

A Study of Exploring the Factors on Women's Choice of Dessert

A-Mei Lin Hsu

Ph.D. Program of Technology Management
Chung Hua University
Hsinchu City, Taiwan, R.O.C.
e-mail: t90094@mail.tut.edu.tw

Hui-Chi Chuang

Institute of Information Management
National Cheng Kung University
Tainan City, Taiwan, R.O.C.
e-mail: huichi613@gmail.com

Chiu-Chi Wei

Dept. of Industrial Management
Chung Hua University
Hsinchu City, Taiwan, R.O.C.
e-mail: a0824809@gmail.com

Yi-Chung Cheng

Department of International Business Management
Tainan University of Technology
Tainan City, Taiwan, R.O.C.
e-mail: t20042@mail.tut.edu.tw

Abstract—The feeling of happiness can affect people's choices. In order to raise the purchasing power, it is a common way to advertise and promote the product with happiness. For example, parent-child wedding and car advertisement pursue the goal of family happiness. Café uses the feelings of happiness as marketing theme to attract in-love couples. However, happiness is a subjective and emotional which is affected by temporal focus. There are two primary experiences of happiness, namely, high awakening (excitement) happiness and low awakening (peace) happiness. This study aims to investigate how the choice of dessert of a couple is affected by the loving atmosphere with temporal focus as well as happiness. It uses two dimensions, namely, temporal focus (present, future) and loving atmosphere (passionate love, not passionate love) to conduct experiments with questionnaires. Experimenters are randomly assigned to four experiments for verifying research hypotheses. The experimental result shows that loving atmosphere affects temporal focus, temporal focus affects happiness, and happiness affects choice of dessert.

Keywords- love atmosphere; time focus; happiness

I. INTRODUCTION

It has been shown that consumer behaviors and psychology are highly related. The decisions of consumers for purchasing products are not only based on the services and the qualities, but also affected by their feelings and emotions. In other words, times, environment, atmosphere and location will cause various purchasing motivations [1]. There is a relationship between happiness and consuming behaviors, which gives chances for enterprises to make advertisement by taking advantages of happy images, such as advertisement of cars, real estate, furniture, coffee, even TV commercial for oden, a Japanese one-pot winter dish. Happiness changes along with the shifts of temporal focus. Barrett [2] and Russell and Barrett [3] defined happiness as high awakening (excitement) happiness and low awakening (peace) happiness, and here both are positive emotions.

When happiness of a person is in different level of awareness, his or her purchasing motivations are different. Happiness also affects the feelings of loving atmosphere. Nowadays, young people prefer instant love which is called "fast food love". We can see couples post their relationship status on Facebook, such as "keep in love", "celebrate keeping in love for one week", "celebrate keeping in love for two weeks" or "celebrate keeping in love for a month" and so on. Soon after, we may see someone post the relationship status as "single" on Facebook. Therefore, the happiness of loving atmosphere is affected by temporal focus. However, how the length of keeping in love affects the temporal focus is an important issue in this research. First, we consider the number of weeks that young people had been falling in love and then we use the median of the numbers as the cut point of high awakening (excitement) happiness and low awakening (peace) happiness. Will women in high awakening (excitement) happiness purchase exciting dessert and in low awakening (peace) happiness purchase peaceful dessert? In the second study, we choose the top 10 desserts from the Internet and we invite young people to rate each dessert from 1 to 5. The dessert which got the highest score is marked as "exciting dessert", and on the other hand, the dessert with the lowest score is marked as "peaceful dessert".

The study takes two dimensions, namely, temporal focus (present, future), and loving atmosphere (passionate love, not passionate love) to conduct experiments and questionnaires. Experimenters are randomly assigned to four experiments. First of all, couples show their recent photos and share the stories of the photos, such as shooting location or travel memories in order to recall truly loving atmosphere. The experimenters were asked two independent questions and two test questions to confirm if the loving atmospheres were successfully reminded. After that, they filled out the form of questionnaires about happiness and choice of dessert.

The study includes 200 women in loving atmosphere as the experimenters. Questionnaires are based on Likert 5-point scale and the questions are:

1. Is happiness affected by temporal focus and loving atmosphere?
2. How does happiness affect the choice of dessert?

II. LITERATURE REVIEW

Consumer behaviors are closely related to psychology. It is well known that consumers' behaviors and purchasing motivation are inseparable. However, it is rarely discussed if in-love happiness influences purchasing motivations and behaviors. In their study, Trope and Liberman [4][5] mentioned that time focus affects one's view and action, such as indulge desire [6] and purchase decision [7]. In summary, there is no literature that discusses the loving atmosphere and happiness, how to cast influence on purchasing behavior, and the interaction between temporal focus and loving atmosphere. Therefore, this research is motivated to address these issues by investigating how the choice of dessert of a couple is affected by the loving atmosphere with temporal focus as well as happiness.

The word happiness has many meanings. It can be considered as a broad term for feeling good. Myers and Diener [8] defined happiness as "a healthy, happy and satisfied state, which is also a pleasant or satisfying experience." Myers and Diener [8] and Layard [9] claimed that the meaning of happiness is the same for everyone, which means happiness is unity; however, other researchers believe happiness is subjective. Happiness does not mean the same to each other and happiness is different [10]. Furthermore, Barrett [2], Russell and Barrett [3] separate happiness in two types: high awakening and low awakening. The definition of the former is excited, joyful, elated and passionate; the meaning of the latter is calm, quiet, peaceful and ordinary. Loving atmosphere refers to the feelings of happiness of the couple who are dating. Therefore, the happiness found in loving atmosphere could be an experience, a status, or a reaction.

The sense of happiness is a subjective enjoyment, feeling and experience, but it is an objective positive emotion or mood. Carstensen et al. [11] proposed that age is a potential psychological factor for happiness and is defined as temporal focus. Young people have longer time to create their own future, but when growing older, they do not pay more attention to the future and gradually focus on the moment. Couples who are in love would also have different subjective feelings about happiness based on the time when they interact with each other, and thus show different objective behaviors for happiness. Is it because young people who experience a loving atmosphere can focus more on the future? Will young people, who have been in a long-term loving atmosphere, tend to focus on the present? This study will define the temporal focus in love by designated experiment.

Argyle suggested that the sense of happiness includes two levels of emotions and cognition [12], and in the study it verifies that positive emotions indirectly influence consumers' choices by affecting individual cognition. In the field of marketing, it is broadly accepted that happiness will affect consumers' behavior. Therefore, many advertisements take advantage of the sense of happiness to attract the consumers, for example, advertising for cars, real estate,

coffee, and even oden, the traditional Japanese food. All of these demonstrate that consumers' happiness will affect their choices of products. In the research of Isen and Patrick, they found that positive emotions would affect many choices of life with optimism [13], which proves that when people are in positive emotions, they would make healthy choices. That is, people with positive emotions would be more optimistic. With such attitude, people focus more on what are expected to happen in the future, but not pay attention to the immediate concerns.

Couples in loving atmosphere are affected by unique and distinct happiness, and often have various positive emotions. Different positive emotions are accompanied with different senses of happiness, and moreover, positive emotions affect choices [13]. Therefore, we can conclude that happiness plays an intermediate role in the relationship between love and dessert selection.

III. RESEARCH METHOD

In this section, we illustrate and display the research framework in detail, which is shown in Figure 1.

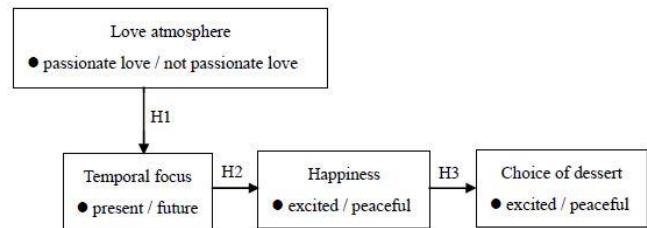


Figure 1. Research hypothesis framework.

A. The research hypotheses are as followings:

- H1: loving atmosphere affects temporal focus
- H2: temporal focus affects happiness
- H3: happiness affects choice of dessert

B. Research variables and operational definition

1) Loving atmosphere

It should distinguish "passionate love" and "not passionate love" in order to understand the strength of loving atmosphere.

2) Temporal focus

This research focuses on the definition of the individual's subjective view of present and future. In the study, we adopt the item to measure the time by Mogilner et al. [14]. The item "I think the future is more important than now" uses a 5-point scale. "1 means strongly disagree" and "2 means disagree", "3 represents normal", "4 represents agree", and "5 represents strongly agree". The answer strongly disagree or disagree represents temporal focuses on "now". The answer "strongly agree" or "agree" represents temporal focuses on the "future". If the answer is 3, it means that the questionnaire is invalid because it cannot be used to distinguish the focus of time and provide valuable information.

3) *Happiness*

The definition of happiness in this study is reflecting two primary experiences of happiness, namely, excited (high awakening) and peace (low awakening). Mogilner et al. [14] proposed the definition of happiness, the item entitled “I feel that a colorful life is happier than a calm and stable life”, using a 5-point scale.

4) *Dessert*

Desserts are rated from exciting to peaceful. First, we picked 10 different kinds of dessert from the internet. The questionnaire is “This dessert makes me excited and happy”, with the answer of Likert 5-point scale.

C. *Research method*

In order to distinguish the strength of the loving atmosphere, in the beginning, we investigate the length of time in-love of the experimenters. According to the data, the median number of weeks is adopted as the cutting point to distinguish "passionate love" and "not passionate love".











The 10 desserts are selected from internet, which are familiar and favorable desserts to the local people (Table I). Every experimenter was asked the question, “Does this dessert make me excited and happy”; this can help us define the most exciting dessert and the most peaceful dessert.

We adopt different temporal focuses and loving atmospheres to discuss the impact of happiness on the choice of desserts. The experiment takes two dimensions, namely temporal focus (present, future) and loving atmosphere (passionate love, not passionate love) to conduct the experiments. Four questionnaires are designed. Respondents are randomly assigned to four experiments for verifying research hypotheses in this study, four different questions are used to test experimenters to evoke the loving atmosphere, and to confirm that the loving atmosphere is valid. Finally, experimenters were required to answer the questions about their status of happiness and choice of desserts.

IV. EXPERIMENT AND DISCUSSION

In order to distinguish the intensity of loving atmosphere, in the study, we investigated the experimenter’s during the length of their love relationship. Then the median of the length is located and used as cutting point of the loving atmospheres of “passionate love” and “not passionate love”. In the beginning, we did the pre-testing which is focused on young people aged 20-30, and a total of 200 questionnaires were collected, including 29 invalid questionnaires and 171 valid questionnaires. According to the study, the average age is 24 years old. The average in-love occurrence is 2, the average endurance of in-love relationship is 48.57 weeks, and the median is 32 weeks. Therefore, the loving atmosphere with respect to the length in time of in-love relationship defined as “passionate love” for those more than or equal to 32 weeks, and "not passionate love" for those less than 32 weeks.

TABLE I. TEN SELLECTED DESSERTS

Dessert name	Picture	Dessert name	Picture
I soufflé		VI Red bean purple rice tangyuan	
II Macaron		VII Almond tofu	
III Sesame paste		VIII mille-feuille	
IV white fungus with crystal sugar		IX Crème brûlée	
V Mille Crepe Cake		X Longan walnut cake	

The study uses Likert 5-point scale to calculate the rank for desserts; the highest scores represent exciting dessert, and the lowest scores represent peaceful dessert. According to the survey results, mille crepe cake with the highest average score of 4 is an exciting dessert, and longan walnut cake with the lowest average score of 3 is a peaceful dessert.

In this study, we adopt different temporal focuses and loving atmosphere to evaluate the impact of happiness on the choice of desserts. Two dimensions, namely, loving atmosphere (passionate love, not passionate love) and temporal focus (present, future) were used to conduct the experiments. There was a total of four questionnaires and the subjects were randomly assigned to four experiments for verifying hypotheses. The loving atmosphere is based on how they share their loving photos and stories.

From Table II, the number of young people who are passionately in love and focusing on the present is 10, and the number of those who are passionately in love and focusing on the future is 16. It shows that young people who are passionately in love put their focus on the future. The number of young people who are not passionately in love but focusing on the present is 19, and the number of those who are not passionately love but focusing on the future is 15. It shows that young people who are not passionately in love put their temporal focus on the present. Therefore, the hypothesis H1: loving atmosphere affects temporal focus, is supported.

TABLE II. LOVING ATMOSPHERE V.S. TEMPORAL FOCUS

love atmosphere \ time focus	Passionate love	Not passionate love	total
present	10	19	29
future	16	15	31
total	26	34	60

Table III shows that 19 young people whose temporal focus is on the present and happiness are peaceful, and 10 young people whose temporal focus is on the present and happiness are excited. Therefore, these young people put their temporal focus on the present, and their happiness is peaceful. There are 9 young people whose temporal focus is on the future and their happiness is peaceful, while there are

22 young people whose temporal focus is on the future and their happiness is excited. We adopt Chi-square test to measure the goodness and fitness of the model. The statistic result is significant ($p < 0.05$), and it means the model has high fitness to verify the analysis result. Therefore, the hypothesis H2: temporal focus affects Happiness, is supported.

TABLE III. TEMPORAL FOCUS VS. HAPPINESS

happiness \ temporal focus	present	Future	total
peaceful	19	9	28
excited	10	22	32
total	29	31	60

Table IV shows that the number of young people whose happiness is peaceful choosing a peaceful dessert is 18, and the number of those whose happiness is peaceful choosing an excited dessert is 10. It indicates that low awareness (peaceful) of the happiness of consumers positively affects the possibility that they would choose peaceful desserts. The number of young people whose happiness is excited and choosing a peaceful dessert is 7. The number of those whose happiness is excited choosing an excited dessert is 25. Then, the Chi-square test is used to evaluate the model fitness. The result is significant ($p < 0.05$), and it means the analysis result is evidential. It indicates that high awareness of the happiness of consumers positively affects the possibility that they would choose excited desserts. Therefore, H3: happiness affects choice of dessert, is supported.

TABLE IV. DESSERT CHOICE VS.. HAPPINESS

Dessert \ Happiness	Peaceful	excited	total
Peaceful (Longan walnut cake)	18	7	25
Excited (Mille Crepe Cake)	10	25	35
total	28	32	60

V. CONCLUSION

Based on the above experimental results, we obtained the following conclusion. (1) Loving atmosphere affects temporal focus. (2) Temporal focus is affected by happiness. (3) Happiness affects the choice of desserts. This result proves that people who have optimistic attitudes will make healthy choices, and they tend to focus more on the future instead of paying attention to immediate worries [13]. This is

a preliminary study. In the future, we will consider more factors which can influence the decision of choice and extend the scope of experiment and increase the number of questionnaire.

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