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訊息正反性和產品正反性的交互作用對消費者認
知、態度、購買意願的影響

The Interactive Effect of Message Framing and Product Type on

Cognition, Attitude, Purchase Intention

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中文摘要

本研究旨在研究訊息正反性和產品正反性對消費者認知、態度、購買意願的影響。本研究為一 2x2 的實驗設計：獨立變數為訊息正反性、調節變數為產品正反性，而相依變數為認知、態度、和購買意願。研究分析方法則採用多變量變異數分析法（multivariate ANOVA）。

本研究的四個主要研究發現為:

1. 訊息正反性和產品正反性的交互作用對廣告效果有顯著影響。

2. 對正面產品的廣告效果而言，正面訊息顯著地優於負面訊息。

3. 對負面產品的廣告效果而言，正面訊息和負面訊息沒有顯著性的差異。

4. 對現在擁有正面產品的人來說，正面訊息顯著地優於負面訊息；對現在沒有擁有正面產品的人來說，正面訊息和負面訊息沒有顯著性的差異。

The Interactive Effect of Message Framing and Product Type on Cognition, Attitude, Purchase Intention

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ABSTRACT

This research aims to understand the interactive effect between advertising appeals and product types on consumers' cognition, attitude, and purchase intention. This research applies a 2*2 design—advertising appeals (positive and negative) serve as independent variables, product types (2 positive and 2 negative products) serve as moderators, and cognition, attitude, purchase intention serve as dependent variables. Eight different advertisements were designed to fit in this experiment. The main analysis method of this research is multivariate ANOVA.

There are four main findings of this research:

1. The interactive effect between advertising appeals and product types on advertising effectiveness is significant.
2. For positive products, positive appeals are significantly more effective than negative appeals.
3. For negative products, there is no significant difference between positive and negative appeals.
4. For people who own positive products now, positive appeals are significantly more effective than negative appeals.

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Chapter 1 Introduction

1.1 Background

Thousands of new products are launched in the market in every single day. Advertisements seem to be the most popular way for sellers to promote their products, to raise consumer awareness, and finally get to the purchasing stage. That is why the money spent on advertisements is increasing every year. The following is a plot of advertisement value in Taiwan from 2001 to 2004.

Figure 1.1 Advertisement Value
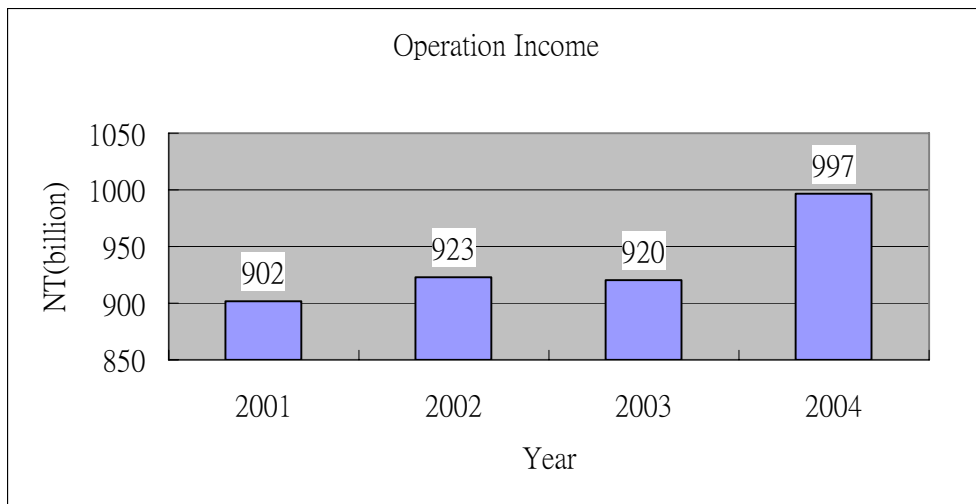
Source: Government Website
(http://2k3dmz2.moea.gov.tw/gnweb/news/hot_html/ente94Q1.htm)

However, owing to the difference of product nature and target market, advertisement must be designed fittingly and the type of media must be chosen wisely. This research chooses print advertisement in magazines as the medium because it is the only one with positive growth rate among the top five types of media in Taiwan. (see Table 1.1)

Table 1.1 Revenue of Top Five Media

Medium	2004	2005	Growth rate
Broadcasting	8,628,362	7,604,688	-11.86%
Cable television	25,381,186	23,362,528	-7.95%
Newspaper	16,524,403	16,325,028	-1.21%
Magazine	8,063,754	8,410,252	4.30%
Broadcasting	3,267,401	3,166,435	-3.09%
Total	61,865,106	58,868,932	-4.84%

Period : 2005/0101～2005/12/31

Product category：All （Unit: thousands）

Cite form: Rainmaker˙XKM International Corp.

1.2 Research Motivation

In the past, marketers believed that it could not be wrong to use positive appeals in their advertisements, but there are more and more negative appeals used now. The motivation of this research was elicited by seeing some negative appeals of beauty products and reading some beauty related paper (Bloch and Richins 1992; Amanda B Bower and Landreth 2001; Leeuwen and Macrae 2004), and then the issue was expanded to how the compatibility between product types (positive/ negative products) and advertising appeals (positive/ negative appeals) could influence the effectiveness of advertisements.

1.3 Research Objectives

The objective of this research is to find the compatibility between the product types (positive/ negative products) and the advertising appeals (positive/negative appeals), which could lead to more effectiveness in advertising. It is a practical issue that all the marketers would like to know, since everyone wants to know the secret formula to make their products profitable.

1.4 Research Structure

This research includes five chapters, and the outline of each chapter is as followings:

Chapter One introduces the research background, research motivation, research objectives, and the research structure.

Chapter Two reviews the antecedent literatures relevant to this research. It contains positive and negative appeals, positive and negative products, the ELM Model, the DMH Model, the Kano concept, cognition, attitude, purchase intention, and the hypotheses. In this research, the appeals will serve as independent variable, the products as moderators, and the cognition/attitude/purchase intention as dependent variables.

Chapter Three illustrates how the experiment is designed and the data is collected. It presents a conceptual research framework, sample selection, data collection, measurements, data analysis method, manipulation check, and pre-test.

Chapter Four examines the hypotheses and shows the statistical results of this research. It includes reliability analysis, factor analysis, correlation analysis, regression analysis, MANOVA, ANOVA, and Independent-Sample T Test. With this information, we could compare the differences and figure out what the factors behind the phenomenon are.

Chapter Five summarizes the findings, describes the limitation of this research and provides suggestions for future researches.

The theoretical framework is as followings:

Figure 1.2 Research Structure

3
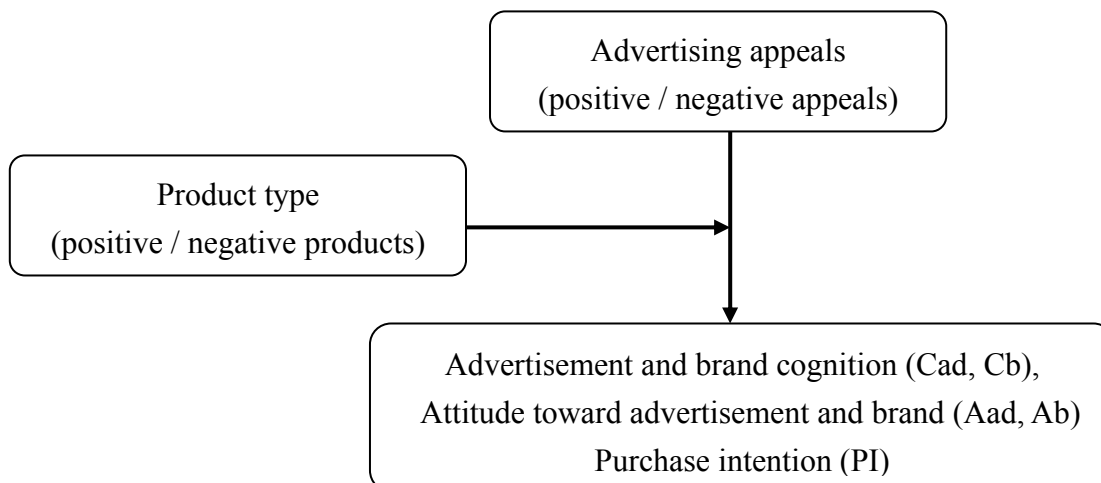
The research flow is as followings:

Figure 1.3 Research Flow

```
┌─────────────────────────────────────────────┐
│         Deciding Research Direction           │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│             Reviewing Literature              │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│  Developing Research Structure and Hypotheses │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│       Modeling and Modifying Questionnaires   │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│            Designing Advertisements           │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│          Sampling and Collecting Data         │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│                Analyzing Data                 │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│            Examining the Hypotheses           │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│         Research Results and Discussion       │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│   Conclusion, Limitations, and Future Research │
└─────────────────────────────────────────────┘
```
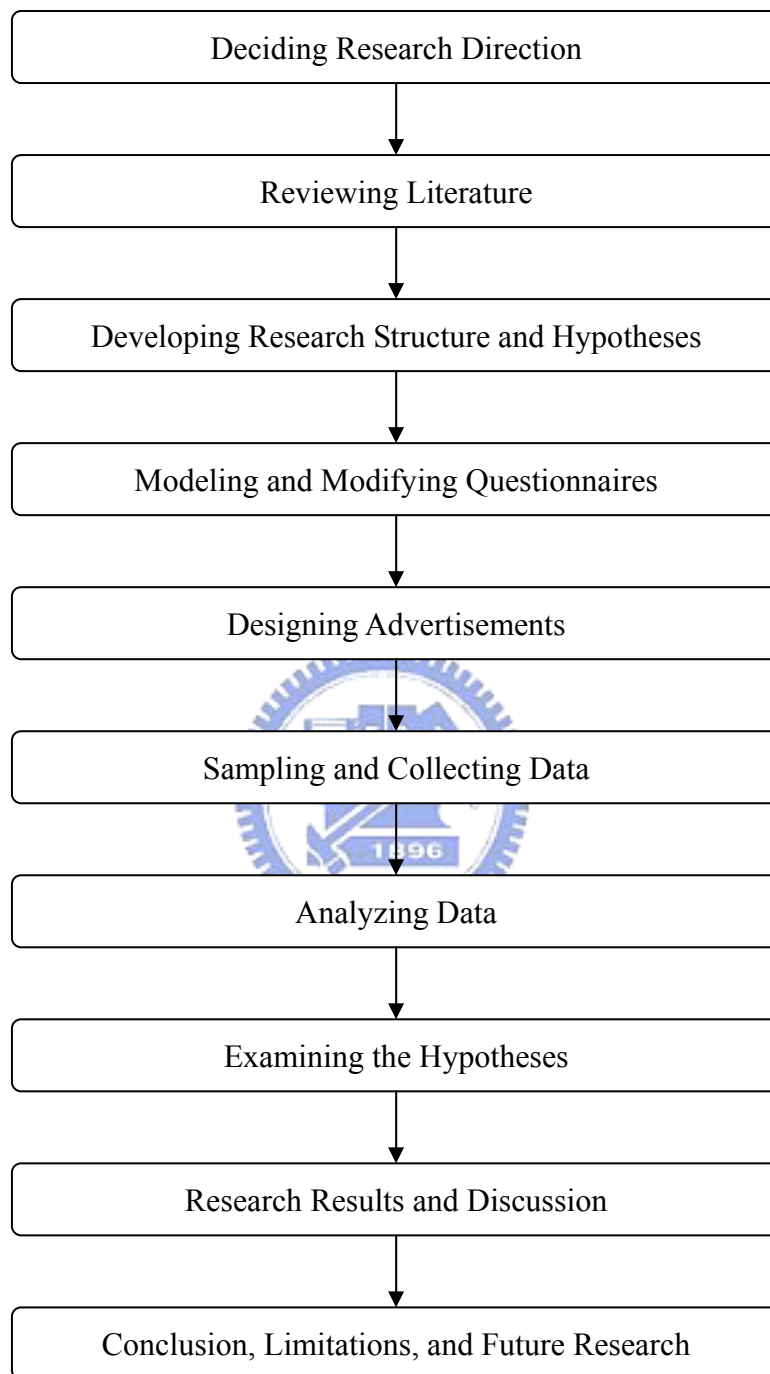
Chapter 2 Literature Review

Many literatures discuss how positive advertising appeals and messages in advertisement are more effective than negative ones. On the other hand, some empirical studies have found that certain products and services, like insurance, are more effective using a negative tone. This research attempts to find whether there is a relationship between positive/negative products and appeals, which could make advertisements more effective.

This literature review consists of four parts. The first defines positive and negative products. The second defines positive and negative appeals. The third defines the dependent variables—Cad, Cb, Aad, Ab, and PI. The forth illustrates the ELM (Elaboration Likelihood Model), the DMH (Dual Mediation Hypothesis), and Kano Concept which are relevant and used in this research. The final part discusses the logic of the hypotheses.

2.1 Positive and negative appeals --Independent variables

In advertisements, advertisers decide what kind of appeals to use, which turns out different perceptions and responses from consumers. The following is a table of the advertisement appeals in research (Ho 2002).

Table 2.1 Advertisement Appeals

Scholar	Hotchkiss	Bridge	Donald	Kotler	Chang	Ho
Period	1949	1950	1955	1991	1990	2002
Ration	◎	◎		◎	◎	
Emotion	◎		◎	◎	◎	
Curiosity	◎		◎			
Memory		◎				
Success		◎				
Economy		◎				
Fear		◎			◎	
Information			◎			
Beauty			◎			
Ethic			◎	◎		
Humor					◎	
Positive						◎
Neutral						◎
Negative						◎

Source: (Ho 2002)

2.1.1 Definition of positive appeals

Positive appeal is defined as the desirable consequence resulting from using the advertised product (Wheatley and Oshikawa 1970; Liang 1992; Lin 1992; Yin 1998; Chen 2001; Liou 2001). Also, positive appeal is defined as rational appeals that is integrated with positive feelings of emotional appeals and attempts to combine consumers' self-advantage and purchase intention into a positive emotion (Ho 2002). This research adopted the former definition.

2.1.2 Definition of negative appeals

Negative appeal emphasizes the undesirable consequences of failing to use the product emphasized (Wheatley and Oshikawa 1970; Liang 1992; Lin 1992; Yin 1998; Chen 2001; Liou 2001). Negative appeal is defined as rational appeals integrated with negative feelings of

emotional appeals and attempts to combine consumers' self-advantage and purchase intention into a negative emotion (Ho 2002). This research adopted the former definition.

Another definition is from Negative Appeals (Fram and Vogler 1990). In "Negative Appeals: The Neglected Side of Promotion"(Fram and Vogler 1990), negative inducements involving psychological emotional appeals can also create customer acceptance of a product or service. For example, fear is an actual emotional response that can induce changes in attitude or behavior intentions (e.g., toward a healthy life or toward environmental protection) and consumer actions (e.g., stop smoking or buying green products) (LaTour and Rotfeld 1997).

Table 2.2 Negative inducements

Inducement	User Product Groups	Strengths & Benefits
Fear	•Business/Industrial Products, e.g., telephone services •Healthcare Product •Prevention Groups, e.g.,Cancer Society, Planned Parenthood	•Lends importance •Highlights reality •Highlights reality
Guilt	•Children's Products •Anti-litter Promotions •Business Products •Insurance •Consumer Products	•Relates to current cultures •Motivates to direct action •Target subconscious
Insecurity	•Consumer Products •Personal Products •Financial Services	•Human pursuit certainty/security •Reduction of dissonance •Provides route to psychological protection
Irritation	•Personal Products •Consumer Products •Low Involvement Products	•Creates product awareness/attention •Can target specific groups who will react

Source: (Fram and Vogler 1990)

2.2 Positive and negative products—Moderators

Actually, "positive product" and "negative product" are subjective to different people. Someone's positive product may be another's negative product. For example, most women enjoy shopping and buying groceries, but most men view it as time-wasting and boring. For this reason, this research differentiates positive and negative products by examining if the products are seen as positive or negative by an apparent majority of consumers.

2.2.1 Definition of positive products

A positive product is a product that consumers enjoy purchasing and using (Fram and Widrick 1981; Widrick and Fram 1984; MacKenzie, Lutz et al. 1986). In previous research, researchers asked consumers' feelings toward a product, using 50% of "like or like very much" as the threshold for identifying a positive product. The following products/services can be placed in this category: flowers and plants (77%), dress clothing (76%), hair care services (65%), sports equipment (56%), stereo equipment (52%), and cameras (50%) (Widrick and Fram 1984). Furthermore, a positive product can be divided into two categories according to its level of involvement (Fram and Widrick 1981), as following.

Table 2.3 Positive Products Based on Different Involvement

Involvement Level	Positive Motivation
High	Vacation Planning / Dress Clothing / Book Selection / Pleasure Boat
Low	Morning Beverage / Movie Selection / Newspaper / Snack Foods

Source: (Fram and Widrick 1981)

Due to the scarcity of positive product definition, this research also tries to define it in another possible way. According to "Measuring Consumer Involvement Profiles," the involvement profile contains five components—personal importance, negative consequence importance, subjective probability of mis-purchase, pleasure value, and sigh value. This

research uses pleasure value as the positive product indicator. The involvement profile result are as follows：

Table 2.4 Measuring Consumer Involvement Profiles

	Importance of Negative Consequences	Subjective Probability of Mispurchase	Pleasure Value	Sign Value
Dresses	121	112	147	181
Bras	117	115	106	130
Washing machines	118	109	106	111
TV sets	112	100	122	95
Vaccum cleaners	110	112	70	78
Irons	103	95	72	76
Champagne	109	120	125	125
Oil	89	97	65	92
Yogurt	86	83	106	78
Chocolate	80	89	123	75
Shampoo	96	103	90	81
Toothpaste	95	95	94	105
Facial soap	82	90	114	118
Detergents	79	82	56	63
Average product score=100 Note the first two antecedents of personal importance and importance of negative consequences are combined in these data.				

Source：(Laurent and Kapferer 1985)

2.2.2 Definition of negative products

Negative products/services are regarded by the consumer as an unlikable, necessary purchase to avoid problems or reduce disutility now or in the future. (Fram and Widrick 1981; Widrick and Fram 1984) "Negative products are products that the consumer does not enjoy purchasing, e.g., toilet paper, automotive replacement parts, etc". Another relevant concept is Negative Demand (Fram and Vogler 1990), in which consumers will pay money to avoid

tasks.

However, some items that are negative at purchasing time can be positive at the using time, and vice versa (Widrick and Fram 1984). For instance, a customer may feel embarrassed buying a bottle of anti-sweat spray, but feel excited using it to solve his/her problem. Moreover, a customer who cheerfully bought a high-tech PDA (Personal Digital Assistant) may feel frustrated when unfamiliar with it. For this reason, negative products selected in the research will be negative for the majority of recipients.

From "Identifying Negative Products (Widrick and Fram 1984)," results show that the greatest four negative purchase responses are auto repairs (59%), extermination service (47%), birth control product (41%), and groceries (35%). According to Negative Appeals (Fram and Vogler 1990), there are three negative product categories—negative product/ demand like burial accessories, flawed products, and personally sensitive products, such as hemorrhoid creams or suppositories. The characteristics and benefits of these three negative products are listed below:

Table 2.5 Negative Product Categories

Products	Characteristics	Strengths/Benefits
Negative Products/ Demand	•Products/Services consumers do not like to buy	•Recognize true consumer motivation •Permits better targeting •More realistic sales training
Flawed Products	•Product because of flaw is below or even occasionally above standard	•Recognition of true product condition •Provides method situations
Personally Sensitive Products	•Flow of information is inhibited problem	•Recognition of information flow

Source: (Fram and Vogler 1990)

Also, consumers can be highly or moderately involved with a negative product purchase

(Fram and Widrick 1981). Table 2.6 instantiates some negative products that differ from consumers' involvement.

Table 2.6 Negative Products Based on Different Involvement

Involvement Level	Negative Motivation
High	Nursing Home / Home Insurance Replacement / Life Insurance /Dentist Visit
Low	Garbage Bag / Light Bulbs / Gasoline / Bank Transaction

Source: (Fram and Widrick 1981)

2.3 Dependent Variables-- Cad、Cb、Aad、Ab、PI

2.3.1 Cad (Advertisement cognition) and Cb (Brand cognition)

Cognitive response toward the advertisement is what subjects think about during advertising exposure. That is, individuals elaborate different issue-relevant thinking when their attitudes are formed(Chen 2002). These thoughts can generally fall into five categories(Chen 2002)：Message-related, Brand-related, Product-related, Ad-related, and Others (see Table 2.7).

Table 2.7 Cognitive Response Categories

Category	Description
Message-related	Explicit references to specific attributes or benefits that were specified in either the verbal or visual content of the ad.
Brand-related	General affective comments about the brand featured in the ad.
Product-related	Comments about the product class in general, not about the brand or any of its relevant attributes.
Ad-related	Comments about the style, theme, execution, or format of the ad including its creative aspects.
Others	All other thoughts, such as those relating to the task, those unlikely to have been generated during exposure but subsequently generated, and those unrelated to the message, brand, product, or ad.

Source: (Chen 2002)

2.3.2 Aad (Attitude toward the advertisement)

Attitude toward the advertisement (Aad) is defined here as a "tendency to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion (Chen 2002)." The general definition of attitude toward the advertisement is shown in the following:

Table 2.8 The Definition of Aad

Researchers	Definition
Lutz (1985) Mehta (2000)	A learned predisposition to respond in the consistently favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion.
Berger and Mitchell (1989)	Evaluations of an advertisement.
Mackenzie and Lutz (1989)	A particular exposure to a particular ad and not to consumers' attitudes toward advertising in general or even their attitudes toward the ad stimulus of interest at another point in time.

Source: (Chen 2002)

2.3.3 Ab (Attitude toward the brand)

According to Lutz's definition, attitude toward the brand means "Under certain situations, the tendency of liking or disliking responded to certain advertising stimulus." (MacKenzie, Lutz et al. 1986) Or, attitude toward the brand was measured as, "When consumers are exposed to advertising messages, their continuous level of like or dislike toward the brand (Huang 2001)."

2.3.4 PI (Purchase Intention)

Purchase intention refers to, "After stimulated by advertising, consumers generate the possibility of purchasing toward the advertised product or brand (Huang 2001)." Purchase intention is regarded as "Toward the brand, individual takes certain action or tends towards

certain action, usually indicating consumer's possible purchasing behavior." (MacKenzie, Lutz et al. 1986)

2.4 The ELM Model, the DMH Model, and the Kano Concept

The following is a brief introduction of how the ELM Model, the DMH Model, and the Kano Concept can be used in this research.

2.4.1 The ELM Model

The ELM (Elaboration Likelihood Model of Persuasion) integrated many variables found in the persuasion literatures (Petty, Unnava et al.). In the ELM, there are many variables that can affect elaboration and the route of persuasion—like motivation, ability, situation, individual, objective, and subjective. The two major variables are: (1) motivation—a person's willingness to process the information, such as personal relevance, need for cognition, personal responsibility, etc. (2) ability —a person's knowledge to process the information, such as distraction, repetition, prior knowledge, message comprehensibility, etc. These two major variables play a big part in what kind of processing a consumer might take.

Both motivation and ability will lead to the central route. When the central route is taken, the consumer will focus on information about the central merits of the object. Attitudes formed or changed by the central route tend to be relatively more persistent, predictive of behavior, and resistant to change (Flora Kokkinaki 1999). Absence of either motivation or ability will lead to the peripheral route. When the peripheral route is taken, the consumer will evaluate the object depending on other peripheral cues. Attitudes formed or changed by the peripheral route tend to be relatively less persistent, resistant, and predictive of long-term behavior. Previous literatures of the two routes are as follows: (Figure 2.1)

Figure 2.1 Elaboration Likelihood Model of Persuasion

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┌─────────────────────────┐                    ┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
│ Persuasive Communication│                      Peripheral Attitude Shift
└─────────────────────────┘                    │ Attitude is relatively temporary, │
            │                                     susceptible, and unpredictive
            │                                   │        of behavior        │
            ▼                                   └ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
┌─────────────────────────┐                                  ▲
│   Motivated to Process?  │      No                         │ Yes
│ (personal relevance; need│─────────┐
│  for cognition; personal │         │          ┌─────────────────────────┐
│  responsibility; etc.)   │         │          │  Peripheral Cue Present? │
└─────────────────────────┘         │          │   (positive negative     │
            │ Yes                    │          │    affect; attractive    │
            ▼                        ▼          │    expert sources:       │
┌─────────────────────────┐   No     │          │  number of arguments; etc.)│
│   Ability to Process?    │─────────┘          └─────────────────────────┘
│ (distraction; repetition;│                         │           ▲
│  prior knowledge; message│                      No │           │
│  comprehensibility; etc.)│                         ▼           │
└─────────────────────────┘                    ┌ ─ ─ ─ ─ ─ ─ ─ ┐
            │ Yes                                 Retain or
            ▼                                   │   Regain     │
┌─────────────────────────┐                      Initial
│ Nature of cognition      │                    │  Attitude    │
│ Processing:              │                    └ ─ ─ ─ ─ ─ ─ ─ ┘
│ (initial attitude,       │
│  argument quality, etc.) │
├──────────┬──────────┬────┤
│Favorable │Unfavorable│Nether or│
│Thoughts  │Thoughts   │Neutral  │
│Predominate│Predominate│Predominate│
└──────────┴──────────┴────┘
       │          │
       ▼          ▼
┌─────────────────────────┐                    No
│  Cognitive Structure     │─────────────────────────────────►
│  Change:                 │
│  Are new cognitions adopted│
│  and stored in memory?; are│
│  different responses made │
│  salient than previously? │
└─────────────────────────┘
      │             │
  Yes │         Yes │
(Favorable)   (Unfavorable)
      ▼             ▼
┌ ─ ─ ─ ─ ─ ┬ ─ ─ ─ ─ ─ ┐
  Central   │  Central
│ Positive    Negative  │
  Attitude  │  Attitude
│ Change      Change    │
├ ─ ─ ─ ─ ─ ┴ ─ ─ ─ ─ ─ ┤
  Attitude is relatively enduring,
│ resistant, and predictive of │
            behavior
└ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
```

Source: (MacKenzie, Lutz et al. 1986)

2.4.2 The DMH (Dual Mediation Hypothesis)

In "The Role of Attitude towards the Ad as a Mediator of Advertising Effectiveness (MacKenzie, Lutz et al. 1986)," four competing explanations of the causal role are examined. These four models have a general hierarchy-of-effects framework, with cognition prior to affect, which in turn is prior to conation (i.e., purchase intention), but the role of Aad as mediator differs. The structural of the four models are as follows:

Figure 2.2 Attitude towards the Ad as a Mediator

(A)Affect Transfer Hypothesis   (B)Dual Mediation Hypothesis

$\quad$ Cab→ Aad $\qquad\qquad\qquad\qquad$ Cab→ Aad

$\qquad$ ↓ $\qquad\qquad\qquad\qquad\qquad$ ↙ ↓

$\quad$ Cb → $\quad$ Ab→ PI $\qquad\qquad$ Cb → $\quad$ Ab→ PI

(C)Reciprocal Mediation Hypothesis   (D)Independent Influences Hypothesis

$\quad$ Cab→ Aad $\qquad\qquad\qquad\qquad$ Cab→ Aad

$\qquad$ ↑ ↓ $\qquad\qquad\qquad\qquad\qquad\qquad$ ↘

$\quad$ Cb → $\quad$ Ab→ PI $\qquad\qquad$ Cb → $\quad$ Ab→ PI
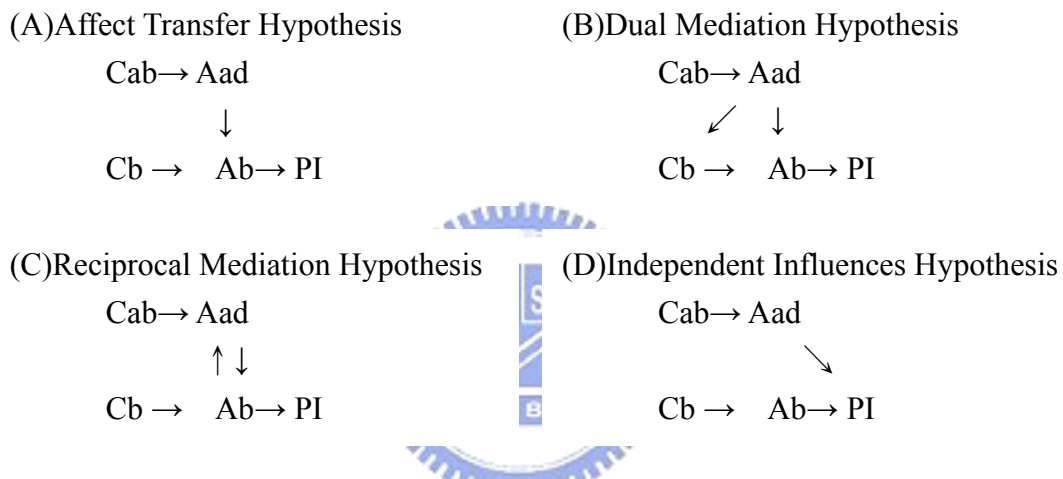
$\quad$ Key:

$\qquad$ Cad represents advertisement cognitions
$\qquad$ Cb represents brand cognitions
$\qquad$ Aad represents attitude toward the ad
$\qquad$ Ab represents attitude toward the brand
$\qquad$ PI represents intention to purchase the brand

$\quad$ Source: (MacKenzie, Lutz et al. 1986)

The DMH (Dual Mediation Hypotheses) turned out to be the best of the four theoretical explanations. It specifies an indirect flow of causation from Aad (attitude toward the advertisement) through Cb (brand cognitions) to Ab (attitude toward the brand), in addition to the direct effect assumed by the ATH. That is, consumers' affective response to an ad influenced their tendency to accept the messages made in the ad on behalf of the brand.

According to this research, this thesis chooses Cad, Cb, Aad, Ab, and PI to be the dependent variables (MacKenzie, Lutz et al. 1986; Biehal, tephens et al. 1992).

2.4.3 The Kano Concept

The Kano Concept was published in 1984 by Kano, Noriaki, Shinchi Tsuji, Nobuhiko Seraku, and Fumio Takerhashi (Jakki Nohr, Sanjit Sengupta et al. 2005). It provides a graphical relationship between the presence of certain product attributes and customer satisfaction or dissatisfaction. There are three attribute types of this graph—one-dimensional quality attribute, must-be quality attribute, and attractive quality attribute. The graph is as the following：

Figure 2.3 Kano Concept
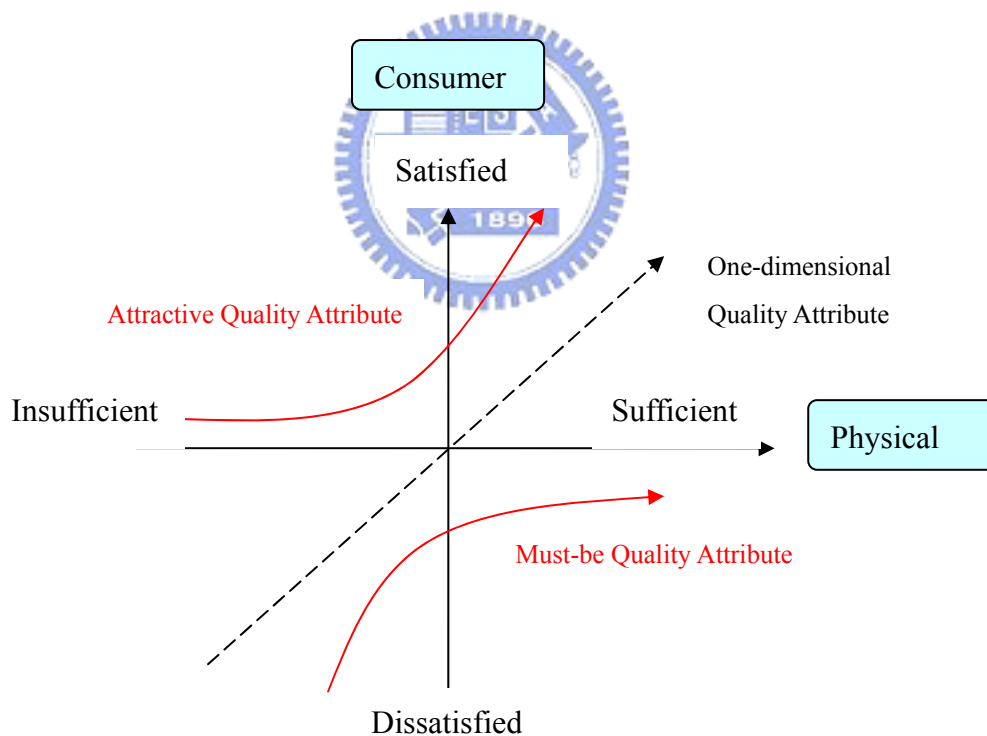
Source: (Jakki Nohr, Sanjit Sengupta et al. 2005)

One-dimensional quality attribute is linearly related to customer satisfaction. Increased performance of these attributes can increase customer satisfaction linearly. Customers know

and ask for these attributes. For example, the notebook battery belongs to the one-dimensional quality attribute, and lengthening the life of the battery would probably increase customer satisfaction.

Must-be quality attribute is exponentially related to customer dissatisfaction. Increased level of these attributes will not increase customer satisfaction, but the absence of them will lead to customer product dissatisfaction. Customers take these attributes for granted and may not ask for them. For example, the notebook screen belongs to must-be quality attributes, and lack of the screen will make the notebook useless.

Attractive quality attribute is exponentially related to customer satisfaction. The presence of these attributes will delight customers, but a lack of them will not lead to customer dissatisfaction. Customers often don't notice the needs of these attributes, and thus, these attributes must be discovered by some special techniques (e.g. empathic design and lead users). For example, the notebook camera belongs to attractive quality attributes, and the presence of this attribute will make this notebook stand out above the rest.
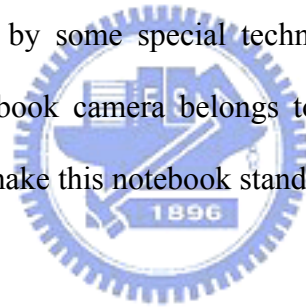
2.5 Hypotheses

There is lots of research about how different product types moderate the relationship between advertisement appeals and advertisement effectiveness. But none of them try to separate the product into positive or negative types. This research attempts to test whether there is compatibility between advertising appeals (positive / negative) and product types (positive / negative).

Negative appeals signal to message recipients that their current situation requires a problem-solving response, and therefore triggers central processing. When central processing, message recipients actively think about the advertisement and attempt to understand it. Because they are concentrating on the message and trying to evaluate it, they may be likely to

either (1) produce more cognitions about the ad than people who are not concentrating on the message and/or (2) give greater weight to those cognitions when forming an overall judgment of the ad (Aylesworth and MacKenzie 1998).

Another research summarized the cognitive processing from previous literatures and showed that negative appeal will elicit more cognition than positive appeal (Reeves, Newhagen et al. 1991). Also, in "Context Is Key," hypotheses have been supported that people in a context-induced negative mood produce more positive and negative cognitions about the program than those in a context-induced positive mood (Aylesworth and MacKenzie 1998). Thus, we could infer that negative appeals usually induce people's negative mood and then induce more positive and negative cognitions about the advertising than positive appeals.

Finally, a research indicated that negative appeals in advertisement elicit more advertisement cognition, which generates more brand cognition (Homor and Yoon 1992). It also found that brand-related cognitions are more influential when induced by a negatively framed versus a positively framed appeal.

H1a：For positive products, negative appeals will elicit more Cad (advertisement cognition) and Cb (brand cognition) than positive appeals.

H1b：For negative products, negative appeals will elicit more Cad (advertisement cognition) and Cb (brand cognition) than positive appeals.

According to "The Role of Product category as a Moderator of Consumer Attitude," different advertising appeals do influence consumers' Aad (attitude toward the advertisement), and positive appeals produce better Aad (attitude toward the advertisement) than negative or neutral appeals. It showed that consumers prefer appeals combining product information and positive feelings, rather than threatening or stressful appeals (Ho 2002).

Another research found that positive advertising appeals lead to more positive Aad (attitude toward the advertisement), which generates more positive Ab (attitude toward the

brand) (Homor and Yoon 1992). It claimed that attitude is based on people's emotional feelings toward the object. Positive appeals evoke people's positive feelings, and positive feelings make people process messages in the peripheral route. When peripheral processing, people tend to take simple cues as clues, which strengthens the relationship between positive appeals and positive feelings.

Finally, a research summarized past research and showed that negative feelings decrease one's favorability toward the ad execution and depress one's attitude toward brands (Bargozzi and Moore 1994). The mediating role of Aad between feelings and Ab was supported at lower exposure level to advertisement (Stayman and Aaker 1988).

H2a：For positive products, positive appeals will elicit more Aad (attitude toward the advertisement) and Ab (attitude toward the brand) than negative appeals.

H2b：For negative products, positive appeals will elicit more Aad (attitude toward the advertisement) and Ab (attitude toward the brand) than negative appeals.

It is long believed that positive appeals are more effective than negative appeals in purchase intention. But recently, there are some research found that negative appeals are more effective than positive or neutral appeals in purchase intention (King and Reid, 1990; Ho 2002). In "The Role of Product category as a Moderator of Consumer Attitude", no matter what kinds of categories—convenient or shopping goods—the product belongs to, the negative appeals elicit higher purchase intention. In some instances, negative feelings, like fear, can have a positive effect on attitude and behavior (Burke and Edell 1989).

Because the inconsistency results found by researchers, we could infer that there may be some moderating variables that were missing. So, this research suppose that product types—positive and negative products— would serve as the moderators (Baron and Kenny 1986), which would interact with the independent variables—positive and negative appeals. Only when the most effective compatibility—positive products with positive appeals and

negative products with negative appeals—occurs, the more purchase intention will be aroused.

According to Maslow's Hierarchy, positive products belong to the three upper levels—emotion demand, respect demand, and self-esteem demand. Positive products are used to make ourselves satisfied, not to guarantee our basic needs. So, inferred to Kano concept, the main attributes of positive products belong to attractive quality attributes.

On the advertisement of positive product, positive appeals stress on the benefit by using this product, while negative appeals stress on the disutility of not using this product. So, in the Kano Concept, along the attractive quality attribute line, positive appeals (Δ positive) could increase more satisfaction than negative appeals (Δ negative)(Figure 2.4). Thus, for positive products, positive appeals will elicit more purchase intention than negative appeals.
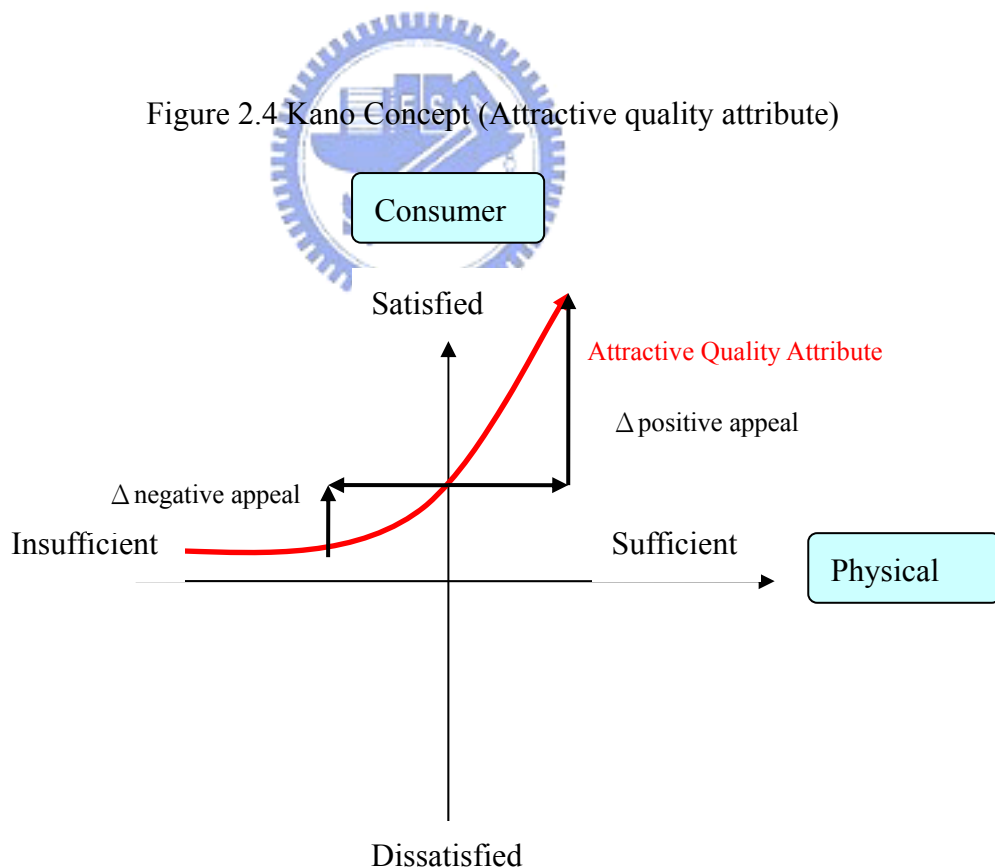
Figure 2.4 Kano Concept (Attractive quality attribute)

Source: (Jakki Nohr, Sanjit Sengupta et al. 2005)

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Another explanation may be when consumers see the positive appeals of positive product on the advertisement, their positive feelings will be elicited. So they will take the peripheral route to process the information. According to Attribution Theory, they may (1) attribute their positive feelings to "I must like this product", or/and (2) attribute the positive outcome in the advertisement to using this particular product, and these kind of peripheral processing will boost their purchase intention.

When consumers see the negative appeals of positive product on the advertisement, their negative feeling will be elicited. So they will take the central route to process the information. But, there are not enough central arguments found in the advertisement. Consumers will find it hard to convince themselves with the information provided.

H3a：For positive products, positive appeals will elicit more PI (purchase intention) than negative appeals

In Maslow' Hierarchy, negative products belong to the two lower levels—physical demand and safety demand. Negative products are used to guarantee our basic needs, not to make ourselves satisfied. Therefore, inferred to Kano concept, the main attributes of negative products belong to must-be quality attributes.

On the advertisement of negative product, negative appeals stress on the disutility of not using this product, while positive appeals stress on the benefit by using this product. So, in the Kano Concept, along the must-be quality attribute line, negative appeals (Δ negative) could decrease more dissatisfaction than positive appeals(Δ positive) (Figure 2.5). Thus, for negative products, negative appeals will elicit more purchase intention than positive appeals.

Figure 2.5 Kano Concept (Must-be quality attribute)
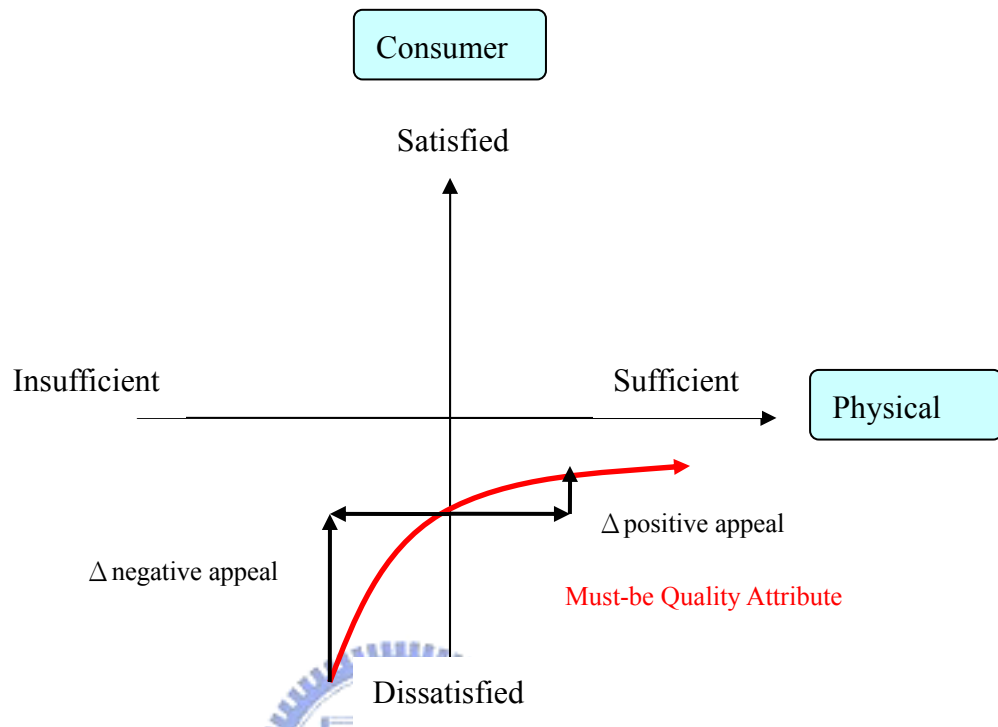
Source: (Jakki Nohr, Sanjit Sengupta et al. 2005)

Another explanation may be when consumers see the negative appeals of negative product on the advertisements, their negative feelings will be elicited. So they will take the central route to process the information. According to Message Learning Approach & Self-Persuasion Approaches, they may (1) learn that the attributes of this product could solve their problem, or/and (2) generate explanation for themselves "I could use this product to solve my problem!", and these kind of central processing will boost their purchase intention.

When consumers see the positive appeals of negative product on the advertisement, their positive feeling will be elicited. So they will take the peripheral route to process the information. But, there are not enough peripheral cues found in the advertisement. Consumers will find it hard to convince themselves with the information provided.

H3b：For negative products, negative appeals will elicit more PI (purchase intention) than positive appeals.

Chapter 3 Research Methodology

3.1 Conceptual Research Framework

Figure 3.1 Conceptual Research Frameworks

Process	Description
Select positive and negative products	Select eight positive and eight negative products from the previous research.
Manipulation check 1: Product strength	Select four positive and four negative products with the same product strength.
Design advertisements	Design advertisements for the above products.
Manipulation check 2: Appeal Strength	Select two positive and two negative products with the same appeal strength.
Select a sampling technique	Select homogeneous sample from students
Determine the sample size	Sample size would be 8(advertisements) x 25 (participants)
Execute the sampling process	Randomly assign each sample to each cell.
Data collection	

3.2 Sampling plan

In the sampling plan, 25 students were asked to evaluate a single-print advertisement independently. In this research, totally 8 advertisements were selected, which means that the sample number would be 200 (8 x 25 = 200).

Students were told that it was a study about consumer behavior and were given a

questionnaire. The questionnaire contained six parts—Cad (advertisement cognition), Cb (brand cognition), Aad (attitude toward the advertisement), Ab (attitude toward the brand), PI (purchase intention), and demographic information

3.3 Data collection

The investigation method is a survey conducted by an experimental advertisement with a questionnaire, which the results are easily measured and is often used in quantitative studies. The data was gathered from 40 graduate students in the pilot study and 200 participants in official survey.

The eight advertisements were mixed and were given to students randomly. A cover letter disclosured research purpose of realizing consumer behavior. Participants were instructed not to talk and look at other participants' advertisement. After the experiment, participants were debriefed and thanked.

3.4 Measures

3.4.1 Cad (Advertisement cognition) and Cb (Brand cognition)

Participants were given four blank lines to write down their thoughts in accord with the following instruction:

In the space bellow, please write down the thoughts that went through your mind while looking at the advertisement. Please list the thoughts that occurred to you about the product, the brand, and your reaction to what was being said about the product by the advertiser. Also, feel free to mention any other thoughts that you had while viewing the advertisement.

These cognition responses were independently coded by two judges into 6 categories: ad-related thoughts (positive, negative, or neutral) (77% agreement), and brand-related thoughts (positive, negative, or neutral) (46% agreement) (Homor and Yoon 1992).

3.4.2 Aad (Attitude toward the advertisement)

Instead of asking the overall evaluation (such as good/bad, like/ dislike) toward the advertisement, this research adapts the questionnaire from (Chen 2002). It combined the "hedonic", "utilitarian", and "interestingness" found by recent researches to provide a multidimensional structure.

(1) I like the ad very much

(2) I feel this ad very appealing

(3) I feel this ad very readable

(4) I feel this ad very outstanding

(5) I feel this ad very innovative

(6) I feel this ad very impressive

(7) I feel this ad very convincing

(8) I feel this ad very important

(9) I feel this ad very helpful

3.4.3 Ab (Attitude toward the Brand)

These four seven-point items were adopted from Shiv (Shiv, Britton et al. 2004). They were used to measure the attitude toward the brand.

(1) I feel this brand good

(2) I feel this brand likeable

(3) I feel this brand desirable

(4) I feel this brand useful

3.4.3 Anticipated satisfaction

Anticipated satisfaction was measure to test if it could explain prepurchase satisafaction and purchase intention. Anticipated satisfaction is the cognitive evaluation of a planned

purchase which will result in satisfaction. Antonis et al.(1997) measured anticipated satisfaction on an single item anchored at 1="think I will be not at all satisfied", and 7= "think I will be very satisfied" (Antonis Simintiras, Adamantios Diamantopoulos et al. 1997). To increase its reliability, this research modified the scale by adding three items— "happy," "pleased," and "the product work out as well as I thought it would." These three items are from the scale of satisfaction which measures a consumer's degree of satisfaction with some stimulus (Gordon C. Bruner II, Karen E. James et al. 2001). Also, to unite the form of the questionnaire, the scale were modified to anchor at 1="strongly disagree", and 7="strongly agree". The instruction was also adopted from Antonis et al.(1997), as following. (Antonis Simintiras, Adamantios Diamantopoulos et al. 1997)

"please indicate the extent to which you anticipate being satisfied after purchasing the product in the advertisement"

(1) think I will be happy

(2) think I will be pleased

(3) think the product work out as well as I thought it would

(4) think I will be very satisfied

3.4.4 Prepurchase Satisfaction

Prepurchase satisfaction was measure to test if it could explain purchase intention. Prepurchase satisfaction refers to the affective feelings resulted by the anticipated satisfaction. This research modified the prepurchase satisfaction, anchored at 1="strongly disagree", and 7="strongly agree"(Antonis Simintiras, Adamantios Diamantopoulos et al. 1997). The 7 items and instruction were adopted, as following.

"indicate the extent to which each of the following adjectives describes how you feel about your planned purchase"

(1) happy

(2) contented

(3) pleased

(4) satisfied

(5) excited

3.4.5 PI (Purchase Intention)

The willingness to buy on seven-point scales was adopted from Bodds (William B. Doods 1991). This scale was developed from Bodds' previous research and purified during the pretest of "Effects of Price, Brand, and Store Information on Buyers' Product Evaluations."

(1)The likelihood of purchasing this product is: very high/ very low

(2)The probability that I would consider buying the product is: very high/ very low

(3)My willingness to buy the product is: very high/very low

3.5 Data Analysis Method

First, to purify the measurement scales and to identify their dimensionality, reliability and factor analysis was conducted. Second, to recognize the relationships between research variables, correlation analysis was employed. Third, to ensure the relationship between anticipated satisfaction, prepurchase satisfaction, and purchase intention, regression analysis was adopted. Forth, to understand the compatibility between product categories and advertising appeals, MANOVA (multivariate analysis of variance) and ANOVA were used to test the interaction. The experiment is a 2 (appeal: positive vs. negative) x 2 (product: positive vs. negative) between-subjects design. Then, Independent-Sample T Test was employed to compare positive and negative appeals of each product type and each product.

3.6 Manipulation Check

Two manipulation checks— product strength and appeal strength—were conducted to eliminate the disturbance from non-manipulation variables.

3.6.1 Product strength

According to previous research, eight positive products (champagne, perfume, stereo, cakes, chocolate, MP3 player, ring, and roses) and eight negative products (toilet cleanser, ointments for athlete's foot, garbage bags, medicines, ointment for curing zits, anti-perspirants, washing detergent, and toilet paper) were surveyed to understand consumer's perceived product-strength. Eight dimensions for each product category are shown as follows. It was measured by a seven-point scale to show the level of agreement (where 1=strongly disagree and 7=strongly agree). The level of agreement implies the product strength; the higher the score of agreement, the stronger the product is.

A.   Positive product:

(1)I feel delight when I buy this product

(2)I feel pleasant when I use this product

(3)I expect the outcome after using this product

(4)I use this product to to make myself happy

(5)I use this product to make me feel better

(6)I use this product because I "want" not I "have to"

(7)I do not mind others know that I use this product

(8)I do not mind shopping this product with others

B.   Negative product:

(1)I do not feel delight when I buy this product

(2)I do not feel pleasant when I use this product

(3)I use this product to avoid unwanted consequence

(4)I use this product to avoid troubles

(5)I use this product to solve problems

(6)I use this product because I "have to" not I "want"

(7)I do not like others know that I use this product

(8)I do not like shopping this product with others

3.6.2 Results of Product strength

For the positive products, the reliability is 0.914. But for the negative products, the reliability is 0.662. To reach the reliability threshold (Cronbach's Alpha > 0.7), the reliability for each product was examined separately. Only four of them reach the acceptable level: the ointment for athlete's foot, the ointment for curing zits, anti-perspirant, and the toilet paper. It might because people perceive negative products inconsistently, which makes the reliability distributed diversely.

Thus, these four negative products were picked to continue with the comparison of product strength. After comparing their means through Independent-Sample T Test (Appendix VI), it is found that there is no significant difference between the following products: perfume, stereo, MP3 player, ring, roses, ointments for athlete's foot, ointment for curing zits, and anti-perspirants.

Putting advertising appeals into consideration, it seems that utilitarian products would be easier to come up with negative appeals. So, two positive products (stereo and MP3 player) and two negative products (ointment for athlete's foot and ointment for curing zits) were chosen to be continued in manipulation check 2.

3.6.3 Appeal Strength
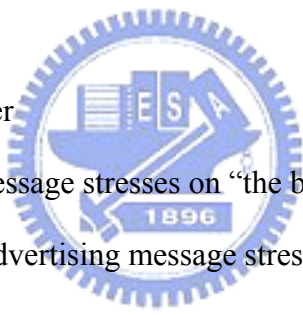
To ensure the appeal manipulation is perceived right and equal loading, perception of positive and negative appeal of each product was examined. Four dimensions are shown as

follows. It used 7 bipolar adjective pairs to (where 1= most suitable for the left-hand description and 7= most suitable for the right-hand description).

A. Questionnaire for stereo

(1) I feel that the advertising message stresses on "the benefit from the high-quality stereo" /

   I feel that the advertising message stresses on the "the loss from the low-quality stereo"

(2) I feel that the advertising picture stresses on "the benefit from the high-quality stereo" /

   "I feel that the advertising picture stresses on "the loss from the low-quality stereo"

(3) From the advertising message, I realized "the benefit from the high-quality stereo" /

   From the advertising message, I realized "the loss from the low-quality stereo"

(4) From the advertising picture, I realized "the benefit from the high-quality stereo" /

   From the advertising picture, I realized "the loss from the high-quality stereo"

B. Questionnaire for MP3 player

(1) I feel that the advertising message stresses on "the benefit from the high-quality MP3

   player" /   I feel that the advertising message stresses on the "the loss from the

   low-quality MP3 player"

(2) I feel that the advertising picture stresses on "the benefit from the high-quality MP3

   player" / "I feel that the advertising picture stresses on "the loss from the low-quality MP3

   player"

(3) From the advertising message, I realized "the benefit from the high-quality MP3 player" /

   From the advertising message, I realized "the loss from the low-quality MP3 player"

(4) From the advertising picture, I realized "the benefit from the high-quality MP3 player" /

   From the advertising picture, I realized "the loss from the high-quality MP3 player"

C. Questionnaire for athlete's foot

(1) I feel that the advertising message stresses on "the benefit from treating Athlete's foot" / I

feel that the advertising message stresses on "the consequence from not treating Athlete's foot"

(2) I feel that the advertising picture stresses on "the benefit from treating Athlete's foot" / I feel that the advertising picture stresses on "the consequence from not treating Athlete's foot"

(3) From the advertising message, I realized "the benefit from treating Athlete's foot" / From the advertising message, I realized "the consequence from not treating Athlete's foot"

(4) From the advertising picture, I realized "the benefit from treating Athlete's foot" / From the advertising message, I realized "the consequence from not treating Athlete's foot"

D. Questionnaire for zit

(1) I feel that the advertising message stresses on "the benefit from treating zits" / I feel that the advertising message stresses on "the consequence from not treating zits"

(2) I feel that the advertising picture stresses on "the benefit from treating zits" / I feel that the advertising picture stresses on "the consequence from not treating zits"

(3) From the advertising message, I realized "the benefit from treating zits" / From the advertising message, I realized "the consequence from not treating zits"

(4) From the advertising picture, I realized "the benefit from treating zits" / From the advertising message, I realized "the consequence from not treating zits"

3.6.4 Results of Appeal Strength

For reliability, the Cronbach alpha is 0.725, which is accepted as reliable. Appeal strength of each product was compared by Independent-Sample T Test. The results show that there is no significant difference between positive and negative appeals of each product (Appendix Ⅶ).

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3.7 Pretest

    To reduce the uncertainty in the survey, a pilot survey was conducted to discover any problems or misunderstanding of the questions and the design of the questionnaire. The pretest was made by giving 40 NCTU (National Chiao Tung University) students the questionnaire, debriefing the research purpose, and welcoming any feedbacks. The results from the pretest showed low uncertainties (alpha=0.966).

Chapter 4 Research Analysis and Results

This chapter demonstrates the analyses and results of this research, including background of respondents, reliability and validity of the results, and a series of data analyses techniques like correlation analysis, regression analysis, MANOVA, ANOVA, and Independent-Sample T Test were utilized in this research. Results of tested hypotheses were presented at last.

4.1 Background of Respondents

The total sample is 240 participants. 51.3% are female, 96.7% are single, 63.8% live in Hsinchu, 78.8% ages 21-30 years old, 93.3% are students, 54.2% have College/Bachelor degree, and 75% have disposable income below NT10,000. (Table 4.1)

4.2 Reliability and Validity of the Results

Five constructs were examined in the research—attitude toward the advertisement, attitude toward the brand, anticipated satisfaction, prepurchase satisfaction, and purchase intention. Reliability was tested with Cronbach's α, factor analysis was conducted with varimax rotation, and CFA analysis was also conducted.

4.2.1 Reliability Analysis

The reliability of the data is tested with Cronbach's α. If Cronbach's α is above 0.7, the study is accepted as reliable. Table 4.2 demonstrates the values from reliability tests of five constructs. The result of the reliability test indicates that the survey is reliable (all above 0.7). Table 4.2 illustrates the values from reliability tests of five constructs.

4.2.2 Validity Analysis

A principle components factor analysis with varimax rotation was conducted. As Table

4.3, four factors were formed. The loading score of each item is higher than 0.5. Because factor 1 consists of two constructs—anticipated and prepurchase satisfaction, CFA was conducted to test the model. Plot, goodness-of-fit, factor loadings are also shown (Table 4.4, Table 4.5, and Figure 4.1).

Table 4.1 Demographics of Respondents

	Category (Demographics)	respondents	Percentage(%)
Gender	Male	117	48.8%
	Female	123	51.3%
	Total	240	100%
Marriage	Married	8	3.3%
	Single	232	96.7%
	Total	240	100%
City	Taipei	65	27.1%
	Hsinchu	153	63.8%
	Taichung	18	7.5%
	Tainan	4	1.7%
	Total	240	100%
Age	Below 20	44	18.3%
	21-30	189	78.8%
	Others	7	2.9%
	Total	240	100%
Occupation	Students	224	93.3%
	Others	16	6.7%
	Total	240	100%
Education Degree	College / Bachelor	130	54.2%
	Master's degree	107	44.6%
	Doctor's degree	3	1.3%
	Total	240	100%
Income	Below NT 10,000	180	75%
	NT10,001~20,000	43	17.9%
	Others	17	7.1%
	Total	240	100%

Table 4.2 Reliability analysis for 5 constructs

Construct / Items	Cronbach Alpha	Item deleted	Cronbach alpha after item deleted
Attitude toward the Advertisement 1. I like the ad very much 2. I feel this ad very appealing 3. I feel this ad very readable 4. I feel this ad very outstanding 5. I feel this ad very innovative 6. I feel this ad very impressive 7. I feel this ad very convincing 8. I feel this ad very important 9. I feel this ad very helpful	0.909	3	0.934
Attitude toward the Brand 1. I feel this brand good 2. I feel this brand likeable 3. I feel this brand desirable 4. I feel this brand useful	0.929	---	---
Anticipated Satisfaction 1. think I will be happy 2. think I will be pleased 3. think the product work out as well as I thought it would 4. think I will be very satisfied	0.922	(1,2)	(0.915)
Prepurchase Satisfaction 1. happy 2. contented 3. pleased 4. satisfied 5. excited	0.929	---	---
Purchase Intention 1. The likelihood of purchasing this product is: very high/ very low 2. The probability that I would consider buying the product is: very high/ very low 3. My willingness to buy the product is: very high/very low	0.952	---	---

* Item 1 and 2 of Anticipated Satisfaction are deleted after CFA.

Table 4.3 Factor Analysis

Factor loading / Items	Component				
	1	2	3	4	5
Attitude toward the Advertisement					
1. I like the ad very much	.617				
2. I feel this ad very appealing	.734				
3. I feel this ad very readable	.525				
4. I feel this ad very outstanding	.785				
5. I feel this ad very innovative	.875				
6. I feel this ad very impressive	.856				
7. I feel this ad very convincing	.738				
8. I feel this ad very important	.680				
9. I feel this ad very helpful	.691				
Attitude toward the Brand					
1. I feel this brand good			.753		
2. I feel this brand likeable			.805		
3. I feel this brand desirable			.736		
4. I feel this brand useful			.683		
Anticipated Satisfaction					
1. think I will be happy					
2. think I will be pleased					
3. think the product work out as well as I thought it would					.732
4. think I will be very satisfied					.662
Prepurchase Satisfaction					
1. happy		.789			
2. contented		.794			
3. pleased		.834			
4. satisfied		.743			
5. excited		.842			
Purchase Intention					
1. The likelihood of purchasing this product is: very high/ very low				.850	
2. The probability that I would consider buying the product is: very high/ very low				.840	
3. My willingness to buy the product is: very high/very low				.869	

Table 4.4 Goodness-of-fit index of CFA

Goodness-of-fit index	Value
χ^2	$\chi^2_{(210)}$=323.91 (p=0.00000)
NCI=χ^2/d.f.	NCI=323.91 / 210 =1.5424
GFI	0.89
RMSEA	0.048
AGFI	0.86
RMR	0.046
CFI	0.99

Table 4.5 Loading of CFA

Latent Variable	Items	Standardized λ	t value
Attitude toward the Advertisement	1. I like the ad very much	0.79	14.27
	2.Very appealing	0.83	15.34
	3.Very readable	0.57	9.30
	4.Very outstanding	0.81	14.54
	5.Very innovative	0.69	11.76
	6.Very impressive	0.74	12.78
	7.Very convincing	0.84	15.59
	8.Very important	0.72	12.40
	9.Very helpful	0.82	15.02
Attitude toward the Brand	1. good	0.86	16.09
	2. likeable	0.83	15.04
	3. desirable	0.77	13.59
	4. useful	0.84	15.49
Anticipated Satisfaction	1. think the product work out as well as I thought it would	0.89	17.02
	2. think I will be very satisfied	0.95	18.64
Prepurchase Satisfaction	1. happy	0.79	14.39
	2. contented	0.90	17.80
	3. pleased	0.85	15.99
	4. satisfied	0.88	17.00
	5. excited	0.78	14.21
Purchase Intention	1. likelihood of purchasing	0.92	18.67
	2. probability of purchasing	0.93	18.79
	3. willingness to buy	0.95	19.52

Figure 4.1 CFA
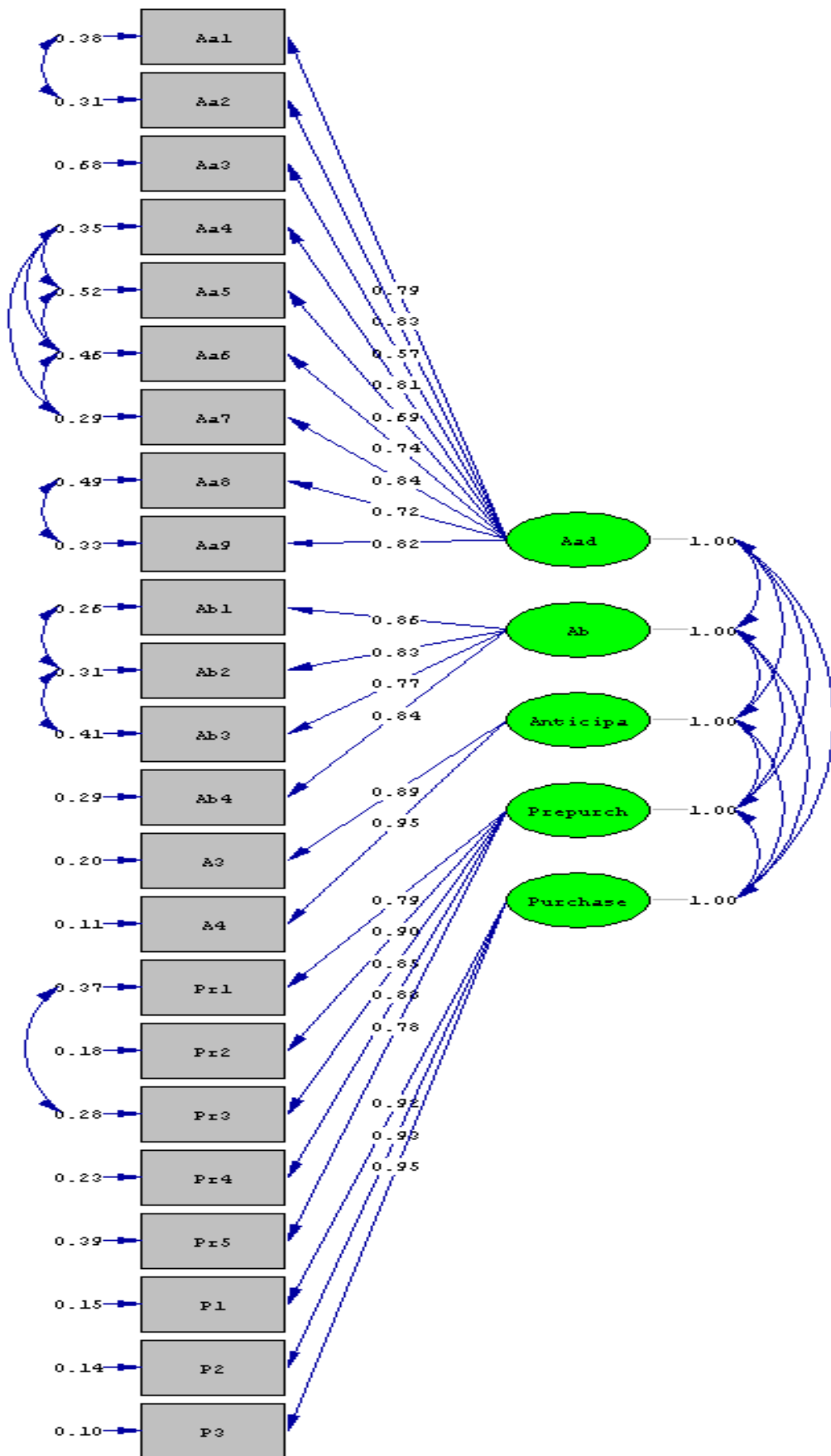
4.3 Analysis of Results

After assuring the reliability and validity of the analyzed data, the study proceeded to conduct correlation analysis, regression analysis, MANOVA, ANOVA, Independent-Sample T Test to test the hypotheses.

4.3.1 Correlation Analysis between Different Construct

Correlation analysis was conducted to recognize the correlation between every two out of five dependent variables. Pearson correlation coefficient was used to tell whether the relationship between two variables is positive or negative. If the p value of Pearson correlation coefficient is less than 0.05, the correlation between two variables is significant.

Table 4.6 Pearson Correlation Coefficient (Five Dependent Variables)

Variable	(Y1)	(Y2)	(Y3)	(Y4)	(Y5)
Attitude toward the advertisement (Y1)	1				
Attitude toward the brand (Y2)	0.618 (0.000**)	1			
Anticipated Satisfaction (Y3)	0.483 (0.000**)	0.640 (0.000**)	1		
Prepurchase Satisfaction (Y4)	0.429 (0.000**)	0.568 (0.000**)	0.711 (0.000**)	1	
Purchase Intention (Y5)	0.572 (0.000**)	0.552 (0.000**)	0.466 (0.000**)	0.596 (0.000**)	1

From Table 4.6, the correlation between every two variable is significantly positive. For this reason, these five dependent variables would be tested by MANOVA, considering the covariance between these five dependent variables.

4.3.2 Regression Analysis

To ensure that prepurchase satisfaction will mediate the relationship between anticipated satisfaction and purchase intention, regression analysis was conducted. From Table 4.7, both

anticipated satisfaction and prepurchase satisfaction have significantly positive influence on purchase intention. It is supported that prepurchase satisfaction will mediate the relationship between anticipated satisfaction and purchase intention. (VIF=1.699 < 10)

Table 4.7 Regression of Purchase Intention

Independent Variables-- Purchase Intention	Adjusted R square	β	t	Significant
(Constant)			-.262	.794
Anticipated Satisfaction	.206	.141	2.072	**.039**
Prepurchase Satisfaction	.347	.493	7.235	**.000**

4.3.3 Chi-square Analysis

Cad and Cb was investigated by open questions that judged by two graduate students who had taken the consumer behavior course. Both Cad and Cb were grouped into three categories (positive, neutral, and negative). To test the relationships between appeal types and cognitions, Chi-square analysis was employed.

For positive product, there is no difference between positive and negative appeals for Cad (χ^2=3.1291<$\chi^2_{(0.95;2)}$=5.99) and Cb(χ^2=0.32<$\chi^2_{(0.95;2)}$=5.99). (Table 4.8 and Table 4.9)

Table 4.8 Cad for positive product

(Expected value)	Judged Advertisement Cognition			
	Positive	Neutral	Negative	Total
Positive Appeal	0 (0.921348)	7 (5.067416)	34 (35.01124)	41
Negative Appeal	2 (1.078652)	4 (5.932584)	42 (40.98876)	48
Total	2	11	76	89

Table 4.9 Cb for positive product

(Expected value)	Judged Brand Cognition			
	Positive	Neutral	Negative	Total
Positive Appeal	1 (1.25)	1 (1.25)	13 (12.5)	15
Negative Appeal	1 (0.75)	1 (0.75)	7 (7.5)	9
Total	2	2	20	24

For negative product, there is no difference between positive and negative appeals for Cad ($\chi^2=1.5833<\chi^2_{(0.95;2)}=5.99$) and Cb($\chi^2=2.5083<\chi^2_{(0.95;2)}=5.99$). (Table 4.10 and Table 4.11)

Table 4.10 Cad for negative product

(Expected value)	Judged Advertisement Cognition			
	Positive	Neutral	Negative	Total
Positive Appeal	7 (7.2027)	8 (6.0946)	26 (27.7027)	41
Negative Appeal	6 (5.7973)	3 (4.9054)	24 (22.2973)	33
Total	13	11	50	74

Table 4.11 Cb for negative product

(Expected value)	Judged Brand Cognition			
	Positive	Neutral	Negative	Total
Positive Appeal	1 (2.1429)	3 (2.8571)	11 (10)	15
Negative Appeal	2 (0.8571)	1 (1.1429)	3 (4)	6
Total	3	4	14	21

4.3.4 MANOVA, ANOVA, and Independent-Sample T Test

First, the interaction between advertising appeal and product type was tested by MANOVA. As the Table 4.12 shows, the interaction between advertising appeals and product types is significant (p<0.1).

Table 4.12 MANOVA

Effect		Value	F	Hypothesis df	Error df	Sig.
Appeal	Pillai's Trace	.019	.898(a)	5.000	232.000	.483
	Wilks' Lambda	.981	.898(a)	5.000	232.000	.483
	Hotelling's Trace	.019	.898(a)	5.000	232.000	.483
	Roy's Largest Roc	.019	.898(a)	5.000	232.000	.483
Type	Pillai's Trace	.181	10.289(a)	5.000	232.000	.000
	Wilks' Lambda	.819	10.289(a)	5.000	232.000	.000
	Hotelling's Trace	.222	10.289(a)	5.000	232.000	.000
	Roy's Largest Roc	.222	10.289(a)	5.000	232.000	.000
Appeal*Type	Pillai's Trace	.044	2.122(a)	5.000	232.000	**.064**
	Wilks' Lambda	.956	2.122(a)	5.000	232.000	**.064**
	Hotelling's Trace	.046	2.122(a)	5.000	232.000	**.064**
	Roy's Largest Roc	.046	2.122(a)	5.000	232.000	**.064**

a   Exact statistic

b   Design: Intercept+Type+Appeal+Type * Appeal

Second, the interaction of advertising appeal and product type on five dependent variables (attitude toward the advertisement, attitude toward the brand, anticipated satisfaction, prepurchase satisfaction, and purchase intention) was tested by ANOVA. As 4.13, the interaction on attitude toward the advertisement, anticipated satisfaction, prepurchase satisfaction is significant (p<0.1).

Table 4.13 ANOVA for Five Dependent Variables

Source	Dependent Variable	df	Mean Square	F	Sig.
Appeal	Aad	1	.417	.389	.533
	Ab	1	.788	.649	.421
	Anticipated satisfaction	1	.704	.457	.500
	Prepurchase satisfaction	1	4.428	3.478	.063
	Purchase intention	1	4.356	2.254	.135
Type	Aad	1	28.781	26.875	.000
	Ab	1	4.334	3.573	.060
	Anticipated satisfaction	1	5.104	3.314	.070
	Prepurchase satisfaction	1	.988	.776	.379
	Purchase intention	1	1.112	.575	.449
Appeal*Type	Aad	1	3.215	3.002	**.084**
	Ab	1	2.450	2.020	.157
	Anticipated satisfaction	1	12.150	7.890	**.005**
	Prepurchase satisfaction	1	10.168	7.986	**.005**
	Purchase intention	1	4.537	2.348	.127

This research aims to know how different appeals work within one product type or one product, not between different product types or different products. Therefore, it is suitable to use Independent-Sample T Test to compare positive and negative appeals for one product type or one product. In the following section, Independent-Sample T Test will be used to compare positive and negative appeals of each dependent variable.

After the interaction on Aad shows significance (p<0.1) (Table 4.13), the means of positive/ negative product with different advertising appeals were shown by Post Hoc Comparison. As Table 4.14, positive product with positive appeal on Aad is significantly (p<0.1) better than negative appeals, partially supporting H2a; for negative product, there is no significant difference between positive and negative appeal, rejecting H2b. In another word, for positive product, positive appeal will elicit better attitude toward the advertisement. Figure 4.2 shows the interaction of advertising appeal and product type on Aad.

Table 4.14 Contrast Results of Aad

Repeated Contrast			Aad
Level 1 vs. Level 2	Contrast Estimate		.315
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		.315
	Std. Error		.189
	Sig.		.097
	95% Confidence Interval for Difference	Lower Bound	-.057
		Upper Bound	.687
Level 3 vs. Level 4	Contrast Estimate		-.148
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		-.148
	Std. Error		.189
	Sig.		.434
	95% Confidence Interval for Difference	Lower Bound	-.520
		Upper Bound	.224

* Level 1 : positive product with positive appeal   Level 2 : positive product with negative appeal

Level 3 : negative product with positive appeal   Level 4 : negative product with negative appeal

Figure 4.2 Attitude toward the advertisement

Independent Sample t test were also run to compare positive and negative appeal of each product. There is no significant difference between positive and negative appeal of each product (Table 4.15).

Table 4.15 Aad of each product

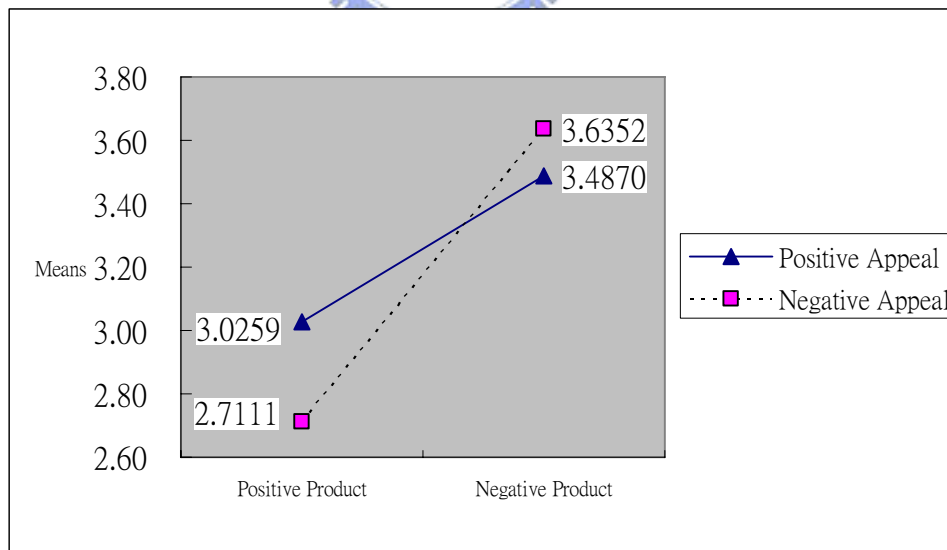| Product	Appeal	Mean	Sig.
Stereo	Positive	3.0222	.266
	Negative	2.7333	
Mp3 Player	Positive	3.0296	.177
	Negative	2.6889	
Athlete's foot	Positive	3.5815	.426
	Negative	3.8074	
Zit	Positive	3.3926	.804
	Negative	3.4630	

Although the interaction on Ab does not show significance (Table 4.13), the means of positive/negative product with different advertising appeals were compared. As Table 4.16, for both positive and negative product, there is no significant difference between positive and negative appeal, rejecting H2a and H2b. Although not significant, positive appeal works better for positive product, and negative appeal works better for negative product. Figure 4.3 shows the interaction of advertising appeal and product type on Ab.

Table 4.16 Contrast Results of Ab

Repeated Contrast			Ab
Level 1 vs. Level 2	Contrast Estimate		.317
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		.317
	Std. Error		.201
	Sig.		.117
	95% Confidence Interval for Difference	Lower Bound	-.079
		Upper Bound	.713
Level 3 vs. Level 4	Contrast Estimate		-.087
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		-.087
	Std. Error		.201
	Sig.		.664
	95% Confidence Interval for Difference	Lower Bound	-.484
		Upper Bound	.309

* Level 1 : positive product with positive appeal   Level 2 : positive product with negative appeal

Level 3 : negative product with positive appeal   Level 4 : negative product with negative appeal

Figure 4.3 Attitude toward the brand
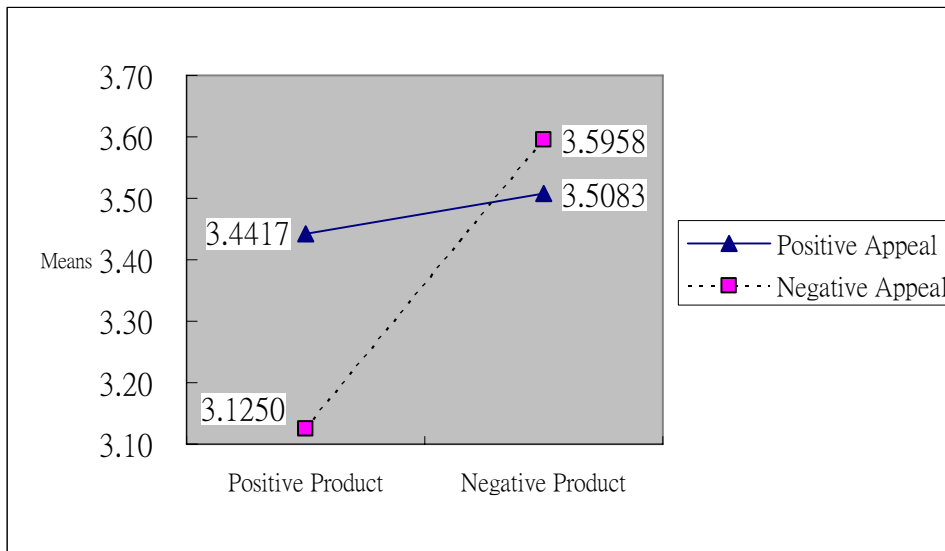
Independent Sample t test were also run to compare positive and negative appeal of each product. There is no significant difference between positive and negative appeal of each product (Table 4.17).

Table 4.17 Ab of each product

Product	Appeal	Mean	Sig.
Stereo	Positive	3.4583	.147
	Negative	3.0333	
Mp3 Player	Positive	3.4250	.395
	Negative	3.2167	
Athlete's foot	Positive	3.5833	.448
	Negative	3.7917	
Zit	Positive	3.4333	.920
	Negative	3.4000	

After the interaction on anticipated satisfaction shows significance (Table 4.13), the means of positive/negative product with different advertising appeals were compared. As Table 4.18, positive product with positive appeal on anticipated satisfaction is significantly ($p<0.05$) better than negative appeals, but for negative product, there is no significant difference between positive and negative appeal. In another word, for positive product,

positive appeal will elicit better anticipated satisfaction. Figure 4.4 shows the interaction of advertising appeal and product type on Anticipated Satisfaction.

Table 4.18 Contrast Results of Anticipated Satisfaction

Repeated Contrast			Anticipated Satisfaction
Level 1 vs. Level 2	Contrast Estimate		.558
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		.558
	Std. Error		.227
	Sig.		**.014**
	95% Confidence Interval for Difference	Lower Bound	.112
		Upper Bound	1.005
Level 3 vs. Level 4	Contrast Estimate		-.342
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		-.342
	Std. Error		.227
	Sig.		.133
	95% Confidence Interval for Difference	Lower Bound	-.788
		Upper Bound	.105

* Level 1 : positive product with positive appeal   Level 2 : positive product with negative appeal
Level 3 : negative product with positive appeal   Level 4 : negative product with negative appeal

Figure 4.4 Anticipated Satisfaction
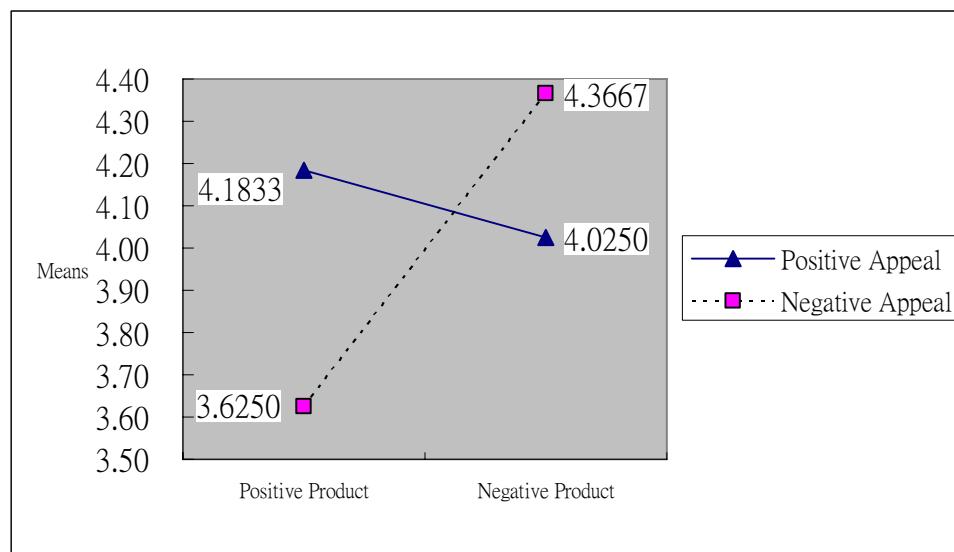
Independent Sample t test were also run to compare positive and negative appeal of each product. For MP3 player, positive appeal will elicit better anticipated satisfaction than negative appeal. In the anticipated satisfaction scale, participants were asked to predict how satisfy they will be for the product on the advertisement. Since most participants are young, maybe it is hard for them to imagine owning a stereo, evaluate the attributes of the stereo, and tell how the stereo could satisfy them. It might easier for them to imagine owning a MP3 player, evaluate the attributes of MP3 player, and tell how MP3 player could satisfy them (Table 4.19).

Table 4.19 Anticipated Satisfaction of each product

Product	Appeal	Mean	Sig.
Stereo	Positive	4.0000	.349
	Negative	3.7000	
Mp3 Player	Positive	4.2833	**.004**
	Negative	3.4917	
Athlete's foot	Positive	4.0250	.369
	Negative	4.2833	
Zit	Positive	3.7167	.298
	Negative	4.0250	

After the interaction on prepurchase satisfaction shows significance (p<0.01) (Table 4.13), the means of positive/negative product with different advertising appeals were compared. As Table 4.20, positive product with positive appeal on prepurchase satisfaction is significantly (p<0.005) better than negative appeals, but for negative product, there is no significant difference between positive and negative appeal. In another word, for positive product, positive appeal will elicit better prepurchase satisfaction. Figure 4.5 shows the interaction of advertising appeal and product type on prepurchase satisfaction.

Table 4.20 Contrast Results of Prepurchase Satisfaction

Repeated Contrast		Prepurchase Satisfaction
Level 1 vs. Level 2	Contrast Estimate	.683
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	.683
	Std. Error	.206
	Sig.	**.001**
	95% Confidence Interval for Difference Lower Bound	.277
	Upper Bound	1.089
Level 3 vs. Level 4	Contrast Estimate	-.140
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	-.140
	Std. Error	.206
	Sig.	.497
	95% Confidence Interval for Difference Lower Bound	-.546
	Upper Bound	.266

* Level 1 : positive product with positive appeal   Level 2 : positive product with negative appeal

Level 3 : negative product with positive appeal   Level 4 : negative product with negative appeal
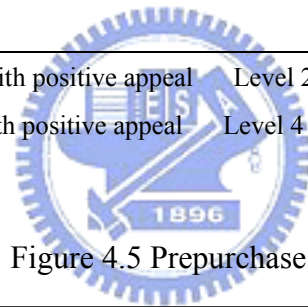
Figure 4.5 Prepurchase Satisfaction
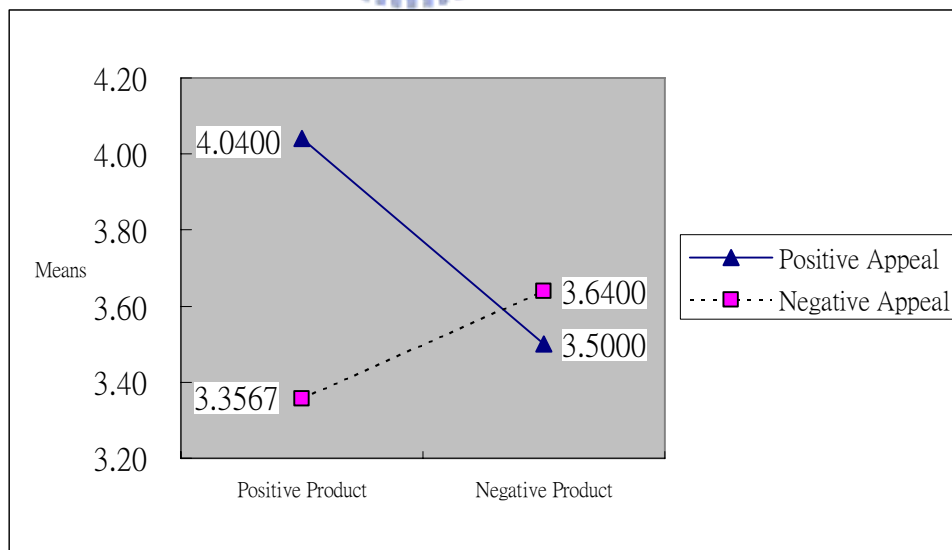
Independent Sample t test were also run to compare positive and negative appeal of each product. For both stereo and MP3 player, positive appeal will elicit significantly ($p<0.05$)

better prepurchase satisfaction than negative appeal. In the prepurchase satisfaction scale, participants were asked to predict how they feel if they had bought the product on the advertisement. It is easy for people to imagine how they feel after buying "positive products" because positive is defined to pleased people (Table 4.21).

Table 4.21 Prepurchase Satisfaction of each product

Product	Appeal	Mean	Sig.
Stereo	Positive	4.0733	.027
	Negative	3.3667	
Mp3 Player	Positive	4.0067	.019
	Negative	3.3467	
Athlete's foot	Positive	3.4133	.216
	Negative	3.7867	
Zit	Positive	3.5867	.746
	Negative	3.4933	

Although the interaction on purchase intention does not show significance (Table 4.13), the means of positive/negative product with different advertising appeals were compared. As Table 4.22, positive product with positive appeal on purchase intention is significantly ($p<0.05$) better than negative appeals, supporting H3a; for negative product, there is no significant difference between positive and negative appeal, rejecting H3b. In another word, for positive product, positive appeal will elicit better purchase intention. Figure 4.6 shows the interaction of advertising appeal and product type on purchase intention.

Table 4.22 Contrast Results of Purchase Intention

Repeated Contrast		Purchase Intention
Level 1 vs. Level 2	Contrast Estimate	.544
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	.544
	Std. Error	.254
	Sig.	.033
	95% Confidence Interval for Difference Lower Bound	.044
	Upper Bound	1.044

Level 3 vs. Level 4	Contrast Estimate		-.006
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		-.006
	Std. Error		.254
	Sig.		.983
	95% Confidence Interval for Difference	Lower Bound	-.506
		Upper Bound	.494

* Level 1 : positive product with positive appeal   Level 2 : positive product with negative appeal

Level 3 : negative product with positive appeal   Level 4 : negative product with negative appeal

Figure 4.6 Purchase Intention
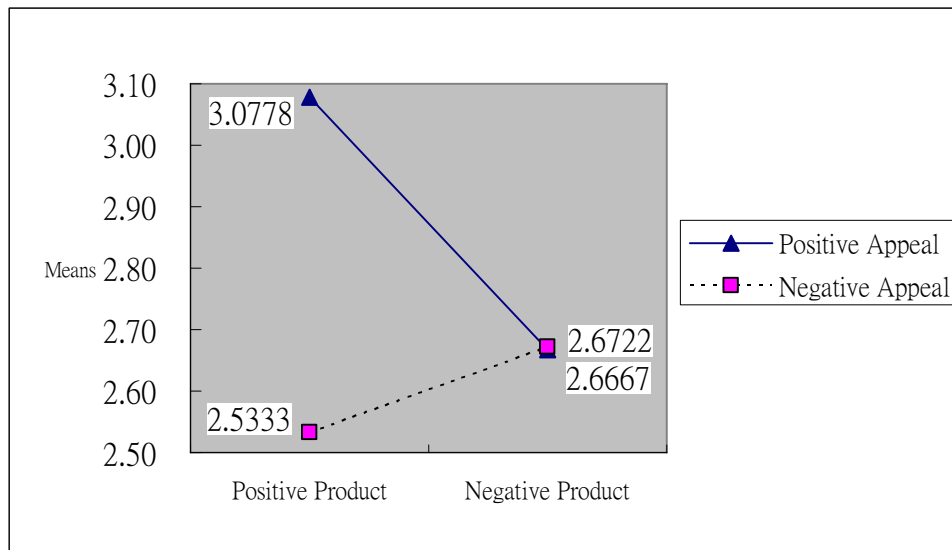
Independent Sample t test were also run to compare positive and negative appeal of each product. For stereo, positive appeal will elicit significantly ($p<0.05$) better purchase intention than negative appeal. However, this result is inconsistent with anticipated and prepurchase satisfaction.

From regression analysis (Table 4.7), it is supported that prepurchase satisfaction will mediate the relationship between anticipated satisfaction and purchase intention. From Table 4.19, positive appeals work better on anticipated satisfaction for MP3 player; from Table 4.21, positive appeals work better on prepurchase satisfaction for both the stereo and the MP3 player. According to the logic of regression, purchase intention should be MP3 that become

significant rather than stereo (Table 4.23). There might be three possible explanations for this inconsistence. First, though MP3 player is not significant, it is on the right direction. It is possible that if the sample size becomes bigger, and then the MP3 player will become significant. Second, most participants are young students. It is possible that the variance of wanting a MP3 player is smaller than the stereo. So the advertisement of MP3 player has less effect than that of stereo, which result in insignificance for MP3 player. Third, the stereo is much more expensive than the MP3 player, which means buying the stereo takes more risk than buying the MP3 player. It is possible that more participants who seeing the negative appeal of stereo take risk-avoidance than those who seeing the negative appeal of MP3 player. Thus, the big variance of the stereo results in significance, but the variance of MP3 does not big enough to become significant.

Also, negative appeals of ointment for athlete's foot is significantly higher than positive appeals ($p<0.1$) (Table 4.23). But, positive appeals of ointment for curing zit are almost significantly higher than negative appeals. There is one possible explanation for this inconsistence. Ointment for curing zit is related to consumer's appearance. It is possible that consumers categorize it in negative products due to the negative feelings about the zits, but categorize it in positive products when they see the advertisement promoting the benefits for curing zits.

Table 4.23 Purchase Intention of each product

Product	Appeal	Mean	Sig.
Stereo	Positive	3.1111	**.031**
	Negative	2.3667	
Mp3 Player	Positive	3.0444	.324
	Negative	2.7000	
Ointment for Athlete's Foot	Positive	2.3333	**.090**
	Negative	2.9556	
Ointment for Curing Zit	Positive	3.0000	.115
	Negative	2.3889	

4.3.5 ANOVA for Demographic Variables

In the demographic information, participants were asked "Do you have a stereo (a MP3 player/ athlete's foot/ zits) now?" and "how likely will it be for you to have a stereo (a MP3 player/ athlete's foot/ zits) in the future?" Answers of these two questions were tested to see if there is interaction between owning the product (having the disease) and advertising appeal.

First, the interaction between owing the positive product and advertising appeal was tested by MANOVA. As the Table 4.24 shows, the interaction is not significant ($p < 0.1$).

Table 4.24 MANOVA (owing the positive product *advertising appeal)

Effect		Value	F	Hypothesis df	Error df	Sig.
Now	Pillai's Trace	.067	1.614(a)	5.000	112.000	.162
	Wilks' Lambda	.933	1.614(a)	5.000	112.000	.162
	Hotelling's Trace	.072	1.614(a)	5.000	112.000	.162
	Roy's Largest Roc	.072	1.614(a)	5.000	112.000	.162
Appeal	Pillai's Trace	.065	1.553(a)	5.000	112.000	.179
	Wilks' Lambda	.935	1.553(a)	5.000	112.000	.179
	Hotelling's Trace	.069	1.553(a)	5.000	112.000	.179
	Roy's Largest Roc	.069	1.553(a)	5.000	112.000	.179
Now*Appeal	Pillai's Trace	.061	1.463(a)	5.000	112.000	.208
	Wilks' Lambda	.939	1.463(a)	5.000	112.000	.208
	Hotelling's Trace	.065	1.463(a)	5.000	112.000	.208
	Roy's Largest Roc	.065	1.463(a)	5.000	112.000	.208

a   Computed using alpha = .05

b   Exact statistic

c   Design: Intercept+Now+Appeal+Now * Appeal

Then, the interaction of owning the positive product/ having the disease and advertising appeals on the five dimensions (attitude toward the advertisement, attitude toward the brand, anticipated satisfaction, prepurchase satisfaction, and purchase intention) was tested by ANOVA. As Table 4.25, the interaction on attitude toward the advertisement, attitude toward the brand, and purchase intention is significant ($p < 0.05$).

Table 4.25 ANOVA for Five Dependent Variables

Source	Dependent Variable	df	Mean Square	F	Sig.
Now	Aad	1	.066	.071	.790
	Ab	1	.009	.009	.927
	Anticipated satisfaction	1	.029	.020	.888
	Prepurchase satisfaction	1	1.948	1.564	.214
	Purchase intention	1	7.540	4.638	.033
Appel	Aad	1	1.749	1.886	.172
	Ab	1	1.993	1.925	.168
	Anticipated satisfaction	1	7.811	5.320	.023
	Prepurchase satisfaction	1	9.163	7.359	.008
	Purchase intention	1	3.271	2.012	.159
Now*Appeal	Aad	1	4.245	4.576	**.035**
	Ab	1	4.315	4.167	**.043**
	Anticipated satisfaction	1	1.905	1.297	.257
	Prepurchase satisfaction	1	3.355	2.694	.103
	Purchase intention	1	9.759	6.003	**.016**

After the interaction on attitude toward the advertisement shows significance ($p<0.05$) (Table 4.25), Independent-Sample T Test were also employed to compare positive and negative appeal of different situations (owning the positive products or not). For people who own the positive products, Aad of positive appeal is significantly ($p<0.05$) higher than Aad of negative appeal (Table 4.26). For people who do not own the positive products, there is no difference between positive and negative appeal. Figure 4.7 shows the interaction between owning the positive product and advertising appeals.

Table 4.26 Contrast Results of Aad(Have*Appeal) (Positive Product)

Repeated Contrast		Aad
Level 1 vs. Level 2	Contrast Estimate	.643
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	.643
	Std. Error	.239
	Sig.	**.008**

	95% Confidence Interval for Difference Lower Bound	.170
	Upper Bound	1.115
Level 3 vs. Level 4	Contrast Estimate	-.140
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	-.140
	Std. Error	.277
	Sig.	.614
	95% Confidence Interval for Difference Lower Bound	-.690
	Upper Bound	.409

* Level 1 : have positive product, advertisement with positive appeal

Level 2 : have positive product, advertisement with negative appeal

Level 3 : not have positive product, advertisement with positive appeal

Level 4 : not have positive product , advertisement with negative appeal

Figure 4.7 Attitude toward the advertisement
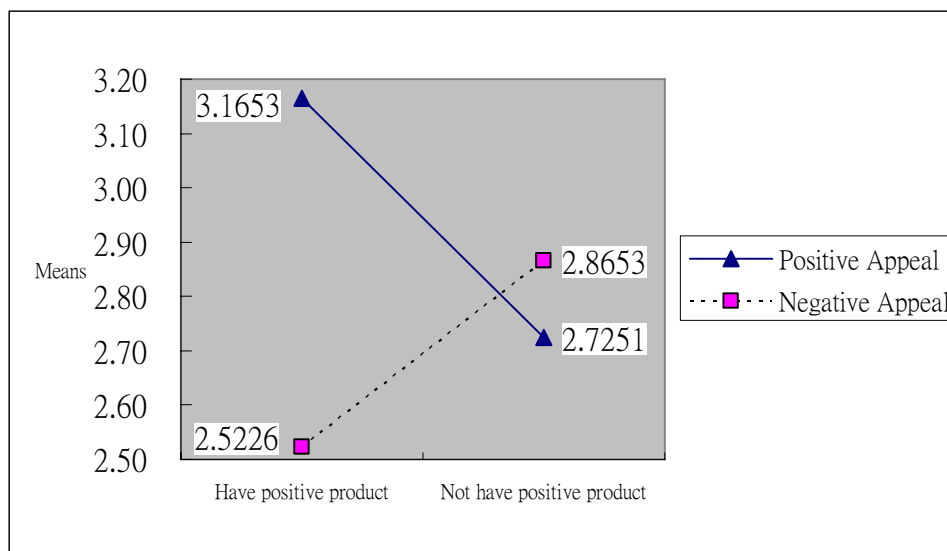
After the interaction on attitude toward the brand shows significance (p<0.05) (Table 4.25), Independent-Sample T Test were also employed to compare positive and negative appeal of different situations (owning the positive products or not). For people who own the positive products, Ab of positive appeal is significantly (p<0.05) higher than Ab of negative appeal (Table 4.27). For people who do not own the positive products, there is no difference between positive and negative appeal. Figure 4.8 shows the interaction between owning the positive product and advertising appeals.

Table 4.27 Contrast Results of Ab (Have*Appeal) (Positive Product)

Repeated Contrast		Ab
Level 1 vs. Level 2	Contrast Estimate	.663
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	.663
	Std. Error	.252
	Sig.	**.010**
	95% Confidence Interval for Difference Lower Bound	.163
	Upper Bound	1.162
Level 3 vs. Level 4	Contrast Estimate	-.126
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	-.126
	Std. Error	.293
	Sig.	.667
	95% Confidence Interval for Difference Lower Bound	-.707
	Upper Bound	.454

* Level 1 : have positive product, advertisement with positive appeal

 Level 2 : have positive product, advertisement with negative appeal

 Level 3 : not have positive product, advertisement with positive appeal

 Level 4 : not have positive product , advertisement with negative appeal

Figure 4.8 Attitude toward the brand

Although the interaction on anticipated satisfaction does not show significance (Table 4.25), Independent-Sample T Test were employed to compare positive and negative appeal of

different situations (owning the positive products or not). For people who own the positive products, anticipated satisfaction of positive appeal is significantly (p<0.005) higher than negative appeal (Table 4.28). For people who do not own the positive products, there is no difference between positive and negative appeal. Figure 4.9 shows the interaction between owning the positive product and advertising appeals.

Table 4.28 Contrast Results of Anticipated Satisfaction(Have*Appeal) (Positive Product)

Repeated Contrast		Anticipated Satisfaction
Level 1 vs. Level 2	Contrast Estimate	.793
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	.793
	Std. Error	.300
	Sig.	**.009**
	95% Confidence Interval for Difference Lower Bound	.198
	Upper Bound	1.388
Level 3 vs. Level 4	Contrast Estimate	.269
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	.269
	Std. Error	.349
	Sig.	.443
	95% Confidence Interval for Difference Lower Bound	-.422
	Upper Bound	.960

* Level 1 : have positive product, advertisement with positive appeal

   Level 2 : have positive product, advertisement with negative appeal

   Level 3 : not have positive product, advertisement with positive appeal

   Level 4 : not have positive product , advertisement with negative appeal
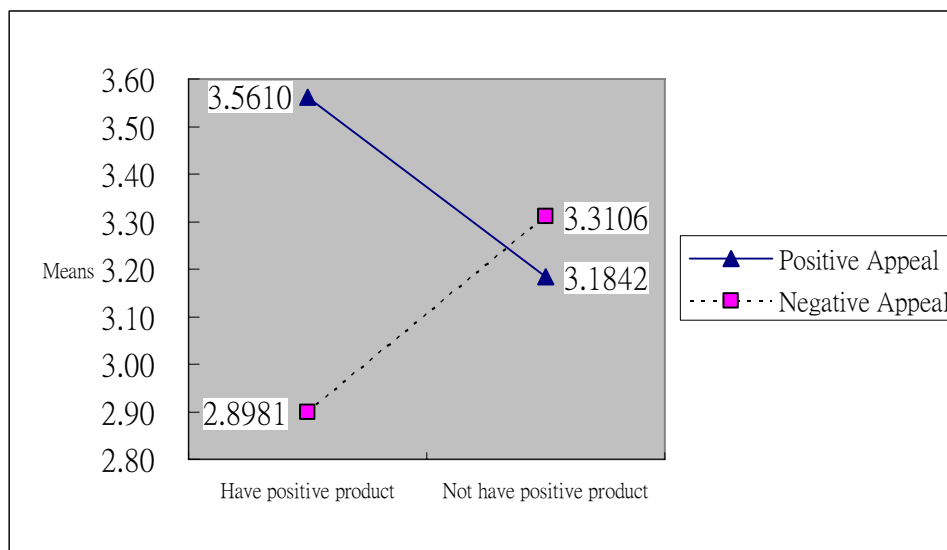
Figure 4.9 Anticipated Satisfaction

Although the interaction on prepurchase satisfaction does not show significance (Table 4.25), Independent-Sample T Test were employed to compare positive and negative appeal of different situations (owning the positive products or not). For people who own the positive products, prepurchase satisfaction of positive appeal is significantly (p<0.005) higher than negative appeal (Table 4.29). For people who do not own the positive products, there is no difference between positive and negative appeal. Figure 4.10 shows the interaction between owning the positive product and advertising appeals.

Table 4.29 Contrast Results of Prepurchase Satisfaction(Have*Appeal)(Positive Product)

Repeated Contrast		Prepurchase Satisfaction
Level 1 vs. Level 2	Contrast Estimate	.923
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	.923
	Std. Error	.277
	Sig.	**.001**
	95% Confidence Interval for Difference Lower Bound	.375
	Upper Bound	1.471
Level 3 vs. Level 4	Contrast Estimate	.227
	Hypothesized Value	0

Difference (Estimate - Hypothesized)	.227
Std. Error	.321
Sig.	.481
95% Confidence Interval for Difference Lower Bound	-.409
Upper Bound	.864

* Level 1 : have positive product, advertisement with positive appeal

  Level 2 : have positive product, advertisement with negative appeal

  Level 3 : not have positive product, advertisement with positive appeal

  Level 4 : not have positive product , advertisement with negative appeal

Figure 4.10 Prepurchase Satisfaction

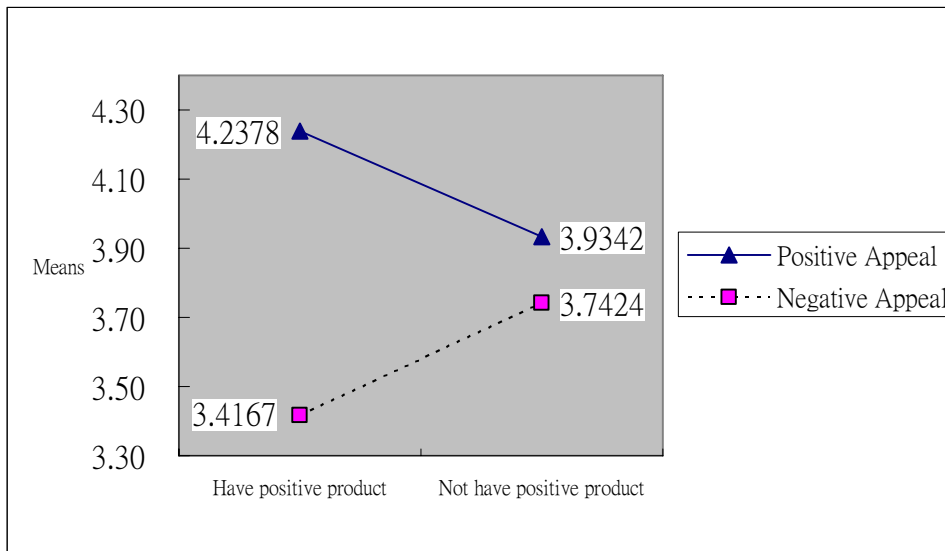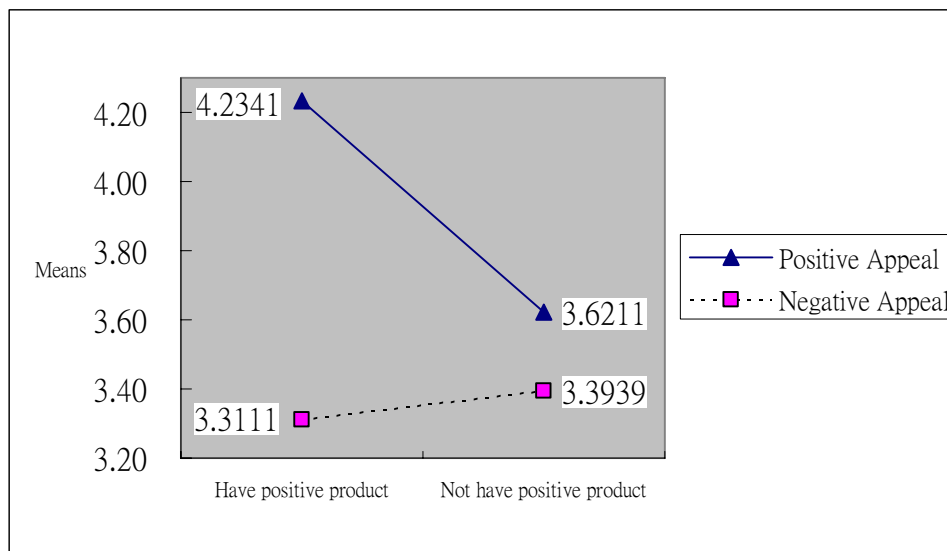After the interaction on purchase intention shows significance ($p<0.05$) (Table 4.25), Independent-Sample T Test were also employed to compare positive and negative appeal of different situations (owning the positive products or not). For people who own the positive products, purchase intention of positive appeal is significantly ($p<0.005$) higher than negative appeal (Table 4.30). For people who do not own the positive products, there is no difference between positive and negative appeal. Figure 4.11 shows the interaction between owning the positive product and advertising appeals.

Table 4.30 Contrast Results of Purchase Intention (Have*Appeal) (Positive Product)

Repeated Contrast		Purchase Intention
Level 1 vs. Level 2	Contrast Estimate	.937
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	.937
	Std. Error	.316
	Sig.	**.004**
	95% Confidence Interval for Difference Lower Bound	.311
	Upper Bound	1.563
Level 3 vs. Level 4	Contrast Estimate	-.250
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	-.250
	Std. Error	.367
	Sig.	.498
	95% Confidence Interval for Difference Lower Bound	-.977
	Upper Bound	.477

* Level 1 : have positive product, advertisement with positive appeal

   Level 2 : have positive product, advertisement with negative appeal

   Level 3 : not have positive product, advertisement with positive appeal

   Level 4 : not have positive product , advertisement with negative appeal

Figure 4.11 Purchase Intention
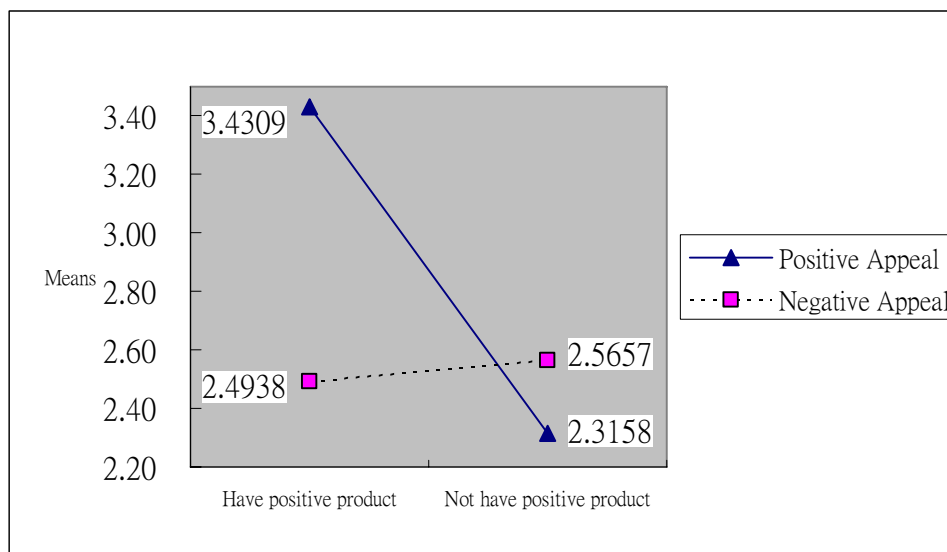
Second, the interaction between having the disease and advertising appeal was tested by

MANOVA and ANOVA. The interaction is not significant (Appendix Ⅷ).

Third, the interaction between "the likelihood for owning the positive product in the future" and advertising appeal was tested by MANOVA and ANOVA. The interaction is not significant (Appendix Ⅸ).

Forth, the interaction between "the likelihood for having the disease in the future" and advertising appeal was tested by MANOVA and ANOVA. The interaction is not significant (Appendix Ⅹ).

4.4 Results of the Tested Hypotheses

Table 4.31 Results of the Hypotheses

Hypotheses	Description of the hypotheses	Results
Hypothesis 1a	For positive products, negative appeals will elicit more Cad (advertisement cognition) and Cb (brand cognition) than positive appeals.	Reject
Hypothesis 1b	For negative products, negative appeals will elicit more Cad (advertisement cognition) and Cb (brand cognition) than positive appeals.	Reject
Hypothesis 2a	For positive products, positive appeals will elicit more Aad (attitude toward the advertisement) and Ab (attitude toward the brand) than negative appeals.	**Partial Support**
Hypothesis 2b	For negative products, positive appeals will elicit more Aad (attitude toward the advertisement) and Ab (attitude toward the brand) than negative appeals.	Reject
Hypothesis 3a	For positive products, positive appeals will elicit more PI (purchase intention) than negative appeals	**Support**
Hypothesis 3b	For negative products, negative appeals will elicit more PI (purchase intention) than positive appeals.	Reject

Chapter 5 Conclusion, Limitation, and Future Research

5.1 Discussion

5.1.1 Summaries of the findings

Table 5.1 Summary of The Findings (advertising appeal* product type)

Dependent Variable	Product Type	Description
Cad	Positive Product	Positive Appeal = Negative appeal.
	Negative Product	Positive Appeal = Negative appeal.
Cb	Positive Product	Positive Appeal = Negative appeal.
	Negative Product	Positive Appeal = Negative appeal.
Aad	Positive Product	**Positive Appeal > Negative appeal.**
	Negative Product	Positive Appeal = Negative appeal.
Ab	Positive Product	Positive Appeal = Negative appeal.
	Negative Product	Positive Appeal = Negative appeal.
Anticipated Satisfaction	Positive Product	**Positive Appeal > Negative appeal.**
	Negative Product	Positive Appeal = Negative appeal.
Preprchase Satisfaction	Positive Product	**Positive Appeal > Negative appeal.**
	Negative Product	Positive Appeal = Negative appeal.
Purchase Intention	Positive Product	**Positive Appeal > Negative appeal.**
	Negative Product	Positive Appeal = Negative appeal.

Table 5.2 Summary of The Findings (advertising appeals* "have it or not")

Time	Product	Have it or not?	Result
Now	Positive Product	Yes	**Significant (Positive appeal > Negative appeal)**
		No	Non-significant
	Negative Product	Yes	
		No	
Future	Positive Product	Yes	
		No	
	Negative Product	Yes	
		No	

5.1.2 Cad and Cb

For Cad and Cb, the results show that there is no significant difference between positive

and negative appeals. Also, most participants express negative thoughts toward the advertisements and brands. There are two possible explanations for the indifferences. First, for Cad, to manipulate the positive and negative appeals, this research does not put any product attributes on the advertisements. Many participants complained about this issue, saying that the advertisement looks unreal. Second, for Cb, to exclude the brand association, this research created four new-brand products. Many participants commented that the brand is new, and they will forget it very quickly with only one exposure to the advertisement.

5.1.3 Aad and Ab

For both Aad and Ab, the results show that positive products with positive appeals are significantly better than with negative appeals, supporting H2a; but there is not significant difference between positive and negative appeals for negative products, rejecting H2b.

In addition, there is an interesting finding. This research found that, for Aad and Ab, means of negative products are higher than means of positive products. There is one possible explanation for this finding. While negative products are usually used to solve consumer's problem, positive products are usually used to please consumers, and to represent consumers' ego. Consumers may tend to require more creativity and attractiveness of positive-product advertisements than negative-product advertisements. So, for the simple advertisements in this research, they gave lower grades for those of positive products than negative products.

5.1.4 Anticipated Satisfaction, Prepurchase Satisfaction, and Purchase Intention

For anticipated satisfaction, prepurchase satisfaction and purchase intention, the results show that positive products with positive appeals are significantly better than with negative appeals, supporting H3a; but there is not significant difference between positive and negative appeals for negative products, rejecting H3b.

Also, this research supported that purchase intention is well explained by anticipated

satisfaction and prepurchase satisfaction.

5.1.5 Negative Appeals Work Better for Negative Products?

For negative products, although the results show that there are no significant differences between positive and negative appeals, a general trend was found. It is found that on five dependent variables (Aad, Ab, anticipated satisfaction, prepurchase satisfaction, and purchase intention), the means of negative appeals all surpass positive appeals. If the sample size is larger, it is possible that this finding may become significant.

5.2 Implications

5.2.1 Different Marketing Strategy

There are two major differences between positive and negative product. First, positive products are usually used for pleasure, but negative products are usually used to solve problems. Second, positive products usually elicit positive feelings, but negative products usually elicit negative feelings. Since the nature of positive and negative product is totally different, different marketing strategies should be applied. (Table 5.3)

Table 5.3 Marketing Strategies for positive and negative products

Marketing Concerns	Type of Purchase	
	Positive Product	Negative Product
Marketing Segmentation	Identify those who perceive product positively	Identify those who perceive product negatively
Time Frame Stressed	Short term benefits	Long term benefits
Distribution	Less intensive	More intensive
Promotional Appeal	Stress primary attribute	Stress secondary attributes
Pricing	More elastic demand pleasurable shopping	Less elastic demand Avoids shopping
Sales Force	Less utilization	More utilization

Source: (Fram and Widrick 1981)

5.2.2 Product Life Cycle

This research has found that for people who already own the positive products, there is a significant difference between positive and negative appeal, but for people who do not own the positive products, there is no significant difference between positive and negative appeal. In other words, for people who already own the positive product, positive appeals result in better attitude toward the advertisement, attitude toward the brand, anticipated satisfaction, prepurchase satisfaction, and purchase intention than negative appeal. This result could be applied to the Product Life Cycle Theory (Figure 5.1). If the market is in the mature stage and most people have it, then positive appeal will be significantly better than negative appeal, and marketer should only use positive appeals to promote their positive products; if the market is in the introduction stage and few people have it, then there is no significant difference between positive and negative appeal, and marketer could use both positive and negative appeals to reach different consumer segmentations.

Figure 5.1 Product Life Cycle
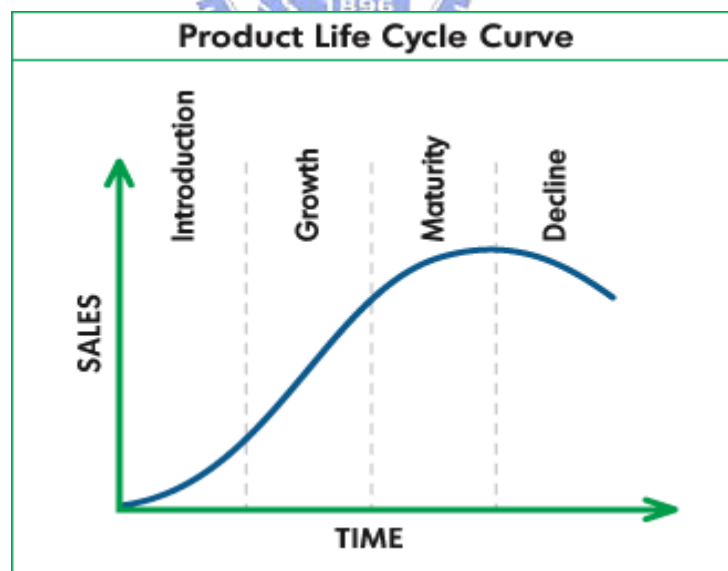
Source: Jakki Nohr, Sanjit Sengupta et al. (2005)

5.3 Limitations and Directions for Future Research

5.3.1 Limitations

First, this research used student sample because of the time constrain. It is not sure this research result could be generalized to the publics.

Second, due to the time constrain, the sample size of this research is not big enough. If the sample size could be larger, deeper investigation could be conducted.

Third, this research developed two simple questionnaires to measure the positive and negative product because there is not any scale for positive and negative products. These two questionnaires were developed respectively and relatively by the previous definition. Although the reliability is qualified (Cronbach's Alpha > 0.7), the validity is not examined. Precise questionnaires should be developed.

Forth, the reliability and product strength of positive products are much higher than those of negative products. It needs more discussion about the mechanism that makes people perceive differently about the positive and negative products.

Fifth, there are plenty of products that can not be classified as positive or negative. More categories need to be created between positive and negative products.

Sixth, for positive and negative appeal, this research adopted and modified the questionnaires from Liang (Liang 1992). The reliability and appeal strength of positive appeals are much higher than those of negative appeals. It needs more discussion about the mechanism that makes people perceive differently about the positive and negative appeals.

5.3.2 Directions for Future Research

First, with one exposure to the advertisement, cognition, attitude, and purchasing intention are formed quite temporarily. To measure the long-term perception and behavior, future research could design a series of advertisements with all positive appeals, all negative appeals, or both of them.

Second, to examine the compatibility between product categories and advertising appeals, this research has designed advertisements with only one-side appeal to eliminate other

disturbance variables. But in the real world, advertisements are usually combined with different kinds of appeals. Future research could discuss the interrelationship between different appeals on different product categories.

Third, this research has tried to explain the reason why purchase intention is well explained by anticipated satisfaction and prepurchase satisfaction. But the perception and decision process of consumers are very complex. Further qualitative research may be needed to figure out whether these explanations are right or not.

Forth, through this research, it is found that there is a diversity answer about what belongs to negative product, and also people has less ability to recognize negative appeals. It seems that people have negative feelings—shy, embarrassed, and fear, etc.— about "negative things," so they would try to ignore them or correct them into "positive things." Further qualitative research could be conducted to understand how to overcome consumer's negative feelings toward negative products.
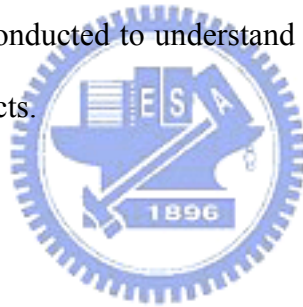
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Appendix Ⅰ

Manipulation check 1: Product strength of positive product

After seeing the product, please imagine the feeling while you are purchasing and using it in your daily life. And answer the following questions, 1 represents strongly disagree, and 7 represents strongly agree.

The Level of Degree

	Strongly Disagree			Neutral			Strongly Agree
1. I feel delight when I buy this product	1	2	3	4	5	6	7
2. I feel pleasant when I use this product	1	2	3	4	5	6	7
3. I expect the outcome after using this product	1	2	3	4	5	6	7
4. I use this product to to make myself happy	1	2	3	4	5	6	7
5. I use this product to make me feel better	1	2	3	4	5	6	7
6. I use this product because I"want" not I"have to"	1	2	3	4	5	6	7
7. I do not mind others know that I use this product	1	2	3	4	5	6	7
8. I do not mind shopping this product with others	1	2	3	4	5	6	7

Demographic Information

1.Gender：□Male　　□Female

2.Status：□Married　　□Single

3.Age：□Below 20　　□21-25　　□26-30　　□31-35
　　　　　□36-40　　□41-45　　□46-50　　□Over50

4.Occupation：□Agricultural　　□Industrial　　□Service　　□Teacher　　□Official
　　　　　　　□Business　　□Soldier or Police　　□Students　　□Others

5.Education：□Junior high school　　□Senior high school　　□College
　　　　　　□Master and plus

操弄檢定—正面產品

看完這個產品之後，請想像平常在購買以及使用這個產品時的感覺，並回答下列問題，
1 代表*非常不同意*，7 代表*非常同意*。

	非常不同意	不同意	有點不同意	普通	有點同意	同意	非常同意
1.當我購買這個產品時感到很快樂	1	2	3	4	5	6	7
2.我期待使用這個產品後的結果	1	2	3	4	5	6	7
3.當我使用這個產品時心情是愉悅的	1	2	3	4	5	6	7
4.我使用這個產品來讓自己心情好	1	2	3	4	5	6	7
5.我不介意別人知道我使用這個產品	1	2	3	4	5	6	7
6.我使用這個產品來讓自己越來越好	1	2	3	4	5	6	7
7.我不介意和別人一起去買這個產品	1	2	3	4	5	6	7
8.我使用這個產品是因爲"想要"而不是"必須"	1	2	3	4	5	6	7

基本資料

1.性別：□男性　　□女性

2.婚姻：□已婚　　□未婚

3.年齡：□20 歲以下　　□21-25 歲　　□26-30 歲　　□31-35 歲
　　　　□36-40 歲　　□41-45 歲　　□46-50 歲　　□50 歲以上

4.職業：□農業　　□工業　　□服務業　　□教師　　□公務員　　□商業
　　　　□軍警　　□學生　　□其他

5.教育程度：□國中以下　　□高中　　□大學　　□研究所以上

Appendix Ⅱ

Manipulation check 1: Product strength of negative product

After seeing the product, please imagine the feeling while you are purchasing and using it in your daily life. And answer the following questions, 1 represents strongly disagree, and 7 represents strongly agree.

The Level of Degree

	Strongly Disagree			Neutral		Strongly Agree	
1. I do not feel delight when I buy this product	1	2	3	4	5	6	7
2. I do not feel pleasant when I use this product	1	2	3	4	5	6	7
3. I use this product to avoid unwanted consequence	1	2	3	4	5	6	7
4. I use this product to avoid troubles	1	2	3	4	5	6	7
5. I use this product to solve problems	1	2	3	4	5	6	7
6. I use this product because I"have to" not I"want"	1	2	3	4	5	6	7
7. I do not like others know that I use this product	1	2	3	4	5	6	7
8. I do not like shopping this product with others	1	2	3	4	5	6	7

Demographic Information

1.Gender：□Male □Female

2.Status：□Married □Single

3.Age：□Below 20 □21-25 □26-30 □31-35

　　　　□36-40 □41-45 □46-50 □Over50

4.Occupation：□Agricultural □Industrial □Service □Teacher □Official

　　　　　　□Business □Soldier or Police □Students □Others

5.Education：□Junior high school □Senior high school □College

　　　　　　□Master and plus

操弄檢定—負面產品

看完以上的產品之後，請想像平常在購買以及使用這個產品時的感覺，並回答下列問題，1 代表*非常不同意*，7 代表*非常同意*。

	非常不同意	不同意	有點不同意	普通	有點同意	同意	非常同意
1.當我購買這個產品時不會感到快樂	1	2	3	4	5	6	7
2.我使用這個產品來避免不想要的後果	1	2	3	4	5	6	7
3.我使用這個產品時不會感到高興	1	2	3	4	5	6	7
4.我使用這個產品來避免麻煩	1	2	3	4	5	6	7
5.我不喜歡別人知道我使用這個產品	1	2	3	4	5	6	7
6.我使用這個產品來解決問題	1	2	3	4	5	6	7
7.我不喜歡和別人一起去買這個產品	1	2	3	4	5	6	7
8.我使用這個產品是因為"必須"而不是"想要"	1	2	3	4	5	6	7

基本資料

1.性別：□男性　　□女性

2.婚姻：□已婚　　□未婚

3.年齡：□20 歲以下　　□21-25 歲　　□26-30 歲　　□31-35 歲
　　　　□36-40 歲　　□41-45 歲　　□46-50 歲　　□50 歲以上

4.職業：□農業　　□工業　　□服務業　　□教師　　□公務員　　□商業
　　　　□軍警　　□學生　　□其他

5.教育程度：□國中以下　　□高中　　□大學　　□研究所以上

請在以下的問題勾選適當的描述，**1** 代表<u>非常同意左邊的描述</u>，**4** 代表<u>沒有意見</u>，**7** 代表<u>非常同意右邊的描述</u>。

請注意，答案有左右兩個方向，請看清楚兩邊的不同，謝謝您的耐心！

我覺得廣告<u>文字</u>強調"品質低劣的音響會招致的損失"	1	2	3	4	5	6	7	我覺得廣告<u>文字</u>強調"品質良好的音響所能帶給我的好處"
我覺得廣告<u>圖片</u>強調"品質低劣的音響會招致的損失"	1	2	3	4	5	6	7	我覺得廣告<u>圖片</u>強調"品質良好的音響所能帶給我的好處"
由這個廣告的<u>文字</u>，我可以得知 "品質低劣的音響會招致的損失"	1	2	3	4	5	6	7	由這個廣告的<u>文字</u>，我可以得知"品質良好的音響所能帶給我的好處"
由這個廣告的<u>圖片</u>，我可以得知 "品質低劣的音響會招致的損失"	1	2	3	4	5	6	7	由這個廣告的<u>圖片</u>，我可以得知"品質良好的音響所能帶給我的好處"

基本資料

1.性別：□男性　　□女性

2.婚姻：□已婚　　□未婚

3.年齡：□20 歲以下　　□21-25 歲　　□26-30 歲　　□31-35 歲

　　　　□36-40 歲　　□41-45 歲　　□46-50 歲　　□50 歲以上

4.職業：□農業　　□工業　　□服務業　　□教師　　□公務員　　□商業

　　　　□軍警　　□學生　　□其他

5.教育程度：□國中以下　　□高中　　□大學　　□研究所以上

請在以下的問題勾選適當的描述，1 代表非常同意左邊的描述，4 代表沒有意見，7 代表非常同意右邊的描述。

請注意，答案有左右兩個方向，請看清楚兩邊的不同，謝謝您的耐心！

我覺得廣告文字強調"音質不佳的 mp3 隨身聽會招致的損失"	1	2	3	4	5	6	7	我覺得廣告文字強調"音質良好的 mp3 隨身聽所能帶給我的好處"
我覺得廣告圖片強調"音質不佳的 mp3 隨身聽會招致的損失"	1	2	3	4	5	6	7	我覺得廣告圖片強調"音質良好的 mp3 隨身聽所能帶給我的好處"
由這個廣告的文字，我可以得知"音質不佳的 mp3 隨身聽會招致的損失"	1	2	3	4	5	6	7	由這個廣告的文字，我可以得知"音質良好的 mp3 隨身聽所能帶給我的好處"
由這個廣告的圖片，我可以得知"音質不佳的 mp3 隨身聽會招致的損失"	1	2	3	4	5	6	7	由這個廣告的圖片，我可以得知"音質良好的 mp3 隨身聽所能帶給我的好處"

基本資料

1.性別：□男性　　□女性

2.婚姻：□已婚　　□未婚

3.年齡：□20 歲以下　　□21-25 歲　　□26-30 歲　　□31-35 歲
　　　　□36-40 歲　　□41-45 歲　　□46-50 歲　　□50 歲以上

4.職業：□農業　　□工業　　□服務業　　□教師　　□公務員　　□商業
　　　　□軍警　　□學生　　□其他

5.教育程度：□國中以下　　□高中　　□大學　　□研究所以上

請在以下的問題勾選適當的描述，**1** 代表<u>非常同意左邊的描述</u>，**4** 代表<u>沒有意見</u>，**7** 代表<u>非常同意右邊的描述</u>。

請注意，答案有左右兩個方向，請看清楚兩邊的不同，謝謝您的耐心！

我覺得廣告<u>文字</u>強調"不治療香港腳會導致的後果"	1	2	3	4	5	6	7	我覺得廣告<u>文字</u>強調"治療香港腳所能帶給我的好處"
我覺得廣告<u>圖片</u>強調"不治療香港腳會導致的後果"	1	2	3	4	5	6	7	我覺得廣告<u>圖片</u>強調"治療香港腳所能帶給我的好處"
由這個廣告的<u>文字</u>，我可以得知"不治療香港腳會導致的後果"	1	2	3	4	5	6	7	由這個廣告的<u>文字</u>，我可以得知"治療香港腳所能帶給我的好處"
由這個廣告的<u>圖片</u>，我可以得知"不治療香港腳會導致的後果"	1	2	3	4	5	6	7	由這個廣告的<u>圖片</u>，我可以得知"治療香港腳所能帶給我的好處"

基本資料

1.性別：□男性　　□女性

2.婚姻：□已婚　　□未婚

3.年齡：□20 歲以下　　□21-25 歲　　□26-30 歲　　□31-35 歲
　　　　□36-40 歲　　□41-45 歲　　□46-50 歲　　□50 歲以上

4.職業：□農業　　□工業　　□服務業　　□教師　　□公務員　　□商業
　　　　□軍警　　□學生　　□其他

5.教育程度：□國中以下　　□高中　　□大學　　□研究所以上

請在以下的問題勾選適當的描述，1 代表非常同意左邊的描述，4 代表沒有意見，7 代表非常同意右邊的描述。

請注意，答案有左右兩個方向，請看清楚兩邊的不同，謝謝您的耐心！

我覺得廣告文字強調"不治療青春痘會導致的後果"	1	2	3	4	5	6	7	我覺得廣告文字強調 "治療青春痘所能帶給我的好處"
我覺得廣告圖片強調"不治療青春痘會導致的後果"	1	2	3	4	5	6	7	我覺得廣告圖片強調 "治療青春痘所能帶給我的好處"
由這個廣告的文字，我可以得知"不治療青春痘會導致的後果"	1	2	3	4	5	6	7	由這個廣告的文字，我可以得知 "治療青春痘所能帶給我的好處"
由這個廣告的圖片，我可以得知"不治療青春痘會導致的後果"	1	2	3	4	5	6	7	由這個廣告的圖片，我可以得知 "治療青春痘所能帶給我的好處"

基本資料

1.性別：□男性　　□女性

2.婚姻：□已婚　　□未婚

3.年齡：□20 歲以下　　□21-25 歲　　□26-30 歲　　□31-35 歲
　　　　□36-40 歲　　□41-45 歲　□46-50 歲　　□50 歲以上

4.職業：□農業　　□工業　　□服務業　　□教師　　□公務員　　□商業
　　　　□軍警　　□學生　　□其他

5.教育程度：□國中以下　　□高中　　□大學　　□研究所以上

Appendix Ⅳ
Official Survey

After seeing the advertisement, my purchase intention for this product is?

Where 1= "very low" and 7= "very high."

		very low						Very high
1	The likelihood of purchasing this product is	1	2	3	4	5	6	7
2	The probability that I would consider buying the product is	1	2	3	4	5	6	7
3	My willingness to buy the product is	1	2	3	4	5	6	7

After seeing the advertisement, indicate the extent to which each of the following adjectives describes how you feel about your planned purchase where 1="strongly disagree", and 7="strongly agree"

		Strongly disagree						Strongly agree
1	Happy	1	2	3	4	5	6	7
2	Contented	1	2	3	4	5	6	7
3	Pleased	1	2	3	4	5	6	7
4	Satisfied	1	2	3	4	5	6	7
5	Excite	1	2	3	4	5	6	7

After seeing the advertisement, please indicate the extent to which you anticipate being satisfied after purchasing the product in the advertisement where 1="strongly disagree", and 7="strongly agree"

		Strongly disagree						Strongly agree
1	think I will be happy	1	2	3	4	5	6	7
2	think I will be pleased	1	2	3	4	5	6	7
3	think the product work out as well as I thought it would	1	2	3	4	5	6	7
4	think I will be very satisfied	1	2	3	4	5	6	7

After seeing the advertisement, my attitude toward this brand is?

Where 1="strongly disagree", and 7="strongly agree"

		Strongly disagree						Strongly agree
1	I feel this brand good	1	2	3	4	5	6	7
2	I feel this brand likeable	1	2	3	4	5	6	7
3	I feel this brand desirable	1	2	3	4	5	6	7
4	I feel this brand useful	1	2	3	4	5	6	7

After seeing the advertisement, my attitude toward this brand is?

1=   Where 1="strongly disagree", and 7="strongly agree"

		Strongly disagree						Strongly agree
1	I like the ad very much	1	2	3	4	5	6	7
2	I feel this ad very appealing	1	2	3	4	5	6	7
3	I feel this ad very readable	1	2	3	4	5	6	7
4	I feel this ad very outstanding	1	2	3	4	5	6	7
5	I feel this ad very innovative	1	2	3	4	5	6	7
6	I feel this ad very impressive	1	2	3	4	5	6	7
7	I feel this ad very convincing	1	2	3	4	5	6	7
8	I feel this ad very important	1	2	3	4	5	6	7
9	I feel this ad very helpful	1	2	3	4	5	6	7

In the space bellow, please write down the thoughts that went through your mind while looking at the advertisement. Please list the thoughts that occurred to you about the product, the brand, and your reaction to what was being said about the product by the advertiser. Also, feel free to mention any other thoughts that you had while viewing the advertisement.

_____
_____
_____
_____

Demographic Information

1.Gender：□Male　　□Female

2.Marriage：□Married　　□Single

3.City：□Taipei　　□Hsinchu　　□Taichung　　□Others

4.Age：□Below 20　　□21-30　　□31-40　　□41-50　　□Above 51

5.Occupation：□Student　　□Technology　　□Industry or Business　　□Service　　□Government

　　　　　　　□Retired　　□Housekeeping　　□Others_____

6.Education：□High school　　□University/college　　□Graduate　　□Ph D.

7.Income：

　　　　□Below NT10,000　　　　□NT10,001-20,000　　　□NT20,001-30,000

　　　　□NT30,001-40,000　　　□NT40,001-50,000　　　□NT50,001-60,000

　　　　□NT60,001-70,000　　　□Above NT70,000

8.Do you have stereo (Mp3 player / athlete's foot/ zits) now? □Yes　　□No

9.The possibility for you to have stereo (Mp3 player / athlete's foot/ zits) is?

　　　　□Impossible　　□Might not happen　　□Either way is possible　　□Might happen

　　　　□Very Possible　　□Not sure

您好！ 非常感謝您抽空填寫本問卷，這是一份研究消費行為的學術性問卷。問卷中的題目並無標準答案，請您根據下列的提示依您個人的感覺填答您認為最適合的描述。本問卷僅供學術研究使用，對於您所提供的資料我們將絕對保密且不向外披露。您的寶貴意見將對本研究有極大的貢獻。衷心感謝您的合作與支持！

敬祝

　　萬事如意

<div align="right">

國立交通大學管理科學研究所
指導教授：張家齊　　博士
研 究 生：許毓貞　　敬上

</div>

看完廣告後，我對此產品的**購買意願**是?

請在以下的問題勾選適當的描述，1代表<u>很低</u>，4代表<u>沒有意見</u>，7代表<u>很高</u>。

		很低						很高
1	購買此產品的可能性是	1	2	3	4	5	6	7
2	我會考慮購買此產品的可能性是	1	2	3	4	5	6	7
3	我對此產品的購買意願是	1	2	3	4	5	6	7

看完廣告後，請指出下列的形容詞，能夠描述當你買了這個產品之後，感覺的程度。

請在以下的問題勾選適當的描述，1代表<u>非常不同意</u>，4代表<u>普通</u>，7代表<u>非常同意</u>。

		非常 不同意	不同意	有點 不同意	普通	有點同意	同意	非常同意
1	開心的	1	2	3	4	5	6	7
2	滿足的	1	2	3	4	5	6	7
3	高興的	1	2	3	4	5	6	7
4	滿意的	1	2	3	4	5	6	7
5	興奮的	1	2	3	4	5	6	7

<div align="center">

<背面還有題目!請翻至背面作答!>

</div>

看完廣告後，請指出當你買了這個產品之後，預期的滿意程度。

請在以下的問題勾選適當的描述，1 代表非常不同意，4 代表普通，7 代表非常同意。

		非常不同意	不同意	有點不同意	普通	有點同意	同意	非常同意
1	認為我將會感到高興	1	2	3	4	5	6	7
2	認為我將會感到愉悅	1	2	3	4	5	6	7
3	認為產品能達到預期的效果	1	2	3	4	5	6	7
4	認為我將會感到滿意	1	2	3	4	5	6	7

看完廣告後，我對此**品牌**的感覺是?

請在以下的問題勾選適當的描述，1 代表非常不同意，4 代表普通，7 代表非常同意。

		非常不同意	不同意	有點不同意	普通	有點同意	同意	非常同意
1	我覺得這個品牌是好的	1	2	3	4	5	6	7
2	我喜歡這個品牌	1	2	3	4	5	6	7
3	我渴望這個品牌	1	2	3	4	5	6	7
4	我覺得這個品牌是有用的	1	2	3	4	5	6	7

看完廣告後，我對此**廣告**的感覺是?

請在以下的問題勾選適當的描述，1 代表非常不同意，4 代表普通，7 代表非常同意。

		非常不同意	不同意	有點不同意	普通	有點同意	同意	非常同意
1	我很喜歡這個廣告了	1	2	3	4	5	6	7
2	我覺得這個廣告很吸引人	1	2	3	4	5	6	7
3	我覺得這個廣告很容易閱讀	1	2	3	4	5	6	7
4	我覺得這個廣告很傑出	1	2	3	4	5	6	7
5	我覺得這個廣告很有創意	1	2	3	4	5	6	7
6	我覺得這個廣告很印象深刻	1	2	3	4	5	6	7
7	我覺得這個廣告很有說服力	1	2	3	4	5	6	7
8	我覺得這個廣告很重要	1	2	3	4	5	6	7
9	我覺得這個廣告很有用	1	2	3	4	5	6	7

<背面還有題目!請翻至背面作答!>

在以下的空白處，請寫下任何關於這個廣告的想法，內容可以包括廣告的製作、廣告的產品、產品的品牌，或是對於廣告訴求的感想。歡迎寫下任何關於這個廣告的想法。

_____

_____

_____

_____

基本資料

1.性別：□男性　　□女性

2.婚姻：□已婚　　□未婚

3.目前居住城市：□台北縣市　　□新竹縣市　　□台中縣市

4.年齡：□20 歲以下　　□21-30 歲　　□31-40 歲　　□41-50 歲　　□51 歲以上

5.職業：□全職學生　　□高科技業　　□工商業　　□服務業　　□軍公教　　□退休
　　　　□家管　　□其他_____

6.學歷：□高中職　　□大學/專科　　□碩士　　□博士

7.月薪（若您是學生請選擇每月可支配所得）：
　　　　□10,000 元以下　　　　□10,001-20,000 元　　□20,001-30,000 元
　　　　□30,001-40,000 元　　□40,001-50,000 元　　□50,001-60,000 元
　　　　□60,001-70,000 元　　□70,000 以上

8.現在是否有使用音響(MP3/香港腳藥膏/除痘膏)? □有　　□沒有

9.未來有可能使用音響(MP3/香港腳藥膏/除痘膏)的機率是?□完全不可能　　□不可能　　□普通
□可能　　□非常可能　　□不知道

<本問卷到此結束，非常感謝您的合作！>

Appendix V
Advertisements
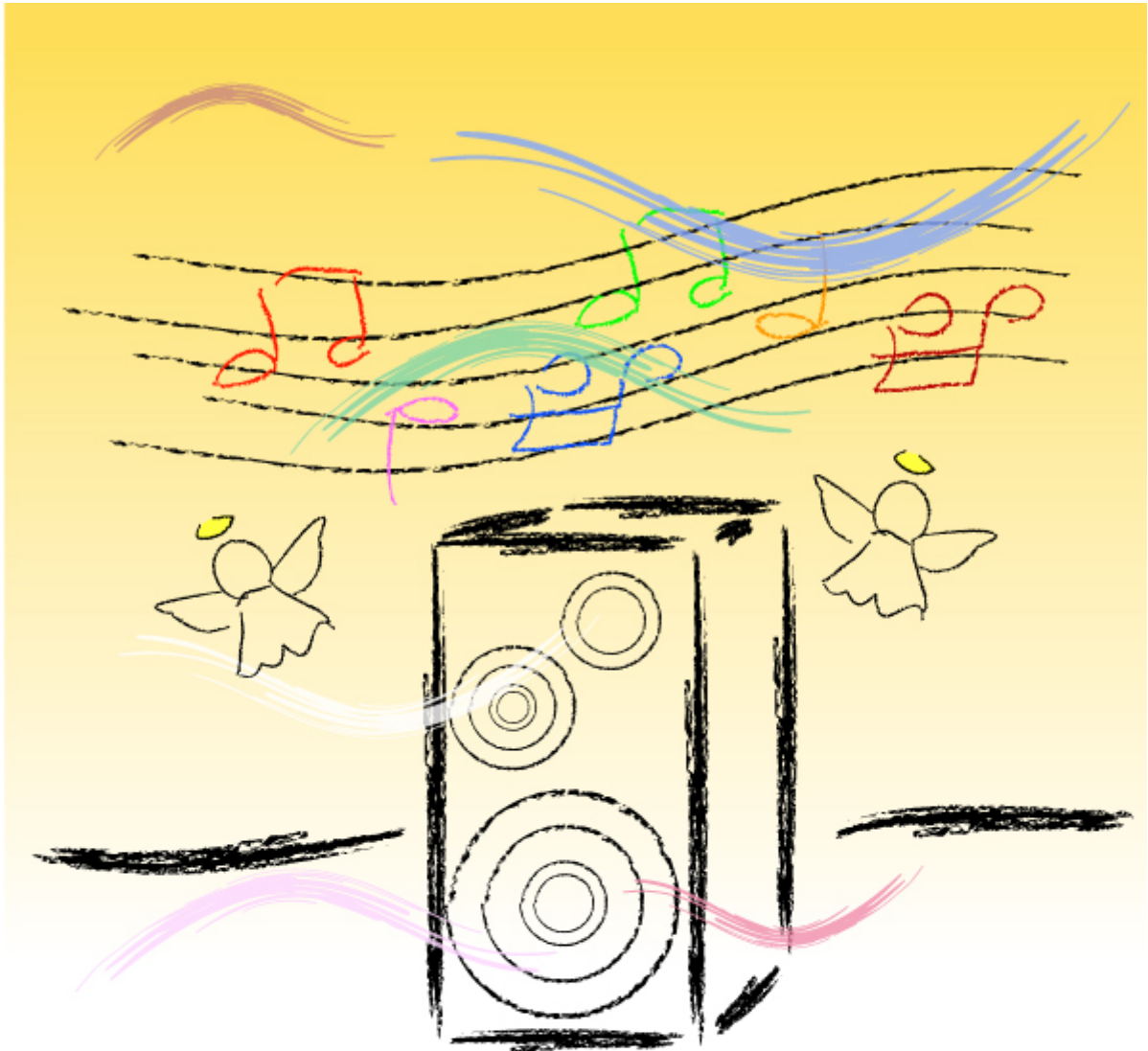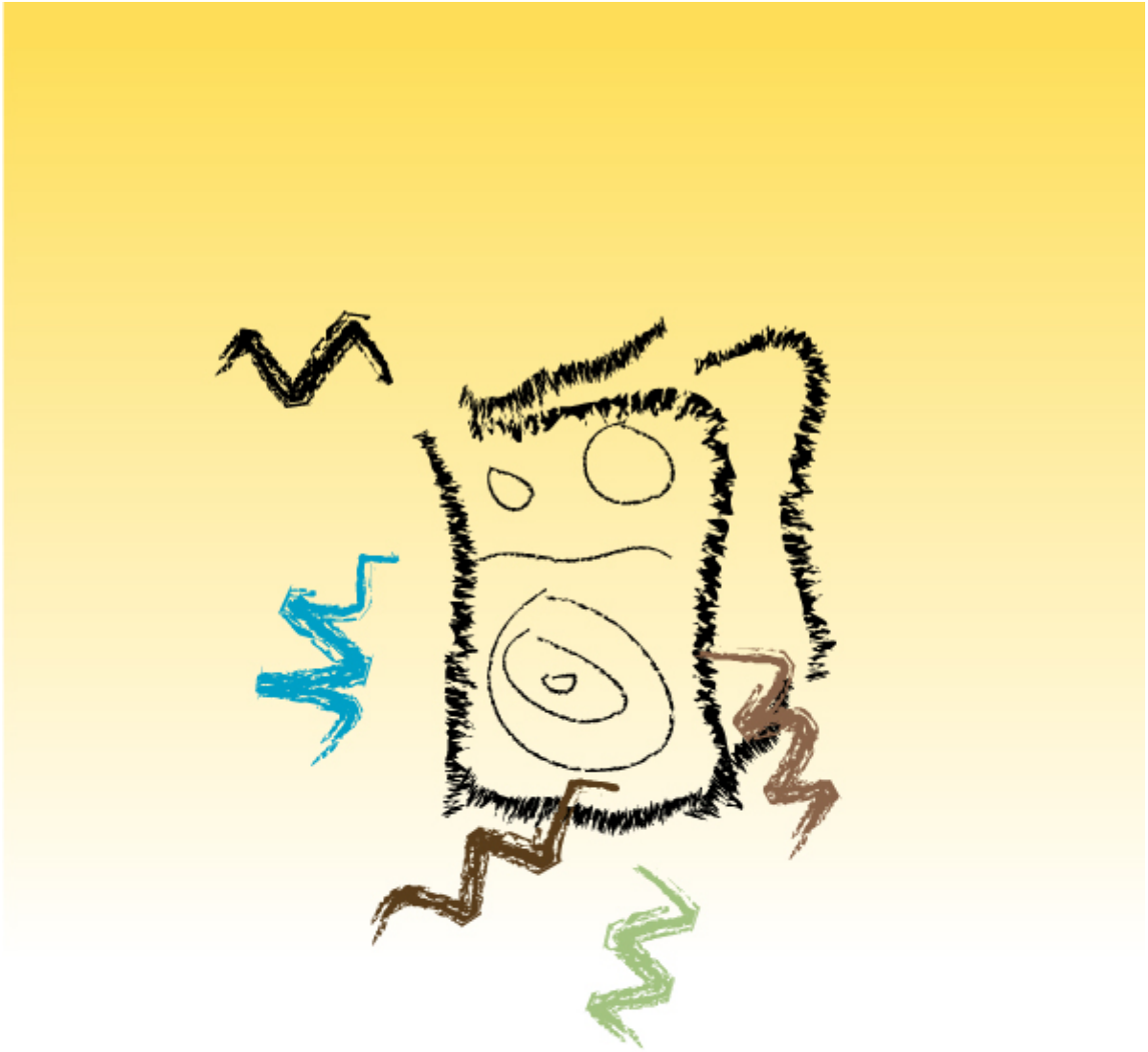
品質低劣的音響將增加CD和機體的磨損，進而提高機體故障率，增加修理或重購的費用，降低你的生活品質。韋瓦第音響，你不可以沒有它！

韋瓦第音響
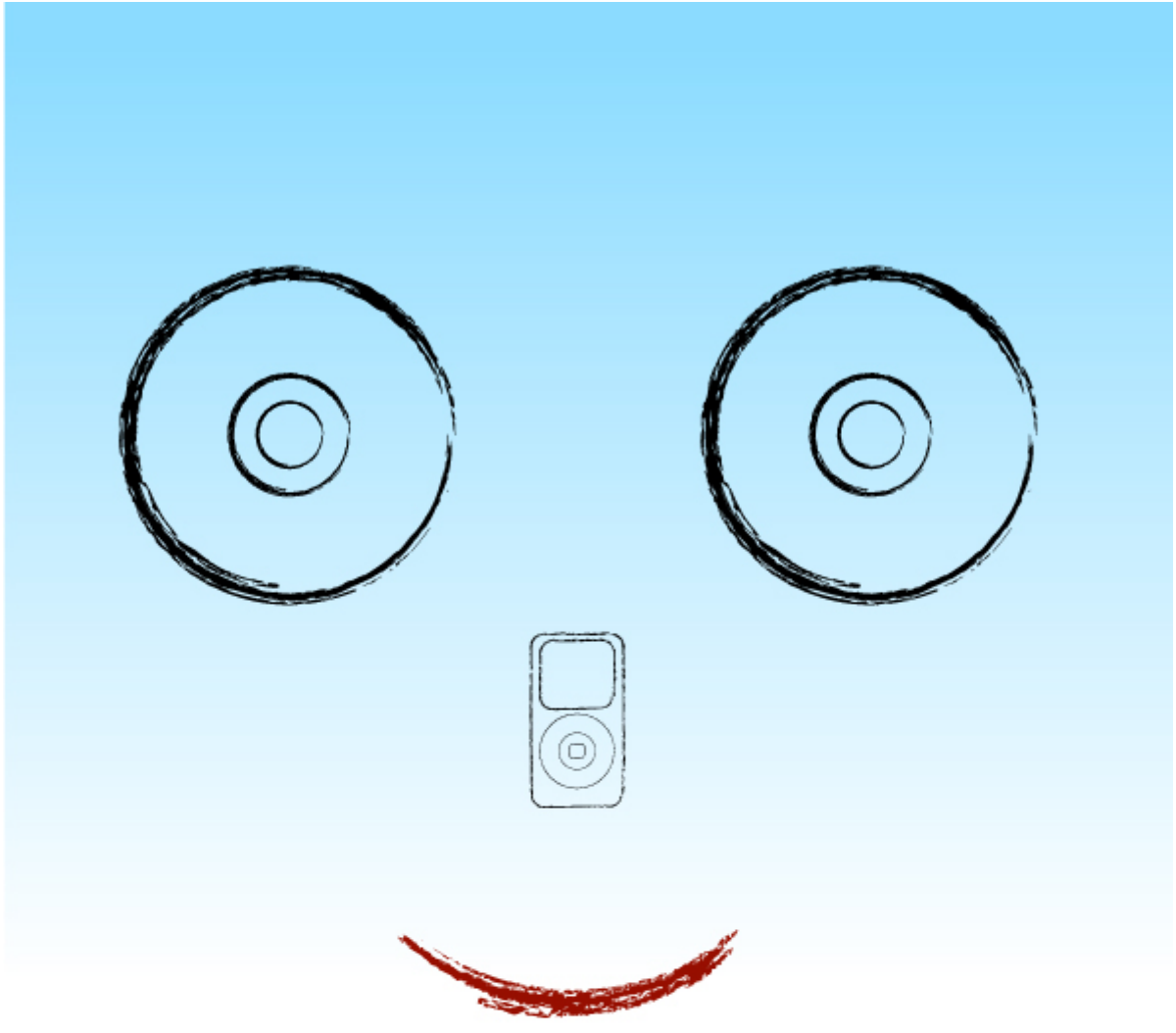
長時間聆聽mp3隨身聽，需要好的音質來保護你的雙耳，使用音質良好的mp3隨身聽，才能呈現最佳的聽覺效果。Dantly mp3隨身聽，是你的唯一選擇！

Dantly mp3隨身聽
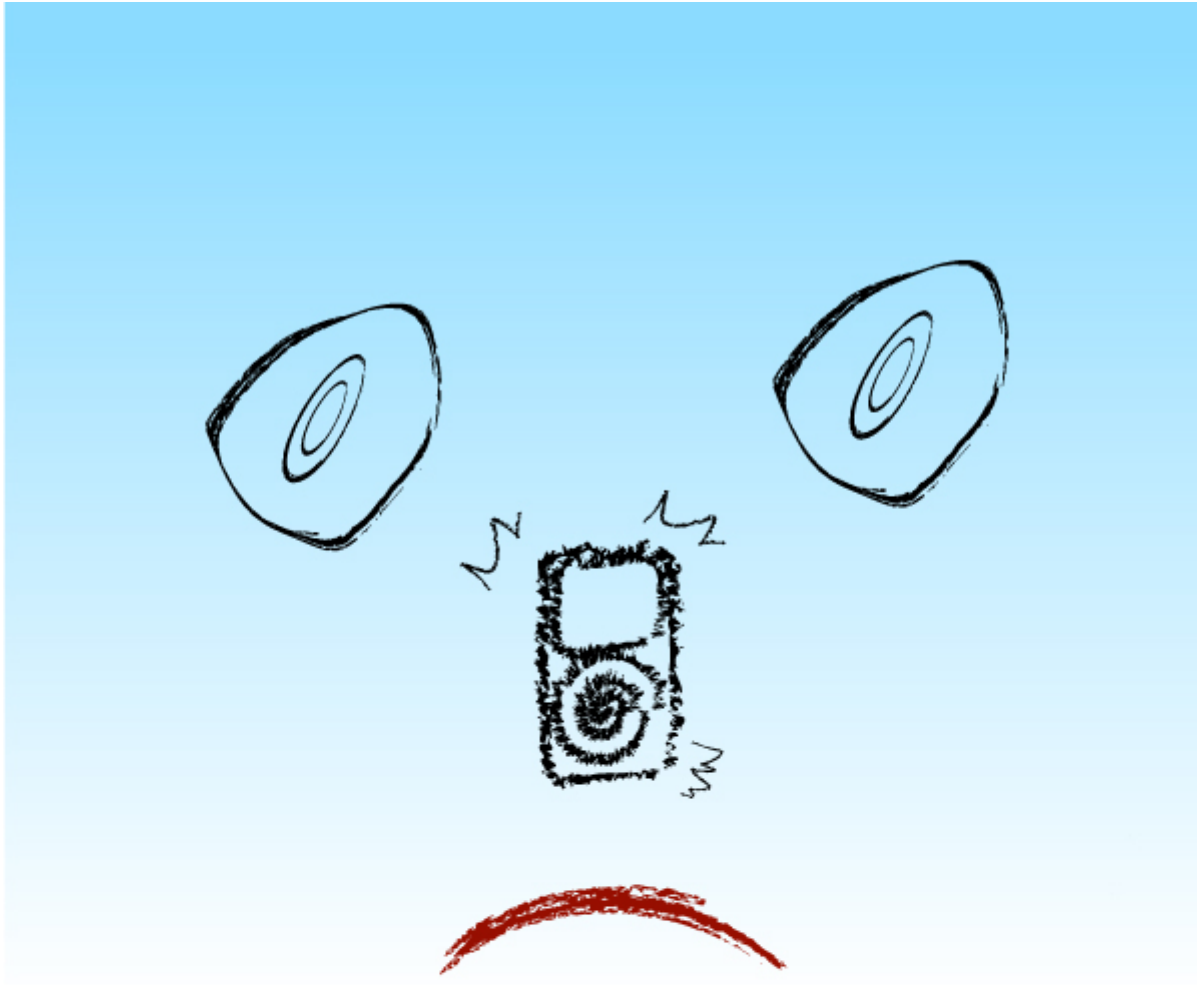
長時間聆聽mp3隨身聽，不好的音質將會損害妳的雙耳，使用音質不佳的mp3隨身聽，將會造成低劣的聽覺效果。Dantly mp3隨身聽，你不可以沒有它！

Dantly mp3隨身聽

爽

整天
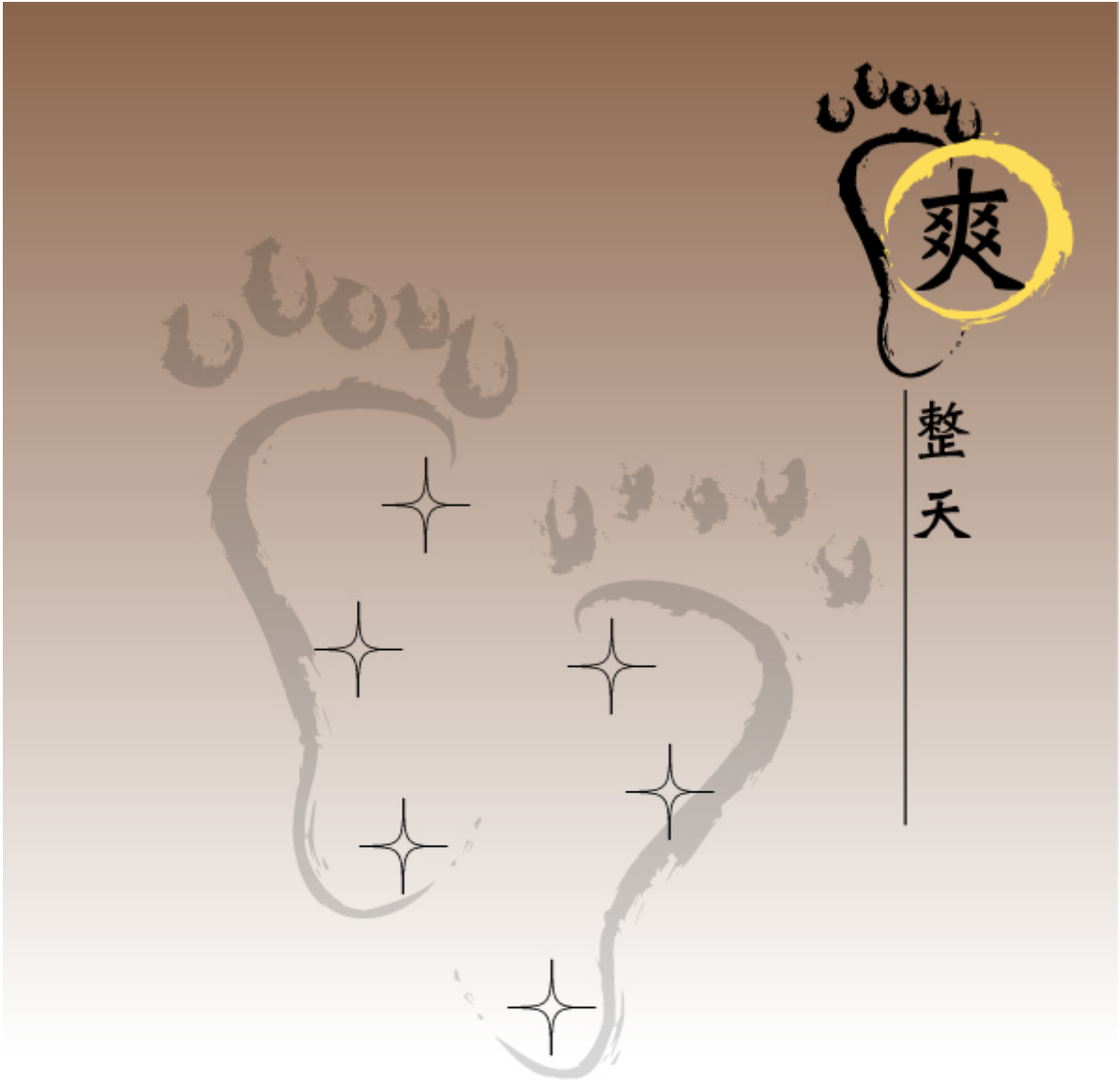
香港腳盡快治療，能常保腳部乾淨、清爽、保護足部皮膚和指甲，並且能防止細菌滋生。LOVELY香港腳藥膏，你需要它的！

Lovely香港腳藥膏

癢

整天還不夠？

香港腳若不治療，會引起腳癢、皮膚起小水泡、腳脫皮、腳趾裂，甚至併發細菌感染。LOVELY香港腳藥膏，你需要它的！

Lovely香港腳藥膏

光滑

型人的必要條件

青春痘盡快治療，能使皮脂腺正常分泌、毛孔正常呼吸、皮膚保持水分，修補皮膚細胞。痘立消除痘膏你需要它的！

月球表面

是行不通的

青春痘若不治療，會使皮脂腺管過度角化、皮脂分泌增加、細菌作用，引起發炎反應。痘立消除痘膏，你需要它的！

痘立消除痘膏

Appendix Ⅵ

Comparison for Product Strength

Negative Product (Score)	Positive product (Score)	Significance (two-tailed)	Judgment
Ointment for athlete's foot (5.24)	Champagne (5.44)	0.601	Non-significant
	Perfume (5.18)	0.899	Non-significant
	Radio (5.5)	0.526	Non-significant
	Cake (5.8)	0.151	Non-significant
	Chocolate (5.89)	0.083	Significant
	Mp3 (5.59)	0.389	Non-significant
	Ring (5.19)	0.923	Non-significant
	Rose (5.41)	0.673	Non-significant
Ointment for curing zits (5)	Champagne (5.44)	0.230	Non-significant
	Perfume (5.18)	0.712	Non-significant
	Radio (5.5)	0.210	Non-significant
	Cake (5.8)	0.035	Significant
	Chocolate (5.89)	0.014	Significant
	Mp3 (5.59)	0.134	Non-significant
	Ring (5.19)	0.708	Non-significant
	Rose (5.41)	0.301	Non-significant
Anti-sweat (4.79)	Champagne (5.44)	0.073	Significant
	Perfume (5.18)	0.410	Non-significant
	Radio (5.5)	0.073	Non-significant
	Cake (5.8)	0.008	Significant
	Chocolate (5.89)	0.003	Significant
	Mp3 (5.59)	0.041	Significant
	Ring (5.19)	0.422	Non-significant
	Rose (5.41)	0.115	Non-significant
Toilet paper (4.6)	Champagne (5.44)	0.021	Significant
	Perfume (5.18)	0.220	Significant
	Radio (5.5)	0.024	Significant
	Cake (5.8)	0.002	Significant
	Chocolate (5.89)	0.000	Significant
	Mp3 (5.59)	0.012	Significant
	Ring (5.19)	0.238	Significant
	Rose (5.41)	0.041	Significant

Appendix Ⅶ

Comparison for Positive and Negative Appeals for Each Product

Product	Appeal	Means	Sig.	Judgment
Stereo	Positive	5.8214		Non-significant
	Negative	6.0000	0.323	
Mp3 player	Positive	5.6333		Non-significant
	Negative	6.0714	0.126	
Ointment for athlete's foot	Positive	5.8654		Non-significant
	Negative	6.1071	0.393	
Ointment for curing zit	Positive	5.5000		Non-significant
	Negative	5.9000	0.123	

Appendix Ⅷ

MANOVA for Negative Products (Now*Appeal)

Effect		Value	F	Hypothesis df	Error df	Sig.
Now	Pillai's Trace	.087	2.127(a)	5.000	112.000	.067
	Wilks' Lambda	.913	2.127(a)	5.000	112.000	.067
	Hotelling's Trace	.095	2.127(a)	5.000	112.000	.067
	Roy's Largest Roc	.095	2.127(a)	5.000	112.000	.067
Appeal	Pillai's Trace	.049	1.145(a)	5.000	112.000	.341
	Wilks' Lambda	.951	1.145(a)	5.000	112.000	.341
	Hotelling's Trace	.051	1.145(a)	5.000	112.000	.341
	Roy's Largest Roc	.051	1.145(a)	5.000	112.000	.341
Now*Appeal	Pillai's Trace	.063	1.505(a)	5.000	112.000	.194
	Wilks' Lambda	.937	1.505(a)	5.000	112.000	.194
	Hotelling's Trace	.067	1.505(a)	5.000	112.000	.194
	Roy's Largest Roc	.067	1.505(a)	5.000	112.000	.194

(a) Computed using alpha = .05   (b) Exact statistic   (c) Design: Intercept+Now+Appeal+Now * Appeal

(d) 0positive product 1negative product = 1.00

ANOVA for Negative Products (Now* Appeal)

Source	Dependent Variable	df	Mean Square	F	Sig.
Now	Aad	1	.364	.301	.584
	Ab	1	.309	.223	.638
	Anticipated satisfaction	1	2.240	1.390	.241
	Prepurchase satisfaction	1	.747	.577	.449
	Purchase intention	1	5.726	2.754	.100
Appel	Aad	1	.723	.597	.441
	Ab	1	.040	.029	.866
	Anticipated satisfaction	1	4.764	2.955	.088
	Prepurchase satisfaction	1	.476	.367	.546
	Purchase intention	1	.336	.161	.689
Now*Appeal	Aad	1	.082	.068	.795
	Ab	1	.600	.433	.512
	Anticipated satisfaction	1	1.868	1.159	.284
	Prepurchase satisfaction	1	.027	.021	.886
	Purchase intention	1	4.189	2.014	.158

Appendix Ⅸ

MANOVA for Positive Products (Future*Appeal)

Effect		Value	F	Hypothesis df	Error df	Sig.
Future	Pillai's Trace	.188	4.306(a)	5.000	93.000	.001
	Wilks' Lambda	.812	4.306(a)	5.000	93.000	.001
	Hotelling's Trace	.231	4.306(a)	5.000	93.000	.001
	Roy's Largest Roc	.231	4.306(a)	5.000	93.000	.001
Appeal	Pillai's Trace	.138	2.976(a)	5.000	93.000	.015
	Wilks' Lambda	.862	2.976(a)	5.000	93.000	.015
	Hotelling's Trace	.160	2.976(a)	5.000	93.000	.015
	Roy's Largest Roc	.160	2.976(a)	5.000	93.000	.015
Future*Appeal	Pillai's Trace	.093	1.906(a)	5.000	93.000	.101
	Wilks' Lambda	.907	1.906(a)	5.000	93.000	.101
	Hotelling's Trace	.102	1.906(a)	5.000	93.000	.101
	Roy's Largest Roc	.102	1.906(a)	5.000	93.000	.101

(a) Computed using alpha = .05　　(b) Exact statistic　　(c) Design: Intercept+Now+Appeal+Now * Appeal

(d) 0positive product 1negative product = 1.00

ANOVA for Positive Product (Future*Appeal)

Source	Dependent Variable	df	Mean Square	F	Sig.
Future	Aad	1	.143	.144	.705
	Ab	1	4.948	4.775	.031
	Anticipated satisfaction	1	2.079	1.622	.206
	Prepurchase satisfaction	1	2.055	1.554	.216
	Purchase intention	1	1.279	.689	.409
Appel	Aad	1	.033	.033	.856
	Ab	1	.564	.544	.462
	Anticipated satisfaction	1	5.255	3.600	.061
	Prepurchase satisfaction	1	6.916	5.228	.024
	Purchase intention	1	1.250	.674	.414
Now*Appeal	Aad	1	.332	.335	.564
	Ab	1	1.203	1.161	.284
	Anticipated satisfaction	1	1.970	1.349	.248
	Prepurchase satisfaction	1	2.489	1.882	.173
	Purchase intention	1	.159	.085	.771

Appendix Χ

MANOVA for Negative Products (Future*Appeal)

Effect		Value	F	Hypothesis df	Error df	Sig.
Future	Pillai's Trace	.241	4.128(a)	5.000	65.000	.003
	Wilks' Lambda	.759	4.128(a)	5.000	65.000	.003
	Hotelling's Trace	.318	4.128(a)	5.000	65.000	.003
	Roy's Largest Roc	.318	4.128(a)	5.000	65.000	.003
Appeal	Pillai's Trace	.045	.614(a)	5.000	65.000	.689
	Wilks' Lambda	.955	.614(a)	5.000	65.000	.689
	Hotelling's Trace	.047	.614(a)	5.000	65.000	.689
	Roy's Largest Roc	.047	.614(a)	5.000	65.000	.689
Future*Appeal	Pillai's Trace	.071	.987(a)	5.000	65.000	.433
	Wilks' Lambda	.929	.987(a)	5.000	65.000	.433
	Hotelling's Trace	.076	.987(a)	5.000	65.000	.433
	Roy's Largest Roc	.076	.987(a)	5.000	65.000	.433

(a) Computed using alpha = .05   (b) Exact statistic   (c) Design: Intercept+Now+Appeal+Now * Appeal

(d) 0positive product 1negative product = 1.00

ANOVA for Negative Products (Future*Appeal)

Source	Dependent Variable	df	Mean Square	F	Sig.
Future	Aad	1	.422	.427	.515
	Ab	1	1.083	.752	.389
	Anticipated satisfaction	1	3.978	2.527	.116
	Prepurchase satisfaction	1	5.284	3.907	.052
	Purchase intention	1	28.662	15.406	.000
Appel	Aad	1	.402	.407	.526
	Ab	1	.132	.092	.763
	Anticipated satisfaction	1	1.566	.995	.322
	Prepurchase satisfaction	1	1.747	1.292	.260
	Purchase intention	1	.115	.062	.804
Now*Appeal	Aad	1	1.454	1.473	.229
	Ab	1	1.400	.972	.328
	Anticipated satisfaction	1	5.134	3.262	.075
	Prepurchase satisfaction	1	.104	.077	.782
	Purchase intention	1	.082	.044	.834