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情緒與產品態度修正量：

享樂型與效用型導向的產品判斷情緒修正量之不同影響

Correction for Mood Bias in Product Judgment:

Hedonic vs. Utilitarian based Product Attitude

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中文摘要

過去研究發現，心情因素與消費者對產品評價有顯著關係。本研究探討在不同心情狀態下，對於高涉入消費者而言，當消費者接收訊息並察覺到心情為偏誤時，是否會修正其對產品之評價。分為三部分進行探討：

（一）在受測者未感受到心情移動時，其在好心情狀態下對產品之評價會進行向下修正

（二）透過操弄及付予任務，試圖讓受測者察覺心情之移動，在其心情處於中立狀態下，對產品評價進行反向修正

（三）在受測者為中立心情狀態下且未感受到心情移動時，其對產品之評價沒有修正的可能性

根據彈性修正模型（ＦＣＭ），消費者須在有足夠動機和能力之情況下，才有足夠的認知資源進行察覺偏誤，並進而修正對產品之評價。本研究之實驗在目標廣告中加入廣告標語提示受測者，以提升其察覺偏誤之能力，結果顯示有提示之實驗組對產品評價有較多之修正量。

另一方面，本研究亦探討不同產品屬性是否會影響心情與產品評價之關係，研究顯示，當受測者自享樂屬性構面給予評價時，其易將心情視為主要特徵（central merits），而不易察覺心情偏誤，修正量少於自效用數性構面思考下之受測者。

關鍵字：心情偏誤、高涉入、偏誤察覺、產品評價、彈性修正模型、享樂屬性、效用屬性

ABSTRACT

Past research which can be found that there are significant relation between mood and the judgment of customers. The objective of this study is to examine the likelihood of judgmental correction when customers with high involvement who receive message and sense mood bias. Three parts of this study are as follows:

（1）For participants in good mood who don't sense the mood shift, they would correct the judgment of product downward.

（2）For participants in bad mood who sense the mood shift by accomplishing a task , they would correct the judgment of product downward.

（3）For participants in neutral mood who don't sense the mood shift, they would not correct the judgment of product.

Base on the Flexible Correction Model, customers can't sense bias without enough motivation and ability. The target tagline are present in the ad would be a cue to promote the ability of bias awareness of customers. The results showed that there are greater amount of correction in the condition with tagline.

In addition, this study investigated whether attributes would influence the relationship between mood and judgment. The results of this study revealed that mood would be a central merits when participants evaluate hedonic attributes of the target. Thus, the amount of correction would be less than when participants evaluate utilitarian attributes of the target.

Keywords :Mood Bias；Bias-Awareness；High Involvement；Product Judgment；Flexible Correction Model； Hedonic Attributes； Utilitarian Attribute

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INTRODUCTION

Marketers develop the marketing strategy and examine the factors which affect customer's decision making to know how to transfer effective message to customer so that they can strengthen their competiveness of product. Researchers have discovered that mood play an important role in the judgment of a product for customer. This research will not only aim to examine the effect of mood on judgment and bias correction but discuss these concepts along with a utilitarian and a hedonic-based attitude.

The study about mood originate from Schwarz and Clore（Schwarz & Clore ,1983） .The researchers found that“ people's judgments of happiness and satisfaction can be influenced by their mood (either weather related or by induced methods). However, they could eliminate negative feelings by having the subjects misattribute the cause of their mood to another source.”. In 1995, Joseph Forgas introduced four strategies which stand for different level of emotion in four conditions. He divided four dimensions base on the degree which emotion affect judgment to examine how emotion influence the judgment.

Another study exploring the relationship between mood and decision-making is the research of Pham discussing in 1998.Schoolars divided product into two categories: utilitarian product and hedonic product. Utilitarian products are those consider to display the useful function. Hedonic products, on the other hand, are those consider to relevant to attribution of feeling. The discussion showed that hedonic consumers are more likely to adopt affective element as index to evaluate product than utilitarian consumers. In other words, the relationship between mood and judgment for consumer can be different because their evaluation of product which is relevant to different attributes.

However, Wegener and Petty（Wegener & Petty, 1997） discovered if people have sufficient motivation and ability, they would be aware of the mood bias when evaluating a product and correct their judgment to form a right decision. This is another topic of this research.

The objective of this study is to examine the direction of correction by people with different mood state evaluating two kinds of attributes respectively when they sense affective bias.

The three studies discussed unequal mood condition respectively: positive mood、negative mood and neutral mood. In the first study, people in positive mood condition who were asked to evaluate from two attributes were examined to measure the direction of correction they made when aware of the affective bias. In the second study we conducted Crossword Puzzle Game to change the mood condition of participants so that they could detect mood shift before evaluating the target. Study3 was design to be a control group to compare the other two conditions.

LITERATURE REVIEW

There many theories concerning this study, we classify them into three parts:

Table 1. The framework of literature review

Mood	Correction Model	Attributes of Product
• *Affect — as — information* • *Affect Infusion Model（AIM）* • *Feelings-Directed Attention*	• *Flexible Correction Model*	• *Utilitarianism and Hedonism*

Affect — as — information

Affect-as-information theory raised by Schwarz and Clore in 1983.They propose that people's judgments of happiness and satisfaction can be affected by mood. However, they can eliminate negative feeling by their cognition of other things. On the other hand, people tend to explain mood condition by searching and using information to reduce the impact of negative mood. Relative to the people in positive mood, those people with negative mood are more likely to attribute unpleasant feeling to external environment or irrelevant factors. Therefore, the theory also known as misattribute model.

Affect Infusion Model（AIM）

Joseph Forgas proposed this model in 1995.The finding suggested that how mood influence the people's ability of information processing. People would infuse unequal amount of affection when facing different situation. Affect infusion processing can be seen as a continuum and can be categorize into four condition based on level of affection: (1) the direct access strategy, (2) the motivated processing strategy , (3) the heuristic processing strategy, and (4) the substantive processing strategy. (Forgas 1992, 1995)。The first two strategies are due to relative little influence by mood. The former arise by the reaction which has been bring to cause before in the same situation ; the latter involves specific processing with direct motivation in mind.

However, heuristic processing strategy and substantive processing strategy come into existence when judgment need a degree of constructive processing. Heuristic processing strategy is exactly Affect-as-information mechanism. It's also an important factor in mood congruency, it assumes that people wouldn't perceive processing of emotion so that people who are inclined to evaluate information by using reaction of emotion. It's likely take place when evaluating overall or unfamiliar things.

In addition, substantive processing strategy arise when information needs high degree of cognition-processing and when people receive much more influence by mood than others. Forgas expected that there are highest level of affect infusion in this mechanism.

Forgas think people requiring much constructive thinking to form judgment when target is rare、inconsistent、atypical or complex. In this case, the frequency of distortion of people's judgment by mood would be affected most .

Feelings-Directed Attention

Unpleasant feeling enable someone to remind unhappy memories and experiences which is relevant to the information(Bower, 1981; Bower & Cohen, 1982)；cheerful feeling tend to recall pleasant things and positive thoughts, while unpleasant feeling tend to increase the accessibility of negative thoughts. (Rule, Taylor, & Dobbs, 1987）However, past research shows that there are relatively high level of inconsistent results when examining how negative mood influence thinking and action. For example, people in bad mood tend to treat others with severe attitude. (Berkowitz,1983).While another study shows that in some circumstances people may arouse social behaviors and lead to positive change when they are not in good mood.

And still another study proposed by Clark and Isen in 1982 showed that the inconsistent effects of negative feelings are because of the nature of different psychological processes. (Clark & Isen, 1982; Isen, 1984)

People who are in bad mood may try to retrieve good memories to mitigate their moods or process less information to avoid negative outcome. Besides, negative feelings may prompt people to search for information which can improve their mood from external environment.(Schwarz & Clore, 1983)

Under some conditions, bad mood can be eased when people are aware of their affect state. Berkowitz proposes that "awareness of one's negative affect prompts a consideration of whatever rules and regulations seem pertinent to the given situation …, the "basic" negative affect-negative judgment relationship could well be weakened or even eliminated altogether." (Berkowitz &Troccoli, 1990).

Correction Model—Flexible Correction Model

This model was suggested by Wegener and Petty in 1997. Different from Set/Reset Model（Martin),this model explained the phenomenon of correction under contrast which is that people sense bias when evaluating target, they would try to eliminate the bias of target to make a correct judgment.

This model proposed that the direction and amount of correction is varied from person to person since the amount of perception for people can be different. This situation also known as naive theory.

Apart from this, The finding showed that there are other factors can affect the direction and amount of correction: one is ability and motivation to sense bias, the other is someone's ability and motivation to correct bias. If people don't have sufficient motivation or professional knowledge, they wouldn't be aware of the potential bias; on the other hand, if the bias would not lead to any serious loss or it's not associated with someone, then people wouldn't try to remove the bias. Besides, limitation of time or being disturbed by something will also consume someone's cognitive resource and influence the ability to correct.

Because naive theory is foundation of this model, perception of people may different due to diversified condition of people. When the amount of perception is more than the amount of bias will result in contrast effect. In addition, if amount of perception is less than the actual amount of bias, then the effect of correction would be weakened.

Utilitarianism and Hedonism

The classification of products for consumers has been divided by many researches into two categories: Utilitarian/Hedonic products. The products with utilitarian elements are related to non-sensory attributes, while the products with hedonic component are relevant to sensory attributes which focus on the feeling of users.（Batra & Ahtola ,1991）

Therefore, utilitarian products are those which would be considered to be useful, practical, functional, and something which can help us to achieve the goal. (Strahilevitz and Myers, 1998)；but hedonic products are those that are pleasant, fun, enjoyable and appealing to the senses(Hirschman and Holbrook, 1982).Besides, some scholars categorize the preference of cognition and reasoning to as the consumers "should" and the preference of affection as the consumers "want". (Bazerman,Tenbrunsel, &Wade-Benzoni, 1998)。

Vaughn proposed a famous model in 1986 dividing product into two dimension thinking / feeling, he suggested thinking products requires more rational and informative advertising, but feeling products will be more attractive by advertising emotional and enjoyable object.

This study manipulate subjects by priming with two attributes processing to examine judgment from different attributes. In recent years, scholars have raised the judgment affected by mood only when emotional customer evaluate affective element as criterion. That is to say, hedonic customers are more likely to take emotional element as indicator to form judgment.（Pham (1998)）.The study by Adaval proof amply the theory which manipulate two group of subjects by watching a pleasant video and a sad video respectively before evaluating four categories (jeans, running, shoes, sweatshirts, and backpacks) .The results showed the judgment by customer take hedonic attributes as criterion is congruent with mood, while the outcome didn't demonstrate in the customer take utilitarian attributes as indiactor.

PROPOSED HYPOTHESES

Many researchers proposed people's judgment are easier influenced by limited ability of information processing and lead to form a right decision ineffectively.

People with high involvement would be aware of mood bias and correct to avoid effect result from wrong judgment.

However, ELM(ELM: Petty and Cacioppo, 1984, 1986; Petty et al., 1983)can be found that people must have sufficient motivation and ability so that they can evaluate the message effectively. Customers who attribute hedonic element to criterion to evaluate a product would consider mood to be a central merits, while customers attributing utilitarian element as an important factor would take mood as peripheral cue. In other word, those people who view utilitarian factor as criterion would consider mood as a bias so they would correct the judgment but the phenomenon wouldn't occur when people evaluating hedonic performance.

When people with good mood were asked to evaluate a product from utilitarian thinking, they would perceive mood as bias after reading cue of target and correct judgment from opposite direction base on mood . However, people who were requested to evaluate a product from hedonic thinking wouldn't be aware of mood bias so they wouldn't correct their evaluation. Thus, we proposed the following hypothesis in study 1:

H1-1:For high involvement participants in good mood, target judgments of utilitarian performance would be worse when receiving the bias reminder in the ad than when no bias reminders are present.

H1-2:The likelihood of judgmental correction would be greater when high involvement participants who are in good mood and evaluating utilitarian performance of the target than when participants who are in good mood and evaluating hedonic performance of the target.

Different from study1, study2 manipulate subjects in bad mood and add crossword puzzle before target advertisement so that people sense mood shift (down to up) and correct evaluation to opposite way base on the direction of mood shift.(up to down). Thus, hypothesis 2 are proposed as below:

H2-1:For high involvement participants in bad mood and with effortful task, target judgments of utilitarian performance would be worse when receiving the bias reminder in the ad than when no bias reminders are present.

H2-2:The likelihood of judgmental correction would be greater when high involvement participants who are in bad mood and evaluating utilitarian performance of the target than when participants who are in bad mood and evaluating hedonic performance of the target.

The two study interpret that whether people sense mood shift or not, they would perceive mood bias and correct judgment.

As the process of study1,the difference between study1 and study 3 is manipulation of neutral mood in study 3.The following are the hypothesis of study 3:

H3-1:For high involvement participants in neutral mood, there would not be significantly different target judgments of utilitarian performance between that when receiving the bias reminder in the ad and when no bias reminders are present.

H3-2:The likelihood of judgmental correction would not arise when high involvement participants who are in neutral mood and evaluating either utilitarian performance or hedonic performance of the target.

Contribution of this study

1.*Neutral mood condition*

Prior studies have investigated positive and negative mood state, this study examined the mood effect under neutral mood as a control group to compare to other two conditions.

2.*Content of the effortful task*

The Crossword Puzzle of past study is a priming for participants to think from either hedonic or utilitarian attribute and to change participants' mood state. This case may make we confuse the reason of changing mood state（participants may change their mood by the hedonic cue）

There are no any cue in the Crossword Puzzle of this study. Thus, the problem which existed before can be avoided.

3.Separate Measurements on Utilitarian and Hedonic Performance

The assessment on impression of this study respectively focus on utilitarian attributes and hedonic attributes would be a precise evaluation to indicate the difference of the judgment for each attribute.

Table 2. Study1,2&3 overview

Priming mood	**Crossword Puzzle**	**Manipulate high involvement**	**Ask subjects evaluate a** product from **two attributes thinking （Hedonic/ Utilitarian）**	**Cue of Bias (tagline of target/ no tagline of target)**	**Hypothesis**
Manipulate participants to positive mood by three jokes and ask them remind pleasant memories.		Hit the market next month and Collect a few samples	Ask participants evaluate target from different attributes respectively	Provide bias knowledge by presenting the target tagline	H 1
Manipulate participants to negative mood by two sad news.	Participants' mood from negative condition to neutral condition by mood shift	Hit the market next month and Collect a few samples	Ask participants evaluate target from different attributes respectively	Provide bias knowledge by presenting the target tagline	H 2
Manipulate participants to neutral mood by two articles.		Hit the market next month and Collect a few samples	Ask participants evaluate target from different attributes respectively	Provide bias knowledge by presenting the target tagline	H 3

STUDY1

METHODS

The objectives of study1 is to examine mood effect and the amount of correction when people in good mood and was asked to think from either hedonic or utilitarian thinking.

Table 3. Framework for Study1

Manipulating in Good Mood	**High Involvement**	**From two attribute thinking to evaluate MP3（Hedonic／Utilitarian）**	**Cue of Bias（tagline／notagline）**
Manipulate participants in positive mood condition by three jokes and ask them remind pleasant memories.	Hit the market next month and target on a few students' opinion	Ask participants evaluate target from different attributes	Provide bias knowledge by presenting the target tagline

Design

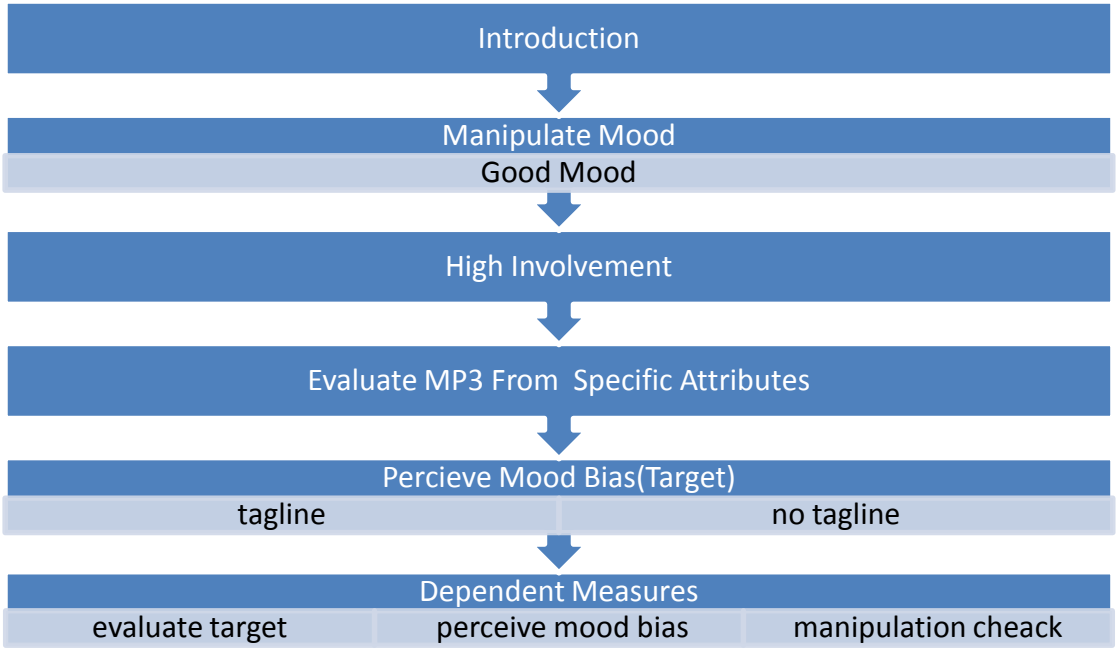
The structure of this study is a 2 (Utilitarian vs. Hedonic Attribute) x 2 (With vs. without tagline) ANOVA design after a good mood priming condition.

Participants

The sample consisted of 60 students from NTU and NTNU.

Procedures

Figure 1. Study 1 Experiment Procedure



Mood Induction

After reading three jokes, subjects were given four parts of questions to make sure they are in good mood. Including a self-rated mood scale as a manipulation check on 7-point scale ranging from in bad mood（1）to in good mood（7）；from very unhappy（1）to very happy（7）；from very sad to not sad（7）,an open-ended question for reason of mood, understanding of three jokes as a manipulation check on 7-point scale and an open-ended question for reminding the funny experiences.

Involvement-manipulation under high involvement

Tell subjects the product will hit the market next month and their opinion is important for the project of target before reading target

Utilitarian and hedonic attributes thinking

Notify participants that they should evaluate target from either "dimension of function and utility" or "dimension of enjoyable and feeling" before reading target to classify subjects into two condition.

Mood bias awareness（Tagline）

According to previous research data（Lin , 2011）,the study which compared MP3 player to other 9 products *(i.e. perfume, refrigerator, cell phone, automobile, vacation resort, athletic shoes, glasses, blue jeans, and watch) and found out that MP3*have the most equivalent level of utilitarian and hedonic attributes (U's M=5.71, H's M=5.52, t (34) =1.17, p=0.25).Therefore, this study apply MP3 player to examine the difference between two attributes. There are two version of target advertisement, the target advertisement was shown to the subjects with or without the tagline, *"Enjoy the music no matter what your mood state is!"*Then subjects were asked to answer questions about evaluation which is relevant to dependent variables.

Assessment of Dependent Variables

Question to assess evaluation about two attributes

A question to evaluate the impression of the target on either function of enjoyable dimension .

For utilitarian condition, subjects' perception regarding the utilitarian dimension of the target product was measured on five7-point scales, ranging from impractical (1) to practical (7); from not functional (1) to functional (7); from unnecessary to me (1) to necessary to me (7); from unhelpful to me (1)to helpful to me (7); from impossible to predict efficiency (1) to possible to predict efficiency (7).

For hedonic condition, subjects' perception regarding the utilitarian dimension of the target product was measured on five7-point scales, ranging from not fun(1) to fun(7); from not enjoyable (1) to enjoyable (7); from not excited to me (1) to excited to me (7); from not pleasurable to me (1)to pleasurable to me (7); from not playful to me (1) to playful to me (7).

A question to confirm consideration of participants when evaluating the target product

The question asking participants to consider which attributes they would give more weight to when evaluating the target product in a 7-point scale ranging from utilitarian attributes（1）to hedonic attributes（7）

A manipulation check of mood state after evaluating target advertisement

Participants' mood state was measured on a three 7-point scale ranging from very bad (1) to very good (7); from very unhappy (1) to very happy (7); from sad (1)to not sad (7).A set of Manipulation check questions on Involvement The first and second question asking subjects "Do you think this survey, targeting toward only target customer-students to collect samples and each answer would be analyze carefully and individually to analyze, would influence your attitude toward the evaluation of the Sound MP3 advertisement?" and "Do you think the fact that the target product would be hit the Taiwan local market next month would influence your attitude toward the evaluation of the Sound MP3 advertisement?" Both questions were rated on the same three 7-point scale ranging from unimportant (1) to important (7); from not very influenced (1) to very influenced (7); from irrelevant (1) to relevant (7).

Manipulation check on whether persuasiveness of target advertisement would be influenced by attributes and tagline

The question asking subjects “How do you think the persuasiveness when you browse target advertisement?”The question were rated on three 7-point scale raging from not persuasive（1）to very persuasive（7）;from weak argument（1） to strong argument（7）;from including unimportant attributes（1）to including important atrributes.

RESULTS FOR STUDY1

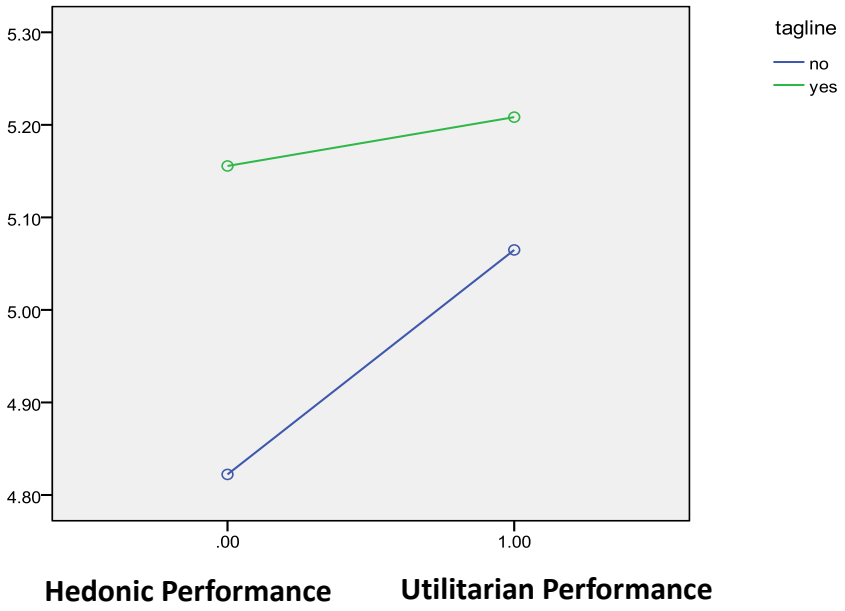
Manipulation Check-Mood

Positive mood was successfully induced after reading the three jokes. On three7-point scales, the average mood manipulated in the study was significantly higher than the scale midpoint, 4 ($M=5.0884$, $t(98)= 8.833$, $p<0.01$, $\alpha=0.9$). In the 2 x 2 ANOVA, mood manipulation showed no significant effect in both attributes and mood bias awareness.

Table 4. 2x2 ANOVA, DV: Mood Manipulation For Study1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Bias Awareness (tagline)	1.182	1	1.182	0.778	0.38
Utility	0.454	1	0.454	0.299	0.586
Tagline*Utility	0.187	1	0.187	0.123	0.726
Error	142.734	94	1.518		

Figure 2. Graph for Good mood after reading jokes



Manipulation Check- Consideration

A question concerning the consideration when evaluating the target product. The mean of this study for utilitarian and hedonic attributes are 3.7703 and 4 respectively. Though the result isn't identical as we expected, these answers by participants may influenced by their general judgment of MP3 products.

Manipulation Check-Involvement

Adopted from previous successful studies, the manipulation of involvement toward the target advertisement in 4 conditions were the same and make up of three dimensions to form involvement indexes (α=0.948). The results were then ran through one-sample t-test and compared to 4 (M=4.2104, t (79) = 1.487, P=0.14), the middle point of the scale. For the reason of that there are no control group to compare to the measure of involvement under normal condition, though the overall involvement isn't significant higher than 4,we still confirm that the overall involvement is higher than usual level.

Manipulation Check-Argument Quality

A question concerning the persuasion of the advertisements was asked and submitted to the ANOVA and one-sample t-test. Based on the results, the argument quality was low for the participants ($M=3.1683$, $t(103) = -6.435$, $p<0.05$, $\alpha=0.86$), neither main effect nor interaction effect was significant. Thus, it can be supposed persuasiveness did not influenced by utility and tagline.

Target attitude

Hypothesis 1-1 and 1-2 were tested using ANOVA, the simple main effect for utilitarian attributes is partially significant($F(1,98)=3.451$,$P=0.066$) (see Table7) ,the results showed that the mean for target attitude under utilitarian condition with tagline and no tagline is significantly different. Compared to the target attitude for hedonic condition($F(1,98)=0.624$,$P=0.431$) (see Table7), there is no difference between the two groups of participants who received tagline and those who didn't get tagline.

The mean of judgment by participants who evaluated utilitarian performance when receiving tagline (3.8629) is lower than when participants didn't get tagline(4.3892) (see Table6),which is consistent with H1-1.

An ANOVA (see Table5) revealed a partially significant interaction of tagline and utility($F(1,98)=2.794$,$P=0.098$). Owing to the great difference of hedonic evaluation, interaction effect may be weakened. The results are supportive of H1-2. For the participants who evaluated utilitarian performance are likely to correct their judgment when they received tagline.

Table 5. 2x2 ANOVA, DV: Target ad attitude (Study1)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Bias Awareness (tagline)	0.171	1	0.171	0.118	0.732
Utility	0.419	1	0.419	0.290	0.591
Tagline*Utility	0.034	1	1.034	2.794	0.098
Error	141.503	98	1.444		

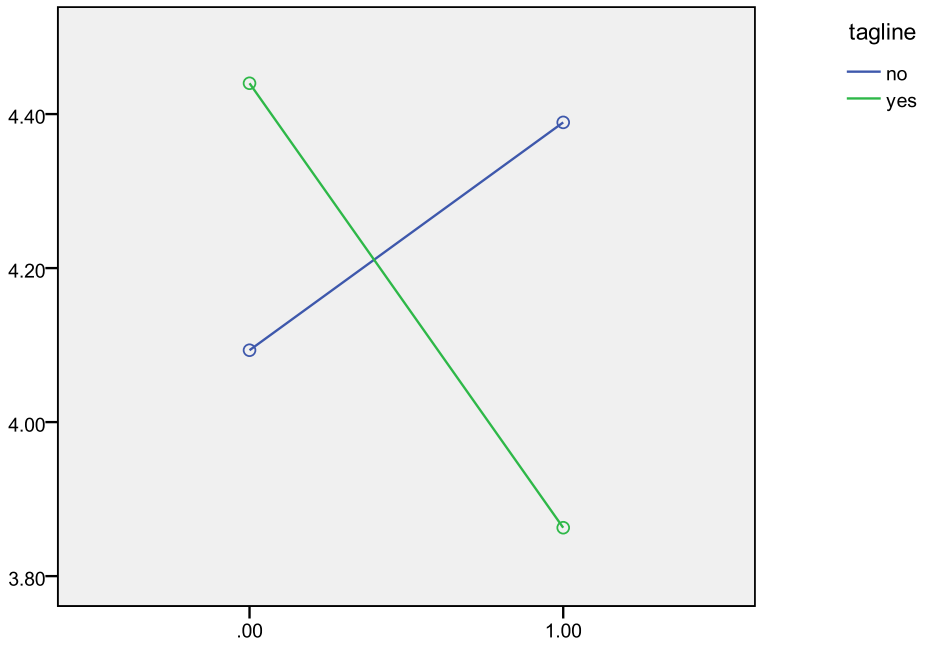
Table 6. Mean for Target ad attitude (Study1)

Hedonic/Utilitarian	Bias Reminder	Mean	N	Std. Deviation
Hedonic	No tagline	4.0933	15	1.50403
	Tagline	4.44	15	1.29879
	Total	4.2667	30	1.39193
Utilitarian	No tagline	4.3892	37	1.00658
	Tagline	3.8629	35	1.20954
	Total	4.1333	72	1.13336

Table 7. Simple main effect for Utilitarian and Hedonic (Study1)

Hedonic/Utilitarian		Sum of Squares	df	Mean Square	F	Sig.
Hedonic	Contrast	0.901	1	0.901	0.624	0.431
	Error	141.503	98	1.444		
Utilitarian	Contrast	4.983	1	4.983	3.451	0.066
	Error	141.503	98	1.444		

Figure 3. Graph for target attitude (Study 1)



DISCUSSION FOR STUDY1

There many study investigate the relationship between mood and attributes, the objective of this study is to explore the topic precisely.

Study 1 indicate that when people in good mood who are aware of the mood bias are likely to correct their utilitarian judgment to form a proper decision. On the other hand, for the people under the same condition but were asked to evaluate hedonic performance would not correct their judgment.

Because of the manipulation check which can be found that average mean of involvement for participants is not high enough to match our hypothesis, the difference of judgment under utilitarian condition is just partially significant. For the reason can be a explanation to interpret the partial significance of interaction between tagline and utility.

Study 2 was designed to compare the results of study. Specifically, we examine the direction of correction when people with bad mood. An effortful task was conducted in study 2 to create a obvious cue to remind participants of mood bias.

STUDY2

PRETEST

According to the pretest of 呂永潔（呂,２０１２）,negative report would induce negative mood and after completing a game would change the mood state, therefore, this study follow up the way of manipulation.

METHODS

The objectives of study2 is to examine mood effect and the amount of correction when people in sad mood and was asked to think from either hedonic or utilitarian thinking. This study can be proved mood effect would arise not only in good mood but negative mood state. The difference between study1and study2 is Crossword Puzzle which was added before target advertisement in this study for the result of that the subjects would sense the mood shift which from negative mood to neutral mood.

Table 8.Framework for Study2

Manipulating in bad Mood	**Crossword Puzzle**	**High Involvement**	**From two attribute thinking to evaluate MP3（Hedonic／Utilitarian）**	**Cue of Bias（tagline／notagline）**
Manipulate participants in negative mood condition by let them read two sad news.	Expect participants' mood state would turn from negative into neutral by accomplish this irrelevant game	Hit the market next month and target on a few students' opinion	Ask participants evaluate target from different attributes	Provide bias knowledge by presenting the target tagline

Design

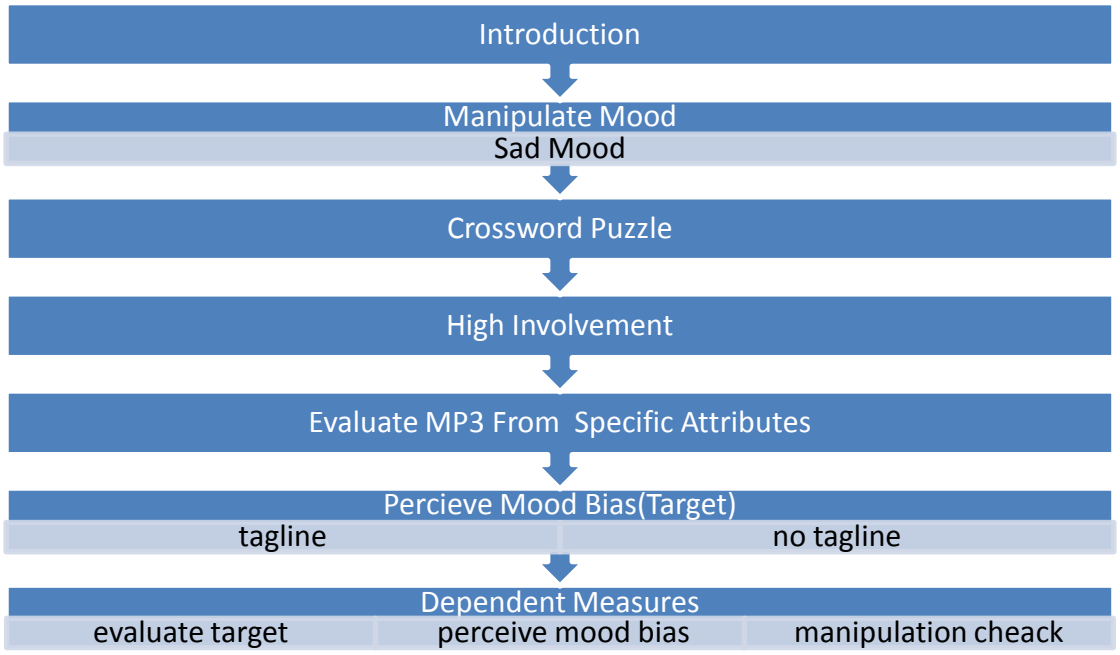
The structure of this study is a 2 (Utilitarian vs. Hedonic Attribute) x 2 (With vs. without tagline) ANOVA design after a good mood priming condition.

Participants

The sample consisted of 60 students from NTU and NTNU.

Procedures

Figure 4. Study 2 Experiment Procedure



Mood Induction

After reading two news, subjects were given four parts of questions to make sure they

are in sad mood. Including a self-rated mood scale as a manipulation check on 7-point scale ranging from in bad mood（1）to in good mood（7）；from very unhappy（1）to very happy（7）；from very sad to not sad（7）,an open-ended question for reason of mood state and understanding of two news as a manipulation check on 7-point scale.

Mood shift

Let subjects accomplish “Crossword Puzzle”to change their mood state from negative mood to neutral mood. Pretest have proved that after completing the game, mood state of subjects would correct upward to neutral mood.

Except for the mood manipulation and “Crossword Puzzle”,the other measure and questions are identical to study1 to be a comparison for study1.

RESULTS FOR STUDY2

Manipulation Check-Mood

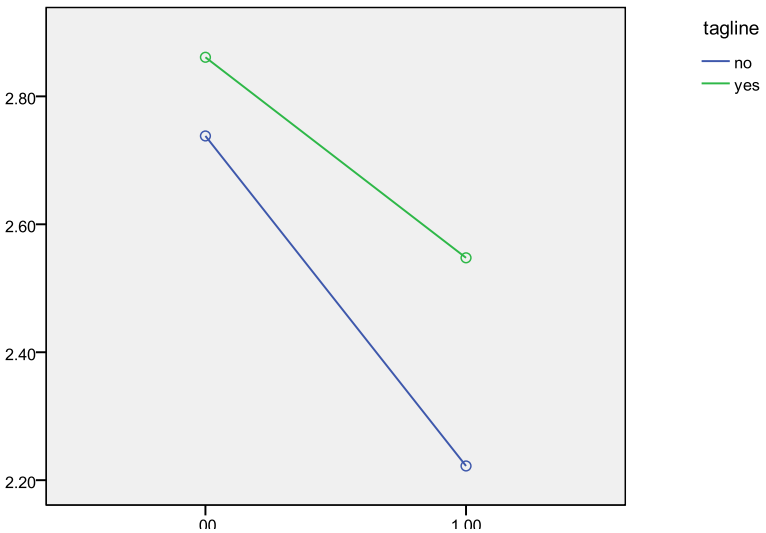
Negative mood was successfully induced after reading the two news. On three

7-point scales, the average mood manipulated in the study was significantly lower than the scale midpoint, 4 ($M=2.5758$, $t(54)= -10.894$, $p<0.01$, $\alpha=0.894$). In the 2 x 2 ANOVA, mood manipulation showed no significant effect in both attributes and mood bias awareness.

Table 9. 2x2 ANOVA, DV: mood manipulation(Study2)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Bias Awareness (tagline)	0.687	1	0.687	0.737	0.395
Utility	2.349	1	2.349	0.252	0.119
Tagline*Utility	0.14	1	0.14	0.15	0.7
Error	47.536	51	0.932		

Figure 5. Graph for Bad mood (Study2)



Manipulation Check- Consideration

A question concerning the consideration when evaluating the target product. The mean of this study for utilitarian and hedonic attributes are 3.3333 and 4.8077 respectively. The result showed that manipulation of different attributes is successful and strengthen the outcome of this study.

Table 10. Mean of Consideration (Study2)

Utility	Mean	Sd. Deviation	N
Hedonic	4.8077	1.41476	26
Utilitarian	3.3333	1.64701	30
Total	4.0179	1.70017	56

Manipulation Check-Involvement

Adopted from previous successful studies, the manipulation of involvement toward the target advertisement in 4 conditions were the same and make up of three dimensions to form involvement indexes (α=0.965). The results were then ran through one-sample t-test and compared to 4 (M=4.1636, t (54) = 0.886, p=0.38), the middle point of the scale. As the same reason for study1, there are no control group to compare to the measure of involvement, though the overall involvement isn't significant higher than 4,we still confirm that the overall involvement is higher than usual level.

Manipulation Check-Argument Quality

A question concerning the persuasion of the advertisements was asked and submitted to the ANOVA and one-sample t-test. Based on the results, the argument quality was low for the participants (M=3.3214, t(55) = -3.796, $p<0.05$, α=0.847), neither main effect nor interaction effect was significant. Thus, it can be confirm that persuasiveness did not influenced by utility and tagline.

Manipulation Check -Mood change

We check the mood which is concerning the mood of participants after they evaluated the target product to confirm the mood change. The results were then ran through one-sample t-test and compared to 4 (M=4.1030, t(54) = 0.93, p=0.356, α=o.848), the middle point of the scale. The results revealed that the mood of participants after evaluating the target product is not significantly different from neutral mood. The data can be confirm that the mood change of participants is as we expected.

Target attitude

A two-way ANOVA test on the basis of the2x2 model was implemented. The results of mean for utilitarian judgments ($F(1,50)=23.199$, $p<0.01$) (see Table13)is a strong evidence to support H2-1.

Interaction of tagline and utility is significant($F(1,50)=12.636$,$p<0.01$)(see Table11)which indicate that the likelihood of judgmental correction when participants evaluated utilitarian attributes of the target. Figure can be found that when participants evaluate utilitarian performance, there are significant difference when

they received bias reminder and when they didn't receive the target tagline. The difference for utilitarian condition indicate that participants would correct their judgment when they aware of mood bias, thus the judgment by them would be corrected downward. Contrast the results for hedonic condition , the evaluation between two groups of participants who received tagline and those who didn't receive tagline are almost the same. Supportive of H2-2.

The ANOVA table (see Table11) revealed that the main effect for tagline is significant. The main effect for tagline comes from the difference for utilitarian evaluation. Though there are no difference for hedonic evaluation, the main effect for tagline can be still significant in this study.

Table 11. 2x2 ANOVA, DV: Target ad attitude (Study2)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Bias Awareness (tagline)	9.873	1	9.873	8.995	0.004*
Utility	0.006	1	0.006	0.006	0.939
Tagline*Utility	13.87	1	13.87	12.636	0.001*
Error	54.882	50	1.444		

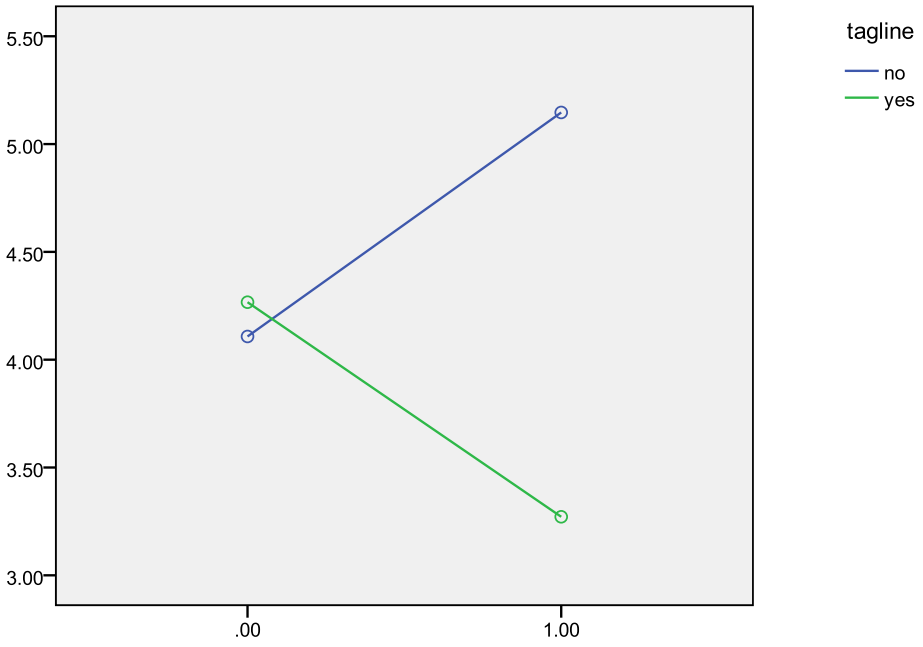
Table 12. mean for target ad attitude (Study2)

Hedonic/Utilitarian	Bias Reminder	Mean	N	Std. Deviation
Hedonic	No tagline	4.1077	13	1.11838
	Tagline	4.2667	12	1.48038
	Total	4.1840	25	1.27922
Utilitarian	No tagline	5.1467	15	0.78728
	Tagline	3.2714	14	0.73843
	Total	4.2414	29	1.21347

Table 13. Simple main effect for Utilitarian and Hedonic (Study2)

Hedonic/Utilitarian		Sum of Squares	df	Mean Square	F	Sig.
Hedonic	Contrast	0.158	1	0.158	0.144	0.706
	Error	54.882	50	1.098		
Utilitarian	Contrast	25.464	1	25.464	23.199	0.000
	Error	54.882	50	1.098		

Figure6:Graph for attitude (Study2)



Hedonic Performance **Utilitarian Performance**

DISCUSSION FOR STUDY2

Study 2 demonstrated that the judgmental correction by participants only under utilitarian condition. Compare to the results in study 1, this results showed more significant difference in the between group of utilitarian and hedonic. This data can be proved that there are much likelihood of correction when people who sense mood shift, which is consistent to H2-2. Therefore, the results can be confirm that when people with bad mood who evaluated utilitarian performance will correct their judgment when being aware of mood bias. The effect of judgmental correction by mood will be strengthen when people sense mood shift.

Besides, the results showed that the mean of judgment by participants in this study was accompanied with the change of mood state. For participants who evaluate utility of target , they tend to give a better judgment when their mood state change from sad mood to neutral mood if they didn't receive tagline; on the other hand, those participants who received tagline tend to give a worse judgment because of judgmental correction.

Study 3 was conducted as a control group to examine that whether people would correct when their judgment was not affected by mood factor .

STUDY3

METHODS

The goal of study3 is to examine mood effect and the amount of correction when people in neutral mood and was asked to think from either hedonic or utilitarian thinking. This study would be proved when mood effect didn't act on the participants, the judgment by subjects which would not be influenced.

Table14. Framework for study3

Manipulating in Neutral Mood	**High Involvement**	**From two attribute thinking to evaluate MP3（Hedonic／Utilitarian）**	**Cue of Bias（tagline／no tagline）**
Manipulate participants in neutral mood condition by let them read two neutral news.	Hit the market next month and target on a few students' opinion	Ask participants evaluate target from different attributes	Provide bias knowledge by presenting the target tagline

Design

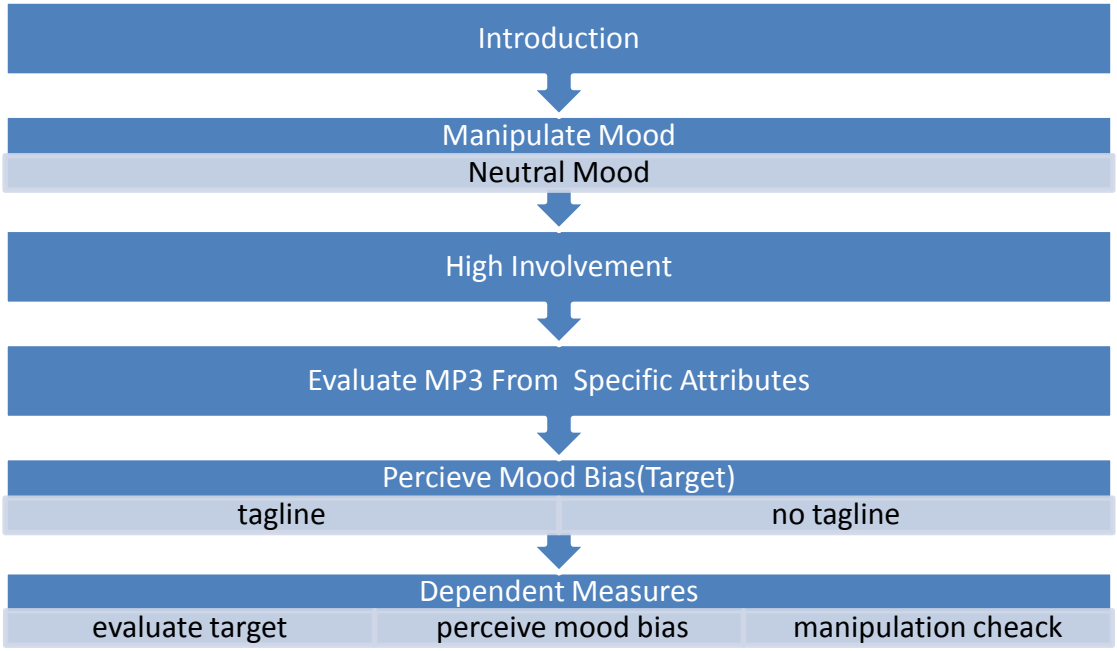
The structure of this study is a 2 (Utilitarian vs. Hedonic Attribute) x 2 (With vs. without tagline) ANOVA design after a good mood priming condition.

Participants

The sample consisted of 60 students from NTU and NTNU.

Procedures

Figure 7. Study 3 Experiment Procedure



Mood Induction

After reading two news, subjects were given four parts of questions to make sure they are in neutral mood. Including a self-rated mood scale as a manipulation check on 7-point scale ranging from in bad mood（1）to in good mood（7）; from very unhappy （1）to very happy（7）; from very sad to not sad（7）,an open-ended question for reason of mood state and understanding of two news as a manipulation check on 7-point scale.

Apart from manipulation of neutral mood, the other procedures and measures for questions are identical to study1.

RESULTS FOR STUDY3

Manipulation Check-Mood

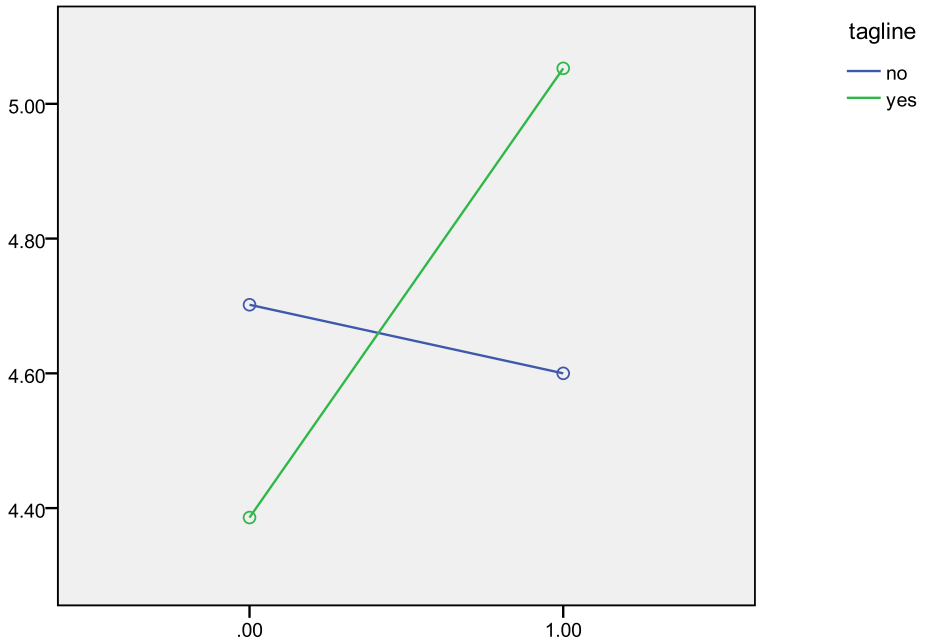
Negative mood was successfully induced after reading the two news. On three

7-point scales, the average mood manipulated in the study was significantly higher than the scale midpoint, 4 ($M=4.684$, $t(76)= 5.341$, $p<0.01$, $\alpha=0.863$).The reason may come from the time we collected sample is the ending of participants' examination. We compared the mood after reading articles in study1 by using LSD, the results showed that there are much difference between study1 and study3($P<0.05$).Though mean of neutral mood is higher than 4,the mean is significantly less than good mood. In addition, in the 2 x 2 ANOVA, mood manipulation showed no significant effect in both attributes and mood bias awareness.

Table 15. 2x2 ANOVA, DV: mood manipulation (Study3)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Bias Awareness (tagline)	0.09	1	0.09	0.72	0.789
Utility	1.535	1	1.535	1.224	0.272
Tagline*Utility	2.84	1	2.84	2.264	0.137
Error	91.56	73	0.932		

Figure8 :Graph for mood after reading two news (Study 3)



Hedonic Performance **Utilitarian Performance**

Manipulation Check- Consideration

A question concerning the consideration when evaluating the target product. The mean of this study for utilitarian and hedonic attributes are 4.625 and 3.9487 respectively. As the results of study1, though the result isn't identical as we expected, those answers by participants may influenced by their general judgment of MP3 products.

Table 16. Mean of Consideration (Study3)

Utility	Mean	Sd. Deviation	N
Hedonic	3.9487	1.80567	39
Utilitarian	4.6250	1.54733	40
Total	4.2911	1.70333	79

Manipulation Check-Involvement

Adopted from previous successful studies, the manipulation of involvement toward the target advertisement in 4 conditions were the same and make up of three dimensions to form involvement indexes (α=0.933). The results were then ran through one-sample t-test and compared to 4 (M=4.3586, t (78) = 2.421, P<0.05), the middle point of the scale. The data showed that the involvement of participants is significantly higher than 4,thus,we confirm that the overall involvement is as we expected.

Manipulation Check-Argument Quality

A question is relevant to the persuasion of the advertisements was asked and submitted to the ANOVA and one-sample t-test. Based on the results, the argument quality was low for the participants (M=3.0633, t(78) = -6.488, p<0.05, α=0.865), neither main effect nor interaction effect was significant. Thus, it can be confirm that persuasiveness did not influenced by utility and tagline.

Manipulation Check Mood change

We check the mood which is concerning the mood of participants after they evaluated the target product to confirm the mood change. The results were then ran through one-sample t-test and compared to 4 (M=4.2222, t(77) = 1.89, p=0.063, α=o.885), the middle point of the scale. The results revealed that the mood of participants after evaluating the target product is not significantly different from neutral mood. The data can be confirm that the mood change of participants is as we expected.

Target attitude

H3-1 and H3-2 were tested using ANOVA to investigate the relation between tagline and utility. Consistent with the hypotheses, the interaction was found between tagline and utility is not significant (F(1,75)=0.031,P=0.861) (see Table17).The results revealed that participants with neutral mood would not correct their judgment even if they receive tagline. That's because there aren't any change of mood, the mood factor is not a bias for participants.

Similarly, the simple main effect for utilitarian is not significant (F(1,75)=0.93 ,P=0.338) (see Table19).The results indicate that there are no difference when people evaluate either utilitarian or hedonic performance. Supportive of H3-1 and H3-2.

Table17. 2x2 ANOVA, DV: Target ad attitude (Study3)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Bias Awareness (tagline)	2.045	1	2.045	1.389	.242
Utility	.153	1	.153	.104	.748
Tagline*Utility	.046	1	.046	.031	.861
Error	110.423	75	1.472		

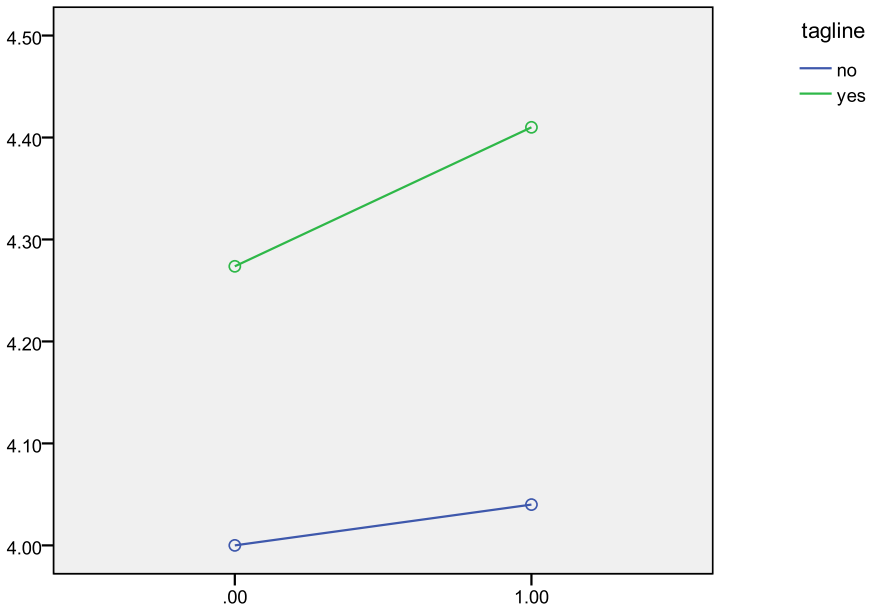
Table 18. Mean for target ad attitude (Study3)

Hedonic/Utilitarian	Bias Reminder	Mean	N	Std. Deviation
Hedonic	No tagline	4.0000	20	1.10311
	Tagline	4.2737	19	1.26528
	Total	4.1333	39	1.17727
Utilitarian	No tagline	4.0400	20	1.08696
	Tagline	4.4100	20	1.37722
	Total	4.2250	40	1.23885

Table 19. Simple main effect for Utilitarian and Hedonic (Study3)

Hedonic/Utilitarian		Sum of Squares	df	Mean Square	F	Sig.
Hedonic	Contrast	0.730	1	0.730	0.496	0.484
	Error	110.423	75	1.472		
Utilitarian	Contrast	1.369	1	1.369	0.930	0.338
	Error	110.423	75	1.472		

Figure9 :Graph for Attitude (Study 3)



Hedonic Performance **Utilitarian Performance**

DISCUSSION FOR STUDY3

Study 3 was designed to be a control group. The results for study 3 just as we expected. Consistent with the theory, people would not correct if they didn't sense any bias. Compared to study1 and study2,there are significant difference of judgment for utilitarian evaluation when participants who are in good and bad mood. Specifically, the direction of correction in study 1 and study 2 are opposite to participants' change in mood. The results also can be found that the effect of mood change is more than the shift of mood. But the participants in study 3 would not correct their evaluation of the target product.

We summarize that mood factor is an important reason for people to correct by the comparison of three studies.

MANAGERIAL IMPLICATIONS

As a marketer who want to transfer message to customers effectively have to understand psychology of consumer, this study investigated that people who sense mood bias when evaluating utilitarian performance will correct their judgment. Therefore, if marketers who are going to market a product which was focus on its utilitarian performance, they should pay attention to the reaction of customers and marketing strategy to avoid the bias perception by customers. Besides ,the results of this study showed that people would correct their judgment to the opposite direction of the mood change. This case indicate that if marketers transfer the message of utilitarian products to a consumer who are in good mood ,they should try not to remind the consumer of mood bias to prevent judgment of the consumer from being corrected downward.

As consumers who tend to form a proper decision to buy a product without regrets, we should be aware of the bias to avoid wrong buying decision. This study showed that there many marketing strategies tend to avoid the correction by consumers to persuade customers to buy a product. This study interpret the relation between attributes and mood factor which can be implemented in the market to be a effective strategy for companies.

LIMITATION AND FUTURE RESEARCH

There are several limitations are as follows:

1.Manipulation of mood is not easy to proceed because we can't control the original mood state of participants. Thus, we may fail to manipulate mood if participants' mood state are influenced by other incontrollable factors.

2.It's hard to manipulate to high involvement because of the different personal condition of participants. Future study should try to improve the involvement by other ways.

The three studies also raise several issues relevant to further research on correction of mood bias. First, this study use tagline as a mood reminder to heighten the effect of mood bias. For participants who are not read target carefully may ignore the tagline. Future study can remind the participants by using other effective cue to avoid the question.

Second, future can add the control group of low involvement to be a comparison of high involvement.

Third, the questions for detection of mood bias by participants are not be proven successfully may result from participant who didn't detect the mood bias. Future can focus on that question carefully and make a revision of the question.

Fourth, the timing for collection of sample in this study are not proper to manipulate the participants' mood and lead to failure on manipulation of neutral mood , future study can pay more attention to the situation of participants.

Fifth, to compare the effect of correction between study2 and study3 more precisely, future can conduct a new experiment which add crossword puzzle in the neutral mood study to be a comparison to study2.

Finally, this study discussed the bias factor which can affect the direction of judgmental correction. Future study can examine other factors which can cause the correction by people.

REFERENCE

Adaval, Rashmi (2001), "Sometimes It Just Feels Right: The Differential Weighting of Affect-Consistent and Affect-Inconsistent Product Information," *Journal of Consumer Research,* 28 (June), 1-17.

Baba, Shiv and Alexander Fedorikhin (1999), "Heart and Mind in Conflict: the Interplay of Affect and Cognition in Consumer Decision Making," *Journal of Consumer Research,*Vol. 26, No. 3, 278-292.

Barry, J. Babin, William R. Darden and Mitch Griffin (1994), "Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value," *Journal of Consumer Research,*Vol. 20, No. 4 (March), 644-656.

Batra, Rajeev and Olli T. Ahtola (1991), "Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes," *Marketing Letters*. 2 (April), 159-170.

Bazerman, Max H., Ann E. Tenbrunsel and Kimberly A. Wade-Benzoni (1998), "Negotiating with Yourself and Losing: Understanding and Managing Conflicting Internal Preferences," *Academy of Management Review,* 23, 225-241.

Berkowitz, Leonard (1983), "Aversively Stimulated Aggression: Some Parallels and Differences in Research with Animals and Humans," *American Psychologist,* 38,1135-1144.

Berkowitz, Leonard and Bartholomeu T. Troccoli (1990), "Feelings, Direction of Attention,and Expressed Evaluations of Others," *Cognition and Emotion*, 4, 305-25.Bless, Herbert, Diane M. Mackie, and Norbert Schwarz (1992), "Mood Effects on Attitude Judgments: Independent Effects of Mood before and after Message Elaboration,"*Journal of Personality and Social Psychology*, 63 (4), 585–95.

Bower, Gordon H. (1981), "Mood and Memory," *American Psychologist*, 36, 129-148.

Bower, Gordon and Paul Cohen (1982), "Emotional Influences in Memory and Thinking:Data and Theory," in M. Clark and S. Fiske (eds.), *Affect and Cognition: The 17thAnnual Carnegie Symposium on Cognition*, Hillsdale, NJ: Erlbaum.

Cacioppo, John T., Richard. E. Petty, and Katherine Morris (1983), "Effects of Need forCognition on Message Evaluation, Recall, and Persuasion," *Journal of Personality and Social Psychology*, 45, 805-818.

Carlson, Michael and Norman Miller (1987), "Explanation of the Relation between Negative Mood and Helping," *Psychological Bulletin,* 102, 91–108.63

Clark, M. S. and Alice M. Isen (1982), "Toward Understanding the Relationship between Feeling States and Social Behavior," In A. H. Hastorf & A. M. Isen (Eds.), *Cognitive Social Psychology,* Elsevier: New York, 73-108.

Crowley, Ayn E., Eric Spangenberg and Kevin R. Hughes (1992), "Measuring the Hedonic and Utilitarian Dimensions of Attitudes toward Product Categories," *Marketing Letters*. 3 (3). 239-49.

Dhar, Ravi and Klaus Wertenbroch (2000), "Consumer Choice between Hedonic and Utilitarian Goods," *Journal of Marketing Research*, Vol. 37, No.1 (Feb.), 60-71.

Finman, Rona and Leonard Berkowitz (1989), "Some Factors Influencing the Effect of Depressed Mood on Anger and Overt Hostility Toward Another," *Journal of Research in Personality,* 23, 70-84.

Forgas, Joseph. P. (1992), "Affect in Social Judgments and Decisions: A Multiprocess Model," *Advances in Experimental Social Psychology*, Vol. 25. 227.

Forgas, Joseph. P. (1995a), "Mood and Judgment: The Affect Infusion Model (AIM),"Psychology Bulletin, Vol. 117(Jan), 39-66.

Gorn, Gerald J., Marvin E Goldberg and Kunal Basu (1993), "Mood, Awareness, and Product Evaluation," *Journal of Consumer Psychology*, Vol. 2, No. 3, 237-256.

Hirschman, Elizabeth C. and Morris B. Holbrook (1982), "Hedonic Consumption: Emerging Concepts Methods, and Propositions," *Journal of Marketing*, 46 (Summer),92-101

Isen, Alice M. (1984), "The Influence of Positive Affect on Decision Making and Cognitive Organization," *Advances in Consumer Research,* Vol. 11, 534-537.

Isen, Alice M. (1993), "Positive Affect and Decision Making," In M. Lewis and J.M. Haviland (Eds.), Handbook of Emotions (pp. 261-277), New York/ London: Guilford Press, xiii, 653.

Irwin, Julie R. and Rajagopal Raghunathan (2001), "Walking the Hedonic Product Treadmill: Default Contrast and Mood-Based Assimilation in Judgments of Predicted Happiness with a Target Product," *Journal of Consumer Research*, Vol. 28 (3),355-368

Lambert, Alan J., Saera R. Khan, Brian A. Lickel and Katja Fricke (1997), "Mood and theCorrection of Positive versus Negative Stereotypes," *Journal of Personality and Social Psychology*, Vol. 72 (May), 1002-1016

Lin, Pei Y. (2011), "Correction for Positive Mood Bias in Product Judgment: Hedonic vs.Utilitarian based Product Attitude," *Unpublished master's thesis*, National Taiwan University, Taiwan.

Lingle, John H., Nehemia Geva, Thomas M. Ostrom and Michael R. Leippe (1979),

"Thematic effects of Person Judgments on Impression Organization," *Journal of Personality and Social Psychology,* Vol. 37(5), 674-687.

Martin, Leonard L. (1986), "Set/Reset: Use and Disuse of Concepts in Impression Formation," *Journal of Personality and Social Psychology*, 51 (September), 493–504.

Martin, Leonard L., John J. Seta, and Rick A. Crelia (1990), "Assimilation and Contrast as a Function of People's Willingness and Ability to Expend Effort in Forming anImpression," *Journal of Personality and Social Psychology*, 59 (January), 27-37.

Mayer, John D., Yvonne N. Gaschke, Debra L. Braverman and Temperance W. Evans (1992). "Mood-Congruent Judgment is a General effect," *Journal of personality and Social Psychology*, 63, 119-132.

Petty, Richard. E. and John T. Cacioppo (1984), "The Effects of Involvement on Responses to Argument Quantity and Quality: Central and Peripheral Routes to Persuasion,"*Journal of Personality and Social Psychology*, 46, 69-81.

Petty, Richard. E. and John T. Cacioppo (1986b), "The Elaboration Likelihood Model of Persuasion," In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology,*Vol. 19, 123-205, San Diego, CA: Academic Press.

Pham, Michel T. (1998), "Representativeness, Relevance and the Use of Feelings in Decision Making," *Journal of Consumer Research,* 25 (September), 144-60.

Rajeev, Batra and Douglas M. Stayman (1990), "The Role of Mood in Advertising Effectiveness", *Journal of Consumer Research*, Vol. 17, No. 2, 203-214.

Schwarz, Norbert (1990), "Feelings as Information: Informational and Motivational Functions of Affective States," In E.T. Higgins and R. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior,* Vol. 2, 527-561, NewYork: Guilford Press.

Schwarz, Norbert (1992), "Assimilation and Contrast Effects in Attitude Measurement: An Inclusion/Exclusion Model," *Advances in Consumer Research,* Vol. 19, 72.65

Schwarz, Norbert and Gerald L. Clore (1983), "Mood, Misattribution, and Judgments ofWell Being: Informative and Directive Functions of Affective States," *Journal of Personality and Social Psychology*, 45 (September), 513–23.

Schwarz, Norbert and Gerald L. Clore (1988), "How Do I Feel about It? Informative Functions of Affective States," in *Affect, Cognition, and Social Behavior*, ed. Klaus Fiedler and Joseph Forgas, Toronto: Hofgrefe International, 44–62.

Vaughn, Richard (1986), "How Advertising Works: A Planning Model Revisited," *Journal of Advertising Research*, February/March, 57-66.

Voss, Kevin E., Eric R. Spangenherg and Bianca Grohmann (2003), "Measuring the

Hedonic and Utilitarian Dimensions of Consumer Attitude," *Journal of Marketing Research,* 40 (August), 310-320.

Wegener, Duane T. (1994), "The Flexible Correction Model: Using Naïve Theory of Bias to Correct Assessments of Targets.*" Unpublished doctoral dissertation,* Ohio State University, Columbus.

Wegener, Duane T. and Richard E. Petty (1995), "Flexible Correction Process in SocialJudgment: The Role of Naïve Theories in Corrections for Perceived Bias," *Journal of Personality and Social Psychology*, 68. No. 1 (Jan), 36-51.

Wegener, Duane T. and Richard E. Petty (1997), "The Flexible Correction Model: The Role of Naïve Theories of Bias in Bias Correction," In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology*, Vol. 29. 141-208, Mahwah, NJ: Lawrence Erlbaum Associates

Wegener, Duane T. and Richard E. Petty (1994), "Mood Management across Affective States: The Hedonic Contingency Hypothesis," *Journal of Personality and Social Psychology*, Vol. 66(6), 1034-1048.

Wegener, Duane T., Richard E. Petty and Stephen M. Smith (1995), "Positive Mood Can Increase or Decrease Message Scrutiny: The Hedonic Contingency View of Mood and Message Processing," *Journal of Personality and Social Psychology*, 69 (July),5–15.

Wyland, Carrie L. and Joseph P. Forgas (2007), "On Bad Mood and White Bears: The Effects of Mood State on Ability to Suppress Unwanted Thoughts," *Cognition and Emotion*, Vol. 21, Issue 7, 1513-1524

Yi, Youjae (1990), "The Effects of Contextual Priming in Print Advertisements," *Journal of Consumer Research,* 17 (September), 215-22.