The Effect of Surprise on Customer Satisfaction: The Moderating Role of Status Consumption

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ABSTRACT
This study focused on the moderating role of different levels of status consumption on surprise (independent variable) and customer satisfaction (dependent variable). Two types of products – utilitarian and hedonic – were introduced unexpectedly to elicit surprise from participants. Three control variables were included: age, pre-consumption mood, and attitude toward the product. The experiment was manipulated with hypothetical scenarios in a $2 \times 2$ factorial design in a hotel setting. The sample population comprised 184 executive MBA students in northern Taiwan. Data from 176 of the participants were analyzed using the ANCOVA method. The results indicated that both utilitarian and hedonic products, given as a surprise, were effective in satisfying customers. The results showed, however, that customers with high levels of status consumption preferred hedonic products, whereas customers with low levels of status consumption preferred utilitarian products.

Keywords: Surprise, status consumption, satisfaction
1. INTRODUCTION

The tourism industry in Taiwan has prospered in recent years because the government strongly supports the development of this industry and because the people themselves have a greater inclination toward recreation and travel. In addition, the industry is boosted by tourists from mainland China and other countries who wish to visit Taiwan. Tourism, of course, inevitably involves the hospitality industry, particularly hotels.

Like other service providers, hotels often express their appreciation to customers by offering them gifts (such as free coupons) as an incentive to continue their patronage. According to Valenzuela, Mellers and Strebel [2010], these incentives generally make customers happy, especially when they occur unexpectedly (i.e., as a surprise to the customer). Even a small, unexpected gift can have a very positive impact on customer goodwill.

As recent studies have shown, it is no longer sufficient in many cases merely to satisfy the customer – now it is necessary to delight the customer (provide the highest level of satisfaction). Studies by Rust, Zahorik, and Keiningham [1996], Kim and Mattila [2010], and Vanhamme and Snelders [2001] suggest that the element of surprise is needed in order to delight customers and thereby achieve the highest level of customer satisfaction.

Previous studies have also shown that pleasant surprises can be used to influence consumers’ purchase decisions [Valenzuela and Snelders, 2002]. According to Lee [2000], unexpected advertising claims generate greater message involvement and more favorable evaluations of the advertisement. One example involved unexpected in-store coupons, which have been shown to increase the overall size of the shopping basket [Heilman, Nakamoto, and Rao, 2002]. Other studies have shown that positive, unexpected surprises increase customer loyalty.
[Oliver, Rust, and Varki, 1997] and promote positive word-of-mouth among customers [Berman, 2005]. Because of the many benefits of a pleasant surprise, many service providers devote a lot of attention to surprising their customers in positive, creative ways [Heilman, Nakamoto, and Rao, 2002].

Although some studies have been conducted on the effect of surprise on customer satisfaction (e.g., Vanhamme and Snelders [2003]), very few have been conducted on the impact of moderating factors on surprise and satisfaction. The literature is also scant regarding how different types of products relate to customers with different levels of status consumption. Because people have a propensity for status consumption, it has been shown that the desire for status can motivate consumer behaviors [Eastman, Goldsmith, and Flynn, 1999]. Business owners and industry leaders who understand this concept and act on it could achieve greater advantages in their business.

The purpose of this study is to investigate the moderating role of status consumption (high versus low) on customer satisfaction when unexpected gifts (utilitarian versus hedonic) are given as a surprise. The differential effect of status consumption on surprise and satisfaction has important implications for business owners, particularly in the hospitality sector, which plays such an important role in Taiwan’s prosperous tourism industry. For that reason, we chose a hotel setting for our study. Our findings would enable hotel operators to select the most suitable surprise gift for customers, thus achieving the goal of customer delight, which is strongly connected to higher customer royalty and retention [Oliver, Rust, and Varki, 1997; Rust, Zahorik, and Keiningham, 1996].

In summary, the specific goals of this study are:

1. To analyze whether utilitarian or hedonic products offered as a surprise gift will lead to customer satisfaction
2. To investigate how surprise is moderated by the effect of status consumption on customer satisfaction

2. LITERATURE REVIEW

This review of the literature discusses surprise and product type, the relationship between surprise and satisfaction, status consumption, and the moderating role of status consumption.

2.1. Surprise and Product Type

In the hospitality industry, giving gifts to customers is one way of pleasing them, especially when the gifts come as a surprise [Valenzuela et al., 2002]. In other words, unexpected gains are more pleasurable than those that are expected [Mellers, Schwartz, and Ritov, 1997; Mellers, Schwartz, and Ritov, 1999]. According to Wilson, Centerbar, Kermer, and Gilbert [2005], the pleasure that is produced by a positive incentive for an uncertain reason is enduring relative to the same event for a certain reason.

Some studies have posited that surprise is not an emotion because it is neutral; i.e., neither positive nor negative [Ortony, Clore, and Collins, 1988]. Other studies, however, view surprise as a short-lived neutral emotion [Schützwohl, 1998; Vanhamme and Snelders, 2001; Reisenzein and Studtmann, 2007]. Surprise is also characterized as a syndrome of reactions in which individuals, when faced with surprise, have a specific pattern of reactions at the subjective, physiological, and behavioral levels [Meyer et al. 1997; Vanhamme and Snelders, 2001; Reisenzein and Studtmann, 2007]:

- **Subjective** (e.g., feelings, surprise exclamation)
- **Physiological** (e.g., changes in respiration rate)
• Behavioral (e.g., specific facial expressions such as eyebrow raising and eye widening, interruption of ongoing activities to focus on the surprise stimulus)

Expectation is the main concept of surprise [Whittlesea and Williams, 2001]. Surprise is educeed by either unexpected or misexpected products, services, or attributions [Ekman and Friesen, 1975; Scherer, 1984]. The term unexpected refers to fuzzy, not clearly defined expectations about products, services, or attributions, and misexpected refers to accurate expectations about products, services, or attributions that do not happen [Vanhamme and Snelders, 2001]. More specifically, surprise is induced by what has been called a “schema discrepancy” [Meyer, Reisenzein, and Schützwohl, 1997; Reisenzein, 2000]. A schema is a private, usually informal, inarticulate, unconsidered theory about the essence of objects, situations, and events [Rumelhart, 1984; Meyer et al., 1997]. Individuals constantly check whether their schemas are consistent with inputs from the surrounding environment. As long as a difference between inputs and schema is detected, surprise is induced [Meyer et al., 1997; Vanhamme and Snelders, 2003].

After evaluating the schema discrepancy, individuals immediately assess whether the experience is pleasant or unpleasant. That is, surprise is often followed by another emotion that colors it from neutral into either positive or negative. When it is followed by a positive emotion (e.g., joy), it becomes positive, but, when it is followed by a negative emotion (e.g., anger), it turns negative [Ekman and Friesen, 1975; Meyer, Niepel, Rudolph, and Schützwohl, 1994; Vanhamme and Snelders, 2001]. This fact explains why previous researchers have studied positive or pleasant surprise and negative or unpleasant surprise.

When it comes to product type, Copeland [1923] was the first researcher to classify products into three categories: convenience, shopping, and specialty goods.
Subsequently, many researchers defined their classifying methods. For example, Bucklin [1963] developed four types of products: convenience, shopping, non-shopping, and specialty goods. Murphy and Enis [1986] categorized products as convenience, shopping, specialty, and preference goods based on risk and effort.

The current study adopted the definition of products from Hirschman and Holbrook [1982], who proposed two broadly different types of products: utilitarian and hedonic. Tangible and objective are the characteristics of primarily utilitarian products that provide functional benefits, fulfill utilitarian needs, and are intended to solve problems [Babin, Darden, and Griffin, 1994; Engel, Blackwell, and Miniard, 1993]. On the other hand, subjective and non-tangible are the characteristics of primarily hedonic products that fulfill experiential needs and whose consumption produces enjoyment and pleasure. Generally, products have both a hedonic and a utilitarian side [Voss, Spangenberg, and Grohmann, 2003].

In this study, we proposed that giving customers unexpected hedonic or utilitarian would elicit the emotion of surprise from them.

2.2. The Relationship Between Surprise and Satisfaction

Satisfaction is one of the key determinants in influencing long-term customer behaviors such as brand loyalty and repurchase intention [Ruyter and Bloemer, 1999; Ryu, Han, and Kim, 2008; Yi, 1990]. Hence, it plays an important role in marketing issues and practices [Churchill and Surprenant, 1982].

Satisfaction study focuses on the essence of the post-consumption stage [Westbrook and Oliver, 1991]. The concept of satisfaction has several definitions. Although some authors consider it an emotion (i.e., affective reaction), others see it as a cognitive judgment [Mano and Oliver, 1993; Oliver, 1992; Westbrook and Oliver, 1991]. Westbrook [1987] contended that satisfaction includes an
assessment of the consumption emotions educed by the use of products. In addition, Oliver [(1997] described it as the consumer’s fulfillment response, the degree to which the level of fulfillment is pleasant or unpleasant.

The most widely accepted definition of satisfaction, however, is the expectation-disconfirmation paradigm proposed by Oliver [1980]. This paradigm suggests that, before consumption, customers have expectations about products or services. When the product is consumed or the service is provided, they make satisfaction judgments that are derived from a comparison between the perceived performances of consuming the product or service and their prior expectations [Mattila and Wirtz, 2000; Ha and Jang, 2010]. If the perceptions of customers exceed their expectations, they will be in a state of satisfaction. On the other hand, if the perceptions fail to meet their expectations, customers will experience dissatisfaction [Ha and Jang, 2010].

The link between positive surprise and satisfaction has already been proved in previous literature. For example, Rust and Oliver [2000] and Vanhamme and Snelders [2001] have suggested that a pleasant surprise often leads to an extreme level of satisfaction (i.e., customer delight). When it comes to delight, we have to mention Plutchik [1980]. Through his psycho-evolutionary theory of emotion model, he found that delight is a function that results from a combination of two emotions: surprise and joy. The concept that surprise and delight are related was suggested by Plutchik as well. In specific service settings, existing studies indicate that the emotion of delight is a sensible and feasible reaction; e.g., Oliver et al. [1997], Torres and Kline [2006]. On the other hand, surprise also appears to intensify negative emotions during consumption experiences. Vanhamme and Snelders [2001], for example, argued that negative surprise that linked to anger and upset is joined to the lowest level of satisfaction in consumption contexts.
Hence, this study proposed that, when customers are given surprises by service providers, they would be satisfied, regardless of whether they receive hedonic products or utilitarian products.

**H1a:** Hedonic products that come as a surprise significantly positively influence customer satisfaction.

**H1b:** Utilitarian products that come as a surprise significantly positively influence customer satisfaction.

### 2.3. Status Consumption

Status is the place or rank in a group or social hierarchy that is conferred on individuals by others [Bierstedt, 1970; Dawson and Cavell, 1986]. It can be developed or gained and does not have to be fastened to formal authority [Wright, 2005]. Status is typically defined as the degree of prestige, regard, or esteem that comes from evaluative judgment based on factors such as wealth, power, and prestige [Donnenwerth and Foa 1974]. According to Barkow [1992], status is a form of power that comprises respect, consideration, and envy from others. Fiske and Berdahl [2007] proposed that individuals with status are seen as those who have power, because social status can be conceptualized as an input into power.

Indeed, resources are often controlled by those who have status [Blieszner and Adams 1992; Kemper 1991]. Hence, a lot of people desire status and dedicate much time to attain it [Barkow, 1992]. Previous studies define three types of status:

1. Status by definition or allocation (e.g., royalty)
2. Status by achievement (i.e., when an individual has a better performance on the job than others, then he or she will own higher status)
The current study focuses on the third type of social status, which is acquired by means of possession.

Products have symbolic uses [Levy, 1978; Belk, Bahn, and Mayer, 1982]. Existing literature suggests that, through the use of material goods, specifically products and brands, an individual’s success and achievement can be demonstrated and intensified [Eastman, Goldsmith, and Flynn, 1999; O’Cass and McEwen, 2004]. Thus, product consumption is a means by which individuals can cross social status stratification based on the emblematic meaning of their possessions and consumption behavior [Featherstone, 1987; Leigh and Gabel, 1992; Meyers, 1984; Packard, 1957; Schudson, 1984; Turner, 1988; Wernick, 1983].

Scholars have paid a lot of attention to showing status through the use of products ever since Veblen [1899] formulated the concept of conspicuous consumption. *Conspicuous consumption* refers to the practice that consumers use products to signal their social status aspirations to others [Mason, 1981; Braun and Wicklund, 1989]. Customers can intensify their perceived status through high-status products derived from conspicuous consumption [Chiagouris and Mitchell, 1997; Featherstone, 1987; Meyers, 1984; Packard, 1957; Schudson, 1984; Turner, 1988; Wernick, 1983].

In addition, status consumption can also be applied to describe the purpose that customers use products for signaling social status [Scitovsky, 1992]. Eastman et al. [1999] defined *status consumption* as the motivational process by which people try very hard to reform their social position by consuming products that symbolize or represent status for the individual and surrounding others (i.e., conspicuous consumption). According to the definition above, status consumption is on the basis of conspicuous consumption and conspicuous consumption is on the basis of status description [Veblen, 1934], which seems to suggest a lot of
Theoretical overlap. That is, status consumption and conspicuous consumption have the same meanings and can be used interchangeably.

In sum, individual differences in status consumption are defined as a “propensity to purchase goods and services for the status or social prestige value that they confer on their owners” [Eastman, Goldsmith, and Flynn, 1999; Han, Nunes, and Drèze, 2010]. In this study, therefore, we modify the classification of customers that is suggested by Han et al. [2010] into the following description to suit this research. That is, consumers are divided according to the extent to which they seek to gain prestige by consuming goods.

2.4. The Moderating Role of Status Consumption

This study uses the concept of power to explain how the status consumption of customers influences their preferences for product types (i.e., utilitarian or hedonic). Previous studies have found that:

(1) Powerlessness is an aversive state; thus, people will often attempt to reduce or change a state in which they lack power [Tucker and Galinsky, 2008].

(2) Status is one source of power; thus, displaying or obtaining status might recompense powerless people for feeling powerless [French and Raven, 1959].

(3) Products can signal status because low power increases people’s desire to gain products associated with status to compensate for their powerlessness [Belk, Bahn and Mayer, 1982].

As the result, people who are low power focus on status [Rucker and Galinsky, 2009], and status products are predicted to be especially valued by powerless people because they provide a possible way of restoring power. Moreover, O’Cass
and Frost [2002] found that status products can offer benefits to customers and that one of the benefits is hedonic (i.e., status products raise the perceived status level by others). The finding implies that powerless people will strive for hedonic products symbolizing status that come from conspicuous consumption. Hence, the current study proposes that powerless people have a higher tendency for status consumption than do powerful people. When powerless customers (with high levels of status consumption) receive a surprise from service providers, they will be more satisfied if they receive hedonic products rather than utilitarian products.

**H2a:** When customers who have high levels of status consumption receive hedonic products that come as a surprise, they will be more satisfied than if they receive utilitarian products.

People who own power pay more and more attention to their own desires and attitudes [Briñol, Petty, Valle, Rucker, and Becerra, 2007; Chen, Lee-Chai and Bargh, 2001; Galinsky et al., 2008]. According to Briñol et al. [2007], powerful people rarely process information about a convincing message because they consider that their own attitudes are correct, which causes them to ignore the thoughts of others. Weick and Guinote [2008] found that, when powerful people evaluate themselves, they deal with their own subjective experiences and feelings carefully. Thus, people who own power are less influenced by others’ judgments while they are generating ideas [Galinsky, Magee, Gruenfeld, Whitson, and Liljenquist, 2008]. Individuals give close attention to their internal thoughts and desires, causing them to focus on what a product will do for them relative to what others will think of the individuals who own it [Snyder and Debono, 1985].

All of the previously cited studies imply that high power will produce a greater preference for products that are regarded as providing the greatest utility (e.g., quality, performance) to the individual and less concern for conspicuous
consumption [Snyder and Debono, 1985; Rucker and Galinsky, 2009]. In other words, high power gives individuals a message that they should pay a lot of attention to themselves and to the influence that things will have on them relative to what others will think of them [Rucker and Galinsky, 2009].

Because powerful people have the tendency to consume utilitarian products rather than products related to consumption, this study proposes that powerful people have lower levels of status consumption compared with powerless people. When customers who own high power (lower levels of status consumption) receive a surprise from service providers, they will be more satisfied if they receive a utilitarian product rather than a hedonic product.

**H2b:** When customers who have low levels of status consumption receive utilitarian products that come as a surprise, they will be more satisfied than if they had received hedonic products.

3. METHODOLOGY

This section discusses the conceptual framework of our study, the pre-test, our experiment design and selection of participants, research procedure, and measurement of results.

3.1. Conceptual Framework of the Study

To explain customer satisfaction in the hotel sector, the current study first examines the concept of surprise. In this study, surprise is elicited by two kinds of products (utilitarian and hedonic), which are presented unexpectedly to customers. The study also focuses on the concept of status consumption as a moderating role in the relationship between surprise and satisfaction. Our conceptual framework is depicted in Figure 1.
3.2. Pre-Test

We conducted a pre-test to confirm the two types of products used in this study. First, we selected six products for the pre-test based on hospitality practice and product price (i.e., the prices of all six products were in the same range). Those products were: a bath product, crystal wine glasses, home fragrance oil, thermos, pen, and flash drive. Second, we developed a questionnaire for the pre-test, which consisted of demographic information and six sections based on the six products. Each section comprised three constructs: hedonic value, utilitarian value, and product value. The value of items was developed based on the HED/UT scale, which was used to measure the hedonic and utilitarian dimensions of consumer attitudes toward product categories [Voss, Spangenberg, and Grohmann, 2003], but it was modified to fit this study. To ensure that the value of each product was very similar in the participants’ mind, all participants were asked to respond to the statement, “This product was worthy to me.” All items were measured on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree).
We chose 30 individuals to participate in the pre-test. At the beginning, every participant was asked to read and understand the definition of product type. Then, after seeing the photos of the products in each of the six sections, participants were immediately asked to respond to the value items according to their perception of the product.

The results of the pre-test showed that the hedonic value of the crystal wine glasses (M=5.02, SD=1.31) was perceived to be significantly greater than that of the other five products. On the other hand, the utilitarian value of the flash drive (M=5.986, SD=0.98) was perceived to be significantly greater than that of the other five products. The respective value of these two products was not significantly different (t=1.82, p>0.05). That is, the product value of the crystal wine glasses and the product value of the flash drive were very similar in the customers’ minds. These two products (Figure 2), therefore, represented each type of product in this study.

![Crystal Wine Glasses](image1.png) ![Flash Drive](image2.png)

**Figure 2. Representative Hedonic and Utilitarian Products**
3.3. Experiment Design and Selection of Participants

Our experiment used a 2 × 2 between-subjects design in a hotel setting to examine the effects of surprise on customer satisfaction. The first factor was a given surprise (utilitarian products versus hedonic products), and the second factor was the different levels of status consumption (higher versus lower).

We selected 184 executive MBA students in northern Taiwan to participate in the experiment. They met the requirements of this study because each has a full-time job during the week and thus has sufficient income to avail themselves of the services of hotels. They were randomly assigned to receive a pleasant surprise – either a utilitarian product or a hedonic product. After eliminating incomplete data, we analyzed the responses of 176 of the participants.

3.4. Research Procedure

The main research technique in this study was the quantitative method. The experiment comprised two parts. First, participants were asked to answer mood questions in order to ensure that the results were not influenced by their pre-consumption mood. Second, we used a hypothetical scenario of a hotel experience to elicit reactions to surprise, based on the fact that prior studies have proved that scenarios can be used successfully to elicit valid reactions in hypothetical situations [e.g., Voss et al., 1998; Namasivayam and Mattila, 2007]. Before participants read the scenario, the experimenter asked them to imagine standing in front of “B” hotel and preparing to experience its services. Then, after reading the scenario, participants were asked to fill in the items about surprise, their satisfaction with the hotel experience, and status consumption. At the end of the questionnaire, we added items of control variables and demographics.

Because we used two types of products as a surprise, we developed two versions of the scenario. Both the first and second versions began with a
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description of the pleasant and comfortable experience of staying in “B” boutique hotel (from the moment of arriving at the hotel until entering the room). In both versions, the participant, after entering the room, found a delicate blue box on the table (a given surprise). Here, the two versions changed. In the first version, the gift in the blue box was a set of crystal wine glasses (a hedonic product). In the second version, the gift was a flash drive (a utilitarian product). At the end of the scenario, each participant was asked to describe how surprised or grateful he or she was by unexpectedly receiving a gift from the hotel.

3.5. Measurement of Results

All responses were measured using a 7-point Likert-type scale, with 1 = “strongly disagree,” 4 = “neutral,” and 7 = an “strongly agree.”

3.5.1. Independent Variable

In this study, surprise was the independent variable. Three terms (surprised, amazed, and astonished), which were adopted from Richins’s [1997] consumption emotions set (CES), were used to measure surprise. Participants were asked to choose one of the following statements:

“I felt surprised when the gift showed up.”
“I felt amazed when the gift showed up.”
“I felt astonished when the gift showed up.”

3.5.2. Dependent Variable

The dependent variable in this study was customer satisfaction, which was measured by three items derived from Carpenter [2007]. In this study, the items were changed slightly into the following three statements, from which all the participants were asked to choose:

“I think that if I stayed in the B hotel, I would feel happy.”

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“I think that if I stayed in the B hotel, I would be contented.”

“Overall, I think that if I stayed in the B hotel, I would feel satisfied.”

3.5.3. **Moderating Variable**

Status consumption was the moderating variable in this study and was measured using five items from Eastman et al. [1999]. The experimenter asked participants to choose one of the following five statements:

- “I would buy a product just because it has status.”
- “I am interested in new products with status.”
- “I would pay more for a product if it had status.”
- “The status of a product is meaningful to me.”
- “A product is more valuable to me if it has some snob appeal.”

3.5.4. **Control Variables**

Different factors, such as culture or the mood state of the customer, may have some effect on the customer’s thoughts on surprise [Valenzuela et al., 2010; Kim and Mattila, 2010]. To ensure that such variables would not influence the relationship between surprise and customer satisfaction, we controlled three variables; namely, age, pre-consumption mood, attitude toward the product.

**Age.** Varik and Rust [1997] suggested that age could potentially moderate the relationship between surprise and satisfaction, and Evanschitzky and Woisetschläger [2008] found that age and age-related constructs had an impact on relevant consumer attitudes and behavior.

**Pre-Consumption Mood.** Oliver [1997] found that mood could be the possible moderator of satisfaction and its antecedents. For positive, surprising experiences, Cohen and Areni [1991] found that, while a positive mood would have a positive impact of surprise on satisfaction,
a negative mood might decrease the positive impact of surprise on satisfaction. In their study of the moderating role of mood state on surprise and satisfaction, Kim and Mattila [2010] found that pre-consumption mood truly had a great influence on the relationship between surprise and satisfaction. In the current study, therefore, we adopted five mood items (cheerful, joyful, pleased, happy, and in a good mood) from Peterson and Sauber [1983] to ensure that the mood of participants would not influence the results of this study.

Attitude Toward the Product. Arias-Bolzmann, Chakraborty, and Mowen [2000] argued that consumers’ information processing could be affected differently by their attitude toward the product category. In this study, therefore, participants were asked to select one of four items (very likable, interesting, good, and appealing) to describe their general attitude toward the given surprise.

4. RESULTS

This section discusses the results of our study in terms of descriptive statistics, reliability, and validity; analysis of control variables; and tests of our hypotheses.

4.1. Descriptive Statistics, Reliability, and Validity

This study used SPSS version 17.0 to examine descriptive statistics and data reliability and validity. Table 1 presents the descriptive statistics – including mean and standard deviation – for the two surprise versions used in this study. As shown, the three surprise items in the first version (hedonic product) were averaged (M=5.03, SD=1.036), and the three surprise items rise in the second version were averaged (M=4.84, SD=1.118).
Table 1
Descriptive Statistics for the Two Surprise Versions

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Surprise</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Version</strong></td>
<td><strong>Mean</strong></td>
<td><strong>SD</strong></td>
</tr>
<tr>
<td>First (Hedonic)</td>
<td>5.03</td>
<td>1.036</td>
</tr>
<tr>
<td>Second (Utilitarian)</td>
<td>4.84</td>
<td>1.118</td>
</tr>
</tbody>
</table>

The results were analyzed by independent samples t-test, which showed that both surprise versions had a high level of surprise and were not significantly different ($t=1.193$, $p=0.235$). Levels of satisfaction in both versions were also not significantly different ($t=1.142$, $p=0.255$). In addition, the five items of status consumption were averaged ($M=4.54$, $SD=1.297$), and scores ranged from 1 to 7. Based on the median 4.6, we divided participants into two groups. One group (87 participants) included those with a higher level of status consumption, and the other group (89) included those with a lower level of status consumption.

As indicated by the reliability scores in Table 2, the Cronbach’s $\alpha$ value for surprise, status consumption, and satisfaction were all above 0.7, indicating that the multiple measurement items had good reliability to measure each construct [Nunnally, 1978].

Table 2
Scale Items and Reliability Coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>Scale Items</th>
<th>Cronbach’s $\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surprise</strong></td>
<td>3-item scale from Richins’s CES [1997]</td>
<td>0.731</td>
</tr>
<tr>
<td><strong>Status Consumption</strong></td>
<td>5-item scale from Eastman et al. [1999]</td>
<td>0.944</td>
</tr>
<tr>
<td><strong>Satisfaction</strong></td>
<td>3 items from Carpenter [2007]</td>
<td>0.905</td>
</tr>
</tbody>
</table>
We conducted a confirmatory factor analysis (CFA) to assess the dimensionality, reliability, and validity of the scale. Table 3 presents the results, which were calculated by LISREL version 8.80. Convergent validity was examined by the factor loadings, AVE and CR [Hair et al, 2006]. Despite the fact that the factor loading of the first item of surprise was 0.52, all item factor loadings in the measurement model were above 0.7, which were significant at the alpha level of 0.01 [Anderson and Gerbing, 1988]. The values for average variance extracted (AVE) from all constructs ranged from 0.57 to 0.77, exceeding the recommended threshold level of 0.5 [Hair, Anderson, Tatham, and Black, 1998]. We also analyzed composite reliability (CR) using procedures from Fornell and Larcker [1981]. The CRs for the three constructs ranged from 0.79 to 0.94, all greater than 0.7, indicating good internal consistency.

Table 3
Confirmatory Factor Analysis Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor loadings</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surprise</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>S-1</td>
<td>0.52</td>
<td>0.79</td>
<td>0.57</td>
</tr>
<tr>
<td>S-2</td>
<td>0.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-3</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Status Consumption</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC-1</td>
<td>0.80</td>
<td>0.94</td>
<td>0.77</td>
</tr>
<tr>
<td>SC-2</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC-3</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC-4</td>
<td>0.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC-5</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA-1</td>
<td>0.85</td>
<td>0.91</td>
<td>0.76</td>
</tr>
<tr>
<td>SA-2</td>
<td>0.87</td>
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<td></td>
</tr>
<tr>
<td>SA-3</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The correlations of paired constructs were compared with the square root of AVEs, in order to assess the discriminant validity [Hair et al., 1998]. As indicated
in Table 4, all of the correlations were less than the square root of AVEs, providing the discriminant validity of the constructs.

Table 4
Correlations and Square Root of AVEs

<table>
<thead>
<tr>
<th>Variables</th>
<th>Surprise</th>
<th>Status Consumption</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surprise</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status Consumption</td>
<td>0.170*</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.597**</td>
<td>0.147</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Note: **p<0.01; *p<0.05

4.2. Control Variables Analysis
This study used three control variables: age, pre-consumption mood, and attitude toward the product. Of the 176 participants, about half were males and half were females. Their average age was 35 years. For the majority of participants (61.9%), monthly income was skewed below NT$65,000. The remainder (38.1%) had a monthly income above NT$65,001. The results of our research showed that gender and monthly income were insignificant in this study; that age and pre-consumption mood were also insignificant; but that attitude toward the product was significant.

4.3. Hypotheses Testing
We conducted a linear regression to examine the relationship between surprise and satisfaction. Table 5 indicates that hedonic products that came as a surprise had a positive effect on customer satisfaction, which was significant at the p<0.01 level, thus supporting Hypothesis 1a. Age and product attitude were significant.
The Effect of Surprise on Customer Satisfaction: The Moderating Role of Status Consumption

Table 5
Regression Results of Hypothesis 1a Testing

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.140</td>
<td>-0.189**</td>
</tr>
<tr>
<td>Monthly Income</td>
<td>0.059</td>
<td>0.146</td>
</tr>
<tr>
<td>Pre-Consumption Mood</td>
<td>0.051</td>
<td>0.035</td>
</tr>
<tr>
<td>Attitude Toward Product</td>
<td>0.734***</td>
<td>0.573***</td>
</tr>
<tr>
<td>Surprise</td>
<td></td>
<td>0.283***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.609</td>
<td>0.660</td>
</tr>
<tr>
<td>Adjust $R^2$</td>
<td>0.584</td>
<td>0.634</td>
</tr>
<tr>
<td>F-value</td>
<td>24.884***</td>
<td>25.516***</td>
</tr>
</tbody>
</table>

Note: ***p<0.01; **p<0.05; *p<0.1

Similarly, utilitarian products that came as a surprise had a significantly positive beta coefficient of 0.189 (Table 6). Thus, Hypothesis 1b was also supported. Of the control variables, only attitude toward the product was significant.

Table 6
Regression Results of Hypothesis 1b Testing

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.143</td>
<td>-0.118</td>
</tr>
<tr>
<td>Monthly Income</td>
<td>-0.064</td>
<td>-0.047</td>
</tr>
<tr>
<td>Pre-consumption Mood</td>
<td>0.097</td>
<td>0.065</td>
</tr>
<tr>
<td>Attitude Toward Product</td>
<td>0.639***</td>
<td>0.543***</td>
</tr>
<tr>
<td>Surprise</td>
<td></td>
<td>0.189**</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.557</td>
<td>0.578</td>
</tr>
<tr>
<td>Adjust $R^2$</td>
<td>0.531</td>
<td>0.548</td>
</tr>
<tr>
<td>F-value</td>
<td>21.140***</td>
<td>18.960***</td>
</tr>
</tbody>
</table>

Note: ***p<0.01; **p<0.05; *p<0.1

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Hypothesis 2a predicted that a given hedonic product coming as a surprise would achieve higher satisfaction when a customer had a higher level of status consumption. Conversely, Hypothesis 2b proposed that a given utilitarian product coming as a surprise would achieve higher satisfaction when a customer had a lower level of status consumption. To examine these two hypotheses, we twice conducted analysis of covariance based on levels of status consumption (low versus high). Table 7 shows that, when participants had high status consumption, there was a main effect of surprise on satisfaction ($F (1, 85) = 37.945, p<0.01$), with hedonic surprise providing higher satisfaction than utilitarian surprise ($M_{hedonic} = 6.413$ vs. $M_{utilitarian} = 5.296$). Of all the control variables, only attitude toward the product had significant effect. Thus, Hypothesis 2a was supported.

**Table 7**

ANCOVA Results of Hypothesis 2a Testing

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct Model</td>
<td>5</td>
<td>9.175</td>
<td>48.866</td>
<td>0.000***</td>
</tr>
<tr>
<td>Intercept</td>
<td>1</td>
<td>9.628</td>
<td>51.278</td>
<td>0.000***</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>0.142</td>
<td>0.757</td>
<td>0.387</td>
</tr>
<tr>
<td>Monthly Income</td>
<td>1</td>
<td>0.218</td>
<td>1.162</td>
<td>0.284</td>
</tr>
<tr>
<td>Pre-Consumption Mood</td>
<td>1</td>
<td>0.007</td>
<td>0.036</td>
<td>0.850</td>
</tr>
<tr>
<td>Attitude Toward Product</td>
<td>1</td>
<td>15.050</td>
<td>80.159</td>
<td>0.000***</td>
</tr>
<tr>
<td>Surprise Versions</td>
<td>1</td>
<td>7.124</td>
<td>37.945</td>
<td>0.000***</td>
</tr>
<tr>
<td>Error</td>
<td>81</td>
<td>0.188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ***$p<0.01$; **$p<0.05$; *$p<0.1$

Table 8 indicates that, when participants had low status consumption, there was a main effect of surprise on satisfaction ($F (1, 87) = 6.968, p<0.05$), with
utilitarian surprise obtaining higher satisfaction than hedonic surprise (M utilitarian = 5.940 vs. M hedonic = 5.144). Of all control variables, age and attitude toward the product had significant effects. These results were consistent with Hypothesis 2b.

Table 8
ANCOVA Results of Hypothesis 2b Testing

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct Model</td>
<td>5</td>
<td>6.229</td>
<td>18.161</td>
<td>0.000***</td>
</tr>
<tr>
<td>Intercept</td>
<td>1</td>
<td>9.188</td>
<td>26.790</td>
<td>0.000***</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>1.620</td>
<td>4.722</td>
<td>0.033**</td>
</tr>
<tr>
<td>Monthly Income</td>
<td>1</td>
<td>0.001</td>
<td>0.002</td>
<td>0.969</td>
</tr>
<tr>
<td>Pre-consumption Mood</td>
<td>1</td>
<td>0.695</td>
<td>2.027</td>
<td>0.158</td>
</tr>
<tr>
<td>Attitude Toward Product</td>
<td>1</td>
<td>8.139</td>
<td>23.730</td>
<td>0.000***</td>
</tr>
<tr>
<td>Surprise Versions</td>
<td>1</td>
<td>2.390</td>
<td>6.968</td>
<td>0.010**</td>
</tr>
<tr>
<td>Error</td>
<td>83</td>
<td>0.343</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ***p<0.01; **p<0.05; *p<0.1

5. CONCLUSIONS
This section presents concluding remarks on our findings, implications of the study, and limitations and future study directions.

5.1. Findings
This study examined the effect of two pleasant surprises (hedonic and utilitarian) on customer satisfaction in a hotel setting, with status consumption as a moderating variable. The results indicated that both hedonic and utilitarian
products that appear unexpectedly (as a surprise) would increase customer satisfaction. That is, positive surprise would effectively induce customer satisfaction, no matter what kind of product appeared unexpectedly. This finding is consistent with previous research conducted by Rust and Oliver [2000], who argued that pleasant surprise often leads to the highest level of satisfaction. Status consumption was also found to have a moderating impact on surprise and satisfaction. Hedonic products that come as a surprise appeal more to customers with high levels of status consumption. Conversely, utilitarian products that come as a surprise appeal more to customers with low levels of status consumption.

5.2. Implications of Study

The findings of our study can contribute to success in the hospitality industry. According to the results of H1a and H1b, offering customers a positive surprise is a useful strategy to enhance customer satisfaction, regardless of what kinds of products are offered as a surprise. This is in accord with the results of Vanhamme and Snelders [2001], who found that surprise is necessary in order to trigger the highest level of satisfaction. Hotel operators may adopt surprise to influence the behavioral intentions of customers, such as their positive evaluation of products [Lee, 2000], and to enhance customer loyalty [Oliver et. al., 1997]. By adopting this method, hospitality operators can differentiate themselves from competitors by allowing customers to compare the products or services.

Surprising customers, however, is not without cost. It is important, therefore, to select the correct or appropriate surprises. Based on the results for H2a and H2b, our empirical study suggests that service providers could give different surprises to please customers based on their tendency toward status consumption. Before offering a surprise, therefore, hotel operators should carefully examine customers’ needs [Vanhamme and Snelders, 2003] and build up detailed personal profiles. In
addition, employees who provide face-to-face service to customers should be trained to accurately assess customers’ needs. If hotel operators make every endeavor to understand their customers, they will be successful in surprising customers in a positive way.

5.3. Limitations and Future Study Directions

Although this study has some managerial implications for both the academic community and the hospitality industry, the results have some limitations and suggest directions for future research.

First, this study used only one moderating variable (status consumption) affecting surprise and satisfaction. Status consumption is not the only factor that could be used. Other factors include, for example, customer personality and the length of the relationship with the customer. Because of their individual personality, people may differ in their response to surprise [Vanhamme and Snelders, 2001]. The length of relationship between the hotel and its customers could influence the impact of surprise because frequent customers may be used to the service manner of the hotel.

Second, our experimental design with scenarios is another limitation. This study asked participants to imagine themselves as customers who had received a surprise product from the hotel. In this context, the emotion of surprise was not easy to manipulate because different participants had different abilities with regard to imagination. Nonetheless, the findings of this study are still useful in the real hospitality industry.

Third, this study used only two products as a given surprise (crystal wine glasses and a flash drive). Future research could go further and use different products or give participants real products as a given surprise in order to examine...
the effect of surprise on satisfaction. Using different types or levels of hotels in the scenario could be an alternative. Based on the results of our study, it might be useful to go deeper into the investigation of surprise. Wolin [2003] indicated that gender differences could influence information processing differently. Thus, including factors such as gender or background music into future research might be useful in better understanding surprise and customer satisfaction.

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