In this research, we applied the new notion of jilting effects to the context of mass customization and reveal the hidden risk of the hybrid customization system". Two studies provide evidence for the power of jilting (i.e., the failure of customization) to decrease preference for the incumbent option and cause a shift away from it.

5.1. Theoretical contributions

The present work makes two contributions to the literature. First, we placed a focus on the hybrid customization and investigated the jilting effect. By doing so, we found that when consumers give up customizing an aspirant product, they incline to switch the brands to even a less attractive competing brand. In other words, we indicated that when consumers suffer from mass confusion they may be alienated from the brand.

Second, we contributed to knowledge concerning marketing actions that elicit the experience of jilt through the context of mass customization. Previous research examining the jilting effect (e.g., Garvey *et al.* [3]) has only focused on the lack of stock or the delay of delivery of mass-produced products. Our work expands the scope of the jilting effect to consider the failure of customization and "mass confusion".

5.2. Managerial contributions

Our research findings have some important managerial contributions for brand managers of mass-customized products. Managers in typical recommend customers to purchase ready-made products after they fail to complete customization (i.e., adopt hybrid e-customization system) to minimize the possibility of customers' brand switching to competing products. However, it may be more effective to prevent them from failing in the first place rather than recommending a mass-produced product by using the hybrid e-

customization system after the failure because once consumers fail to custom aspirant products the jilting effect may occur.

Managers may be able to use one of two possible strategies to prevent mass confusion and help customers to complete customizing aspirant products. First, managers can introduce an aid system to help customers to complete their customization. With a recommendation system, confused customers may be able to create aspirant products making good use of their original design. These policies can work better than a hybrid e-customization system. Second, managers can design multiple sets of customizations that varies in complexity and quantity of customizable choices, and recommend one suitable set out of them for each. With this strategy, managers can minimize the risk of jilt.

5.3. Limitations

The current work has some limitations. First, the sample representation was somewhat limited as all participants for our studies were undergraduate students. Furthermore, the sample size was somewhat small (although comparable in size to previous research examining the jilting effect). Therefore, future research should use wider and bigger datasets to confirm the validity of the result of our studies.

Second, stimuli for our studies were limited. In fact, firms from various industries have been adopting various customization systems. However, we used only aromas in our experiments. Future research should use a variety of stimuli besides aromas to confirm the validity of the result of our studies.

5.4. Future research directions

This research has implications for future research examining the jilting effect in the context of mass customization. Future research could examine moderating factors of the jilting effect. In our studies, some participants did not switch brands even though they felt jilted. Therefore, examining what types of consumers are likely to switch brands (i.e., examining the moderating role of consumer's characteristics) would be needed.

With a more elaborate design of empirical studies, examining the power of jilting and consumers' psychological response would be conclusive. How exposure to more alternatives during the post-jilt phase influences consumers' response remains an unsolved matter. In daily life, consumers could choose their brands among many alternatives. So, future research could consider an actual situation where consumers expose themselves to multiple alternatives. Future research may also consider the price of an attractive alternative. In our experiments, the aspirant products (customized products) is clearly superior to the incumbent products (ready-made products). However, customers sometimes hesitate to purchase attractive products due to their price. Therefore, considering the price of an attractive customized product would be a matter for future investigation.

6. REFERENCES

- [1] A. M. Kaplan and M. Haenlein, "Toward a parsimonious definition of traditional and electronic mass customization," *Journal of Product Innovation Management*, vol. 23, no. 2, pp. 168–182, Mar. 2006.
- [2] C. Huffman and B. Kahn, "Variety for sale: Mass customization or mass confusion," *Journal of Retailing*, vol. 74, no. 4, pp. 491–513, Autumn. 1998.
- [3] A. M. Garvey, M. G. Maloy, and S. Baba, "The jilting effect: Antecedents, mechanisms, and consequences for preference," *Journal of Marketing Research*, vol. 54, no. 5, pp. 785–798, Oct. 2017.
- [4] S. M. Davis, "From 'future perfect': Mass customizing," *Planning Review*, vol. 17, no. 2, pp. 16–21, Feb. 1989.
- [5] G. da Silveira, D. Borenstein, and F. S. Fogliatto, "Mass customization: Literature review and research directions," *International Journal of Production Economics*, vol. 72, no. 1, pp. 1–13, Jun. 2001.
- [6] P. Kotlar, "From mass marketing to mass customization," *Planning Review*, vol. 17, no. 5, pp. 10–47, May. 1989.
- [7] J. Barlow, P. Childerhouse, D. Gann, S. Hong-Minh, M. Naim, and R. Ozaki, "Choice and delivery in housebuilding: Lesson from Japan for UK housebuilders," *Building Research and Information*, vol. 31, no. 2, pp. 134–145, Apr. 2003.
- [8] M. Boland, "Innovation in the food industry: Personalised nutrition and mass customisation," *Innovation*, vol. 10, no. 1, pp. 53–60, Apr. 2008.
- [9] M. Comstock, K. Johansen, and M. Winroth, "From mass customization: Enabling perspectives from the Swedish mobile telephone industry," *Production Planning and Control*, vol. 15, no. 4, pp. 362–372, Jun. 2004.
- [10] A. Litt, U. Khan, and S. Baba, "Lusting while loathing: Parallel counterdriving of wanting and Liking," *Psychological Science*, vol. 21, no. 1, pp. 118–125, Jan. 2010.
- [11] S. J. Blanchard, K. A. Carlson, and M. G. Meloy, "Biased predecisional processing of leading and non-leading alternatives," *Psychological Science*, vol. 25, no. 3, pp. 812–816, Mar. 2014.
- [12] M. G. Meloy, "Mood-driven distortion of product information," *Journal of Consumer Research*, vol. 27, no. 3, pp. 345–359, Dec. 2000.
- [13] E. J. Russo, K. A. Carlson, M. G. Meloy, and K. Yong, "The goal of consistency as a cause of information distortion," *Journal of Experimental Psychology General*, vol. 137, no. 3, pp. 456–470, Aug. 2008.
- [14] L. Z. Tiedens and L. Susan, "Judgment under emotional certainty and uncertainty: The effects of specific emotions on information processing," *Journal of Personality and Social Psychology*, vol. 81, no. 6, pp. 973–988, Jan. 2002.
- [15] R. Raghunathan and M. T. Pham, "All negative moods are not equal: Motivational influences of anxiety and sadness on decision making," *Organizational Behavior and Human Decision Processes*, vol. 79, no. 1, pp. 56–77, Jul. 1999.
- [16] R. Raghunathan, R. W. Naylor, and W. D. Hoyer, "The unhealthy = tasty intuition and its effects on taste inferences, enjoyment, and choice of food products," *Journal of Marketing*, vol. 70, no. 4, pp. 170–184, Oct. 2006.

CORRESPONDENCE



Akinori Ono
Keio University, Tokyo
Faculty of Business and Commerce,
2-15-45, Mita, Minato,
Tokyo, Japan
akinori@keio.jp



Yusuke Iwama
Keio University, Tokyo
Faculty of Business and Commerce,
2-15-45, Mita, Minato,
Tokyo, Japan
yusuke_iwama@keio.jp



Ryohei Kitazawa
Keio University, Tokyo
Faculty of Business and Commerce,
2-15-45, Mita, Minato,
Tokyo, Japan
ryohei_kitazawa@keio.jp