

國立交通大學
運輸科技與管理學系碩士班

碩士論文

擊退產品功能疲勞症：心理模擬對消費者偏好
一致性與購買意圖之影響

Defeating Feature Fatigue:
Effects of Mental Simulation on Consumer Preference
Consistency and Purchase Intention



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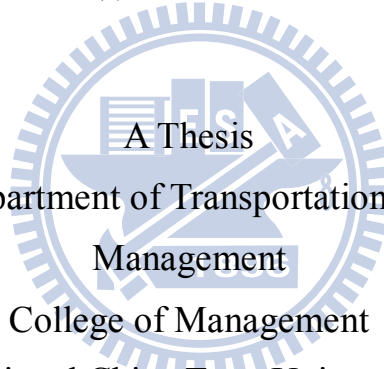
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摘要

企業經常以添加很多功能在某一產品上的方式來增強產品的價值和產品差異化。然而，當消費者試用產品的時候，過多的產品功能不僅意味著該產品可能具有較強的性能，同時也增加了消費者要學習和使用該產品的困難度。這樣的情況將引發所謂的「產品功能疲勞症」，使得消費者轉而偏好只有基本功能但使用較為簡單的產品。這將與企業原本想要藉由附加許多功能來提升消費者對於多功能產品購買意願的原意背道而馳。為了解決這個問題，本研究提出心理模擬的機制來改變消費者在試用前後以產品性能或產品易用性來評估產品的主要權重。為了驗證本研究推導出來的三組假設，本研究先對相關構念發展量表問卷，再使用情境設計，設計了三種試用情境：自然情境，程序情境，結果情境。在對 150 位受測者施測問卷後，結果發現實證結果支持本研究的假設推論。結果顯示心理模擬是讓消費者在試用前後的偏好趨於一致，以及增加他們對於多功能產品購買意願的有效方式。本研究的結果亦顯示「對消費者提前告知多功能產品的缺點未必是一件壞事。」對於消費者來說，如果在試用前讓他們了解到功能越多的產品越可能提高學習和使用這個產品的難度，能夠提供一個心理上的預防機制去減緩消費者在之後試用時可能引起的負面反應。此外，如果消費者是在試用之後才了解到多功能產品亦可能提高學習和使用這個產品的難度，仍可以藉由讓消費者再次把評估產品的主要權重放在產品性能上，讓他們把注意力再次放在該產品吸引人的眾多功能上。最後，本研究根據實驗之結果，提出相關管理意涵，並對後續研究提出若干建議。

關鍵字：心理構念、心理模擬、產品性能、產品易用性、偏好一致性

Defeating Feature Fatigue: Effects of Mental Simulation on Consumer Preference Consistency and Purchase Intention

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Abstract

Firms often try to enhance and differentiate their products by increasing the number of product features. However, when consumers engage in a product trial, “too many” features not only means the higher capabilities, but also represent the increasing difficulty of learning and using a product. Such situation would further evoke so-called “feature fatigue” and alter consumers’ preference toward simpler products that are easier to use. It may run counter with firms’ desire to increase consumers’ purchase intention for high capability/low usability products. To deal with the problem, we proposed the mechanism of mental simulation to shift relative weights consumers give to product capability and usability in product evaluations before or after a product trial. The results support our proposition that such ways are useful to shift consumer’ preferences and increase their purchase intentions. The results also suggest that “facing the shortcomings in advance is not necessarily a bad thing.” It can provide a precaution for consumers to attenuate negative reactions in response to feature fatigue. Furthermore, even if consumers learn about the negative effects of too many features after a product trial, this learning may be forgotten when product capability again becomes the key driver of evaluations.

Key words: mental construal, mental simulation, product capability, product usability, preference consistency

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Table of Contents

Chinese Abstract.....	I
English Abstract.....	II
Acknowledgements.....	III
Table of Contents.....	IV
List of Figures	V
List of Tables.....	VI
Appendix	VI
1. Introduction	1
2. Literature Review	4
2.1 Construal Level Theory (CLT).....	4
2.2 Product Trials.....	6
2.2.1 Consumers' Product Experiences.....	6
2.2.2 The Advantages of Product Trials	7
2.2.3 Preference Inconsistency Before and After a Product Trial.....	9
2.3 Mental Simulation.....	10
2.4 Literature Critique.....	12
3. Research Methods and Hypotheses.....	13
3.1 Research Framework.....	13
3.2 Research Hypotheses.....	14
3.2.1 The Relative Weights that Consumers Give to Evaluate Products Before and After Product Trials.....	14
3.2.2 The Effects of Mental Simulation on Consumers' Preference Consistency Before and After Product Trials	16
3.3 Experimental Design	18
3.3.1 The Scenario Design of Natural Preference Condition	19
3.3.2 The Scenario Design of Process Simulation Condition.....	19
3.3.3 The Scenario Design of Outcome Simulation Condition	20
3.4 Operation Definition and Measurement of Variables.....	20
3.4.1 Operation Definition.....	20
3.4.2 Measurement of Variables	20
4. Results and Analyses.....	22
4.1 Results of Pretest.....	22
4.2 Formal Investigation	22
4.2.1 Subjects and Data Structure	22
4.2.2 Reliability Analysis.....	23
4.2.3 Manipulation Checks	23

4.3 Hypotheses Test	24
4.3.1 Tests of H1a, H1b in Natural Preferences Scenario	25
4.3.2 Tests of H2a, H2b, H2c in Process Simulation Scenario.....	26
4.3.3 Tests of H3a, H3b, H3c in Outcome Simulation Scenario	29
4.3.4 Discussion	33
5. Discussion and Implication	35
5.1 Discussion.....	35
5.2 Managerial Implication	38
5.3 Limitations and Suggestions for Future Research	40
5.3.1 Limitations	40
5.3.2 Suggestions for Future Research.....	40
References	42
Resume.....	58

List of Figures

Figure 1 The Direct Experience Spectrum (Mooy and Robben 2002).....	7
Figure 2 The Figure of Research Framework	13
Figure 3 Means of Manipulation Check Items for Two Simulation Scenarios.....	24
Figure 4 Consumers' Evaluative Weight for Product in Natural Preference Scenario	25
Figure 5 Consumers' Evaluative Weight for Product in Natural vs. Process Simulation Scenarios before Trial.....	27
Figure 6 Consumers' Evaluative Weight for Product in Natural Preference Scenario (After Trial) vs. Process Simulation Scenario (Before Trial).	28
Figure 7 Consumer's Purchase Intention in Natural Preference Scenario vs. Process Simulation Scenario	29
Figure 8 Consumers' Evaluative Weight for Product in Natural vs. Outcome Simulation Scenario After Trial.	30
Figure 9 Consumers' Evaluative Weight for Product in Natural Preference Scenario (Before Trial) vs. Outcome Simulation Scenario (After Trial).....	32
Figure 10 Consumer's Purchase Intention in Natural Preference Scenario vs. Outcome Simulation Scenario	33

List of Tables

Table 1 The Three Experimental Scenarios	19
Table 2 Profile of the Respondents by Age, Gender, and Occupation.....	23
Table 3 Results of Manipulation Checks for Two Simulation Scenarios	24
Table 4 Results of Consumers' Evaluative Weight for Product in Natural Preference Scenario.....	25
Table 5 Results of Consumers' Evaluative Weight for Product in Natural vs. Process Simulation Scenario before Trial.....	26
Table 6 Results of Consumers' Evaluative Weight for Product in Natural Preference Scenario (After Trial) vs. Process Simulation Scenario (Before Trial)	28
Table 7 Results of Purchase Intention in Natural Preference Scenario vs. Process Simulation Scenario	29
Table 8 Results of Consumers' Evaluative Weight for Product in Natural vs. Outcome Simulation Scenarios After Trial	30
Table 9 Results of Consumers' Evaluative Weight for Product in Natural Preference Scenario (Before Trial) vs. Outcome Simulation Scenario (After Trial).....	31
Table 10 Results of Purchase Intention in Natural Preference Scenario vs. Outcome Simulation Scenario	33

Appendix

Appendix 1.1 The Product Advertisement of Tested Product (iPod touch).....	46
Appendix 1.2 The Product Manual for Process Simulation Manipulation.....	47
Appendix 1.3 The Functional Introductions for Outcome Simulation Manipulation	48
Appendix 2.1 Questionnaire for Natural Preference Scenario	49
Appendix 2.2 Questionnaire for Process Simulation Scenario	52
Appendix 2.3 Questionnaire for Outcome Simulation Scenario.....	55

Defeating Future Fatigue: Effects of Mental Simulation on Consumer Preference Consistency and Purchase Intention

1. Introduction

In order to stand out from numerous products, firms often try to enhance and differentiate their products by increasing the number of product features (Goldenberg et al. 2003; Mukherjee and Hoyer 2001; Nowlis and Simonson 1996). This classic marketing strategy not only helps firms gain competitive advantages (Porter 1985) by providing greater functionality for consumers, but also improve consumers' purchase intention by providing more sufficient reason for consumers to purchase a product (Brown and Carpenter 2000). However, this marketing strategy is not entirely perfect. "Too many" features sometimes may lead to feature fatigue (Thompson, Hamilton, and Rust 2005) for consumers after a product trial (Kempf and Smith 1998).

Why does feature fatigue easily occur for consumers after a product trial? Previous research suggested that consumers use different levels of mental construal (Liberman and Trope 1998) to evaluate product before and after using a product (Thompson, Hamilton and Rust 2005; Hamilton and Thompson 2007) is the key factor to cause feature fatigue after a product trial. Because consumers who tend to use an abstract, high-level construal (Liberman and Trope 1998) to evaluate products before trial will assign greater weight to product capability (i.e., the product's ability to perform desired functions, see Thompson, Hamilton and Rust 2005), in contrast, consumers who tend to use a concrete, low-level construal (Liberman and Trope

1998) to evaluate product after a product trial will place more weight on product usability (i.e., the difficulty of learning and using a product, see [Thompson, Hamilton and Rust 2005](#)). For consumers who will perceive greater capability as the number of feature increases ([Thompson, Hamilton and Rust 2005](#)) and put more weight on product capability before trial, products with many features as their selling points indeed can obtain higher purchase intentions. However, when consumers shift their evaluative weights toward product usability after a product trial, every additional feature not only means the adding in product capability, but also means that “one more thing to learn, one more thing to possibly misunderstand, and one more thing to search through when looking for the thing they want” ([Nielsen 1993](#)) to detract product usability. As a result, product with many features may become too much of a good thing and lead consumers to perceive feature fatigue. Simultaneously, such feature fatigue effect may further result in the reduction of their purchase intentions for product with many features and alter consumers’ preferences toward products with simpler functions but are easier to use. In such case, increasing the number of product features will be a useless marketing strategy. Thus, how to defeat feature fatigue effect is an important issue for firms in successfully implement their marketing strategy.

Even though prior research suggested that firms should consider having a larger number of more specialized products, each with a limited number of features ([Thompson, Hamilton and Rust 2005; Chernev 2007](#)) to prevent from feature fatigue. However, loading as many as possible functions into one product (e.g., smart phones etc.) still becomes prevalent and primary considerations for consumers to purchase the product, especially for products in electronics and information technology. In such case, developing more specialized products perhaps can diminish the

possibility to cause feature fatigue for consumers, but it also cannot increase their purchase intention.

In view of this, our research purpose is to provide applicable solutions for firms when they load many features into one product as their marketing strategy. Not only help to defeat feature fatigue, but also make consumers to keep consistent preference and increase their purchase intention. In this research, we respectively apply two kinds of mental simulation: process versus outcome simulation ([Taylor et al. 1998](#); [Escalas and Luce 2003, 2004](#); [Zhao, Hoeffler, and Zauberman 2007](#)) to defeat feature fatigue. Specifically, by manipulating process simulation to pre-remind consumers about the relationships between the increasing capability and difficulty of using the product before trial, or implementing outcome simulation to stimulate consumers to focus on desired functions after trial, we use such two ways to shift consumers' evaluative weight for products before or after a product trial. It not only helps to maintain consistent preferences before and after trial for consumers, but also increases their purchase intention after trial. Finally, we will provide managerial implications for marketing practitioners to improve the marketing strategy that loading many features into one product a better strategy.

2. Literature Review

2.1 Construal Level Theory (CLT)

Construal level theory (CLT) is an account of how psychological distance influences individuals' thoughts and behaviors (Trope, Liberman, and Wakslak 2007). CLT was initially concerned with the temporal dimension (Liberman and Trope 1998; Trope and Liberman 2000, 2003; Chandran and Menon 2004), which suggests that temporal distance is one important determinant of whether primary, essential characteristics or secondary, peripheral characteristics are used as the basis of evaluations for objects and events.

CLT was extended from the research on psychology of prediction. A considerable amount of research proposed that people's prediction about future situations was susceptible by "planning fallacy" (Buhler, Griffin, and Ross 1994; Kahneman and Lovallo 1991; Kahneman and Tversky 1979). Since feasibility information regarding the distant future is unavailable or unreliable and therefore cannot be taken into consideration (Liberman and Trope 1998), people fail to incorporate "non-schematic, mundane issues of availability of time and energy" (Sherman 1980), and tend to make predictions by constructing coherent scenarios of future task performance. It may lead people to underestimate task completion times. Furthermore, a similar idea has been proposed by researchers of people's "overconfidence" in predicting their own and others' behavior (Dunning et al. 1990; Griffin, Dunning, and Ross 1990; Griffin and Ross 1991; Vallone et al. 1990). These researchers suggested that people tend to base their predictions on abstract models that underestimate the effect of contextual influences on the target person. In short, these lines of research have shown that people are failed to incorporate

non-schematic aspects of reality into their construal of future situations.

On the basis of above-mentioned research, CLT proposed that people tend to use abstract, high-level construals when evaluating distant-future objects or events (e.g., 1 year from now) and concrete, low-level construals when evaluating near-future objects or events (e.g., tomorrow) (Liberman and Trope 1998). High-level construals are relatively simple and coherent representations. They consist of general, superordinate, and essential features of objects or events, whereas concrete, low-level construals include more specific, subordinate, and incidental features of object or events (Cantor and Mischel 1979; Rosch 1978; Sherman, Beike, and Ryalls 1999).

Liberman and Trope (1998) also applied CLT to the role of feasibility and desirability considerations in choice among near and distant future situations. The distinction between feasibility and desirability corresponds to the distinction between means and ends (Gollwitzer and Moskowitz 1996; Kruglanski 1996; Miller, Galanter, and Pribram 1960). Desirability refers to the valence of an action's end state, whereas feasibility refers to the ease or difficulty of reaching the end state. For example, desirability may reflect the value one attaches to getting a high grade in a course, whereas feasibility may reflect the amount of time and effort one has to invest to get a high grade. Owing to abstract construals shift people's attention toward desirability considerations, whereas concrete construals shift people's attention toward feasibility considerations (Liberman and Trope 1998), greater temporal distance would increase the importance of desirability and decrease the importance of feasibility considerations in choice. As a result, it would further lead to time-dependent changes in consumer preference for options.

Analogous to the effect of temporal distance, Thompson, Hamilton, and Rust

(2005) suggested that preferences formed based on indirect experiences with a product (e.g. reading a product description or advertisement) can differ systematically from preferences formed based on direct product experiences (e.g. product trials). Specifically, consumers tend to prefer products with many features and capabilities (high desirability/low feasibility) before using a product, but tending to prefer simpler products that are easier to use (high feasibility/low desirability) after using a product, an observation called “feature fatigue”. In the next section, we would review the literature on product trials and give a more detailed explanation for the reason that consumers experience feature fatigue and preference inconsistency after a product trial.

2.2 Product Trials

2.2.1 Consumers’ Product Experiences

Consumers’ experiences with a product vary in a spectrum from indirect to direct, depending on their level of interaction with a product (Mooy and Robben 2002). On this spectrum (see Figure 2.1), with increasing consumer interaction with the product, the use of relevant senses in product information processing increases. Specifically, at the indirect end of the spectrum (e.g. reading a product description), consumers use a single sense in processing product information; at the direct end of the spectrum (e.g. product trials), consumers have direct sensory contact and fully interact with the product. In the following articles, we would use product trials, the most direct form of product experience, to represent the example of direct experience with a product; and product advertisement, one of the most common form of product experience before consumers engage in a product trial, to represent the example of indirect experiences.

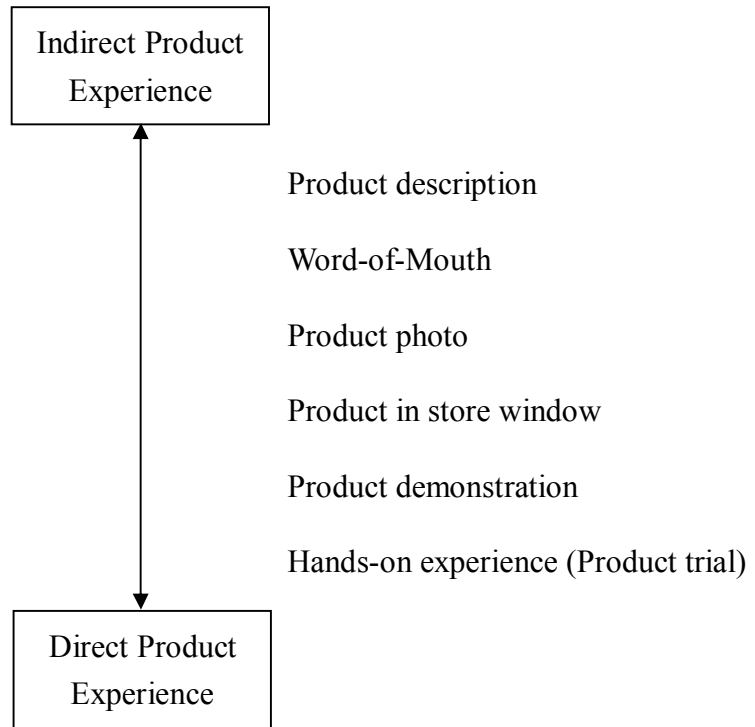


Figure 1 The Direct Experience Spectrum (Mooy and Robben 2002)

2.2.2 The Advantages of Product Trials

Product trials was defined as a consumer's first usage experience with a brand, which is a critical factor in determining brand beliefs, attitudes, and purchase intentions (Kempf and Smith 1998). Previous research proposed several advantages to provide product trials for both consumers and retailers.

First, product trials may reduce consumers' perceived risk for products (Roselius 1971). Because high levels of perceived risk may prevent consumers from buying the product, through a product trial, they have the opportunity to test hypotheses about how the products work (Hoch and Deighton 1989) to further reduce the level of perceived risk. Simultaneously, consumers can find out whether they will like the product enough to buy (Groot, Antonides, Read, and Raaij 2009).

Second, product trials may provide consumers with more credible information

than other indirect experiences with a product (Hamilton and Thompson 2007). Because information is accepted better when it is obtained from first-hand experience such as trial than when obtained by other indirect source such as advertising (Smith and Swinyard 1983; Wright and Lynch 1995; Fazio and Zanna 1981). Product trials would contribute to the formation of high-order beliefs and more enduring behavior (Kempf and Smith 1998). As a result, product trials have been shown to produce higher consistency between consumers' attitudes and behaviors (Smith and Swinyard 1983) and greater belief confidence (Smith and Swinyard 1988) than exposure to advertising.

The third advantage is related to loss aversion (Thaler 1980; Kahneman and Tversky 1979; Knetsch 2000). Since loss aversion can make people overvalue items in possession relative to items not in possession (Kahneman et al. 1990, 1991), an observation which Thaler (1980) labeled the "endowment effect". More importantly, similar processes can even take place without physical possession of objects (Strahilevitz and Loewenstein 1998; Antonides et al. 2006). Thus, on the basis that "giving up" can induce negative feelings (Hoch and Loewenstein 1991; Plous 1993; Smith and Nagle 1995), providing a product trial may not only lead people to overvalue the product, but also raise the probabilities for buying the product.

In short, product trial is beneficial for consumer because it may reduce perceived risk and provides more reliable information. On the other hand, it is also beneficial for retailers because it can lead to more positive attitudes, and a feeling of ownership among consumers.

2.2.3 Preference Inconsistency Before and After a Product Trial

Although there are several advantages to provide product trials, it will alter consumers' mental construals to evaluate products (Hamilton and Thompson 2007), further causing inconsistent preferences for products, and detracting consumers' purchase intention in some situations.

Owing to processing product information which is got from indirect experience (e.g., product advertisement) require consumers to manipulate and integrate stimulus information, it would trigger people to use a more abstract mental construal to evaluate the product (Liberman, Trope, and Stephan 2007; Hamilton and Thompson 2007). In contrast, direct experience (e.g., product trials) allow consumers to react to an immediate, vivid stimulus and provide greater sensory contact with the stimulus; it would induce a more concrete mental construal to evaluate a product. When consumers just exposure to a product advertisement, abstract construals make them to place more weight on the desirability of promised benefits (e.g., What can this product do for me?), consumers may tend to prefer products with many features that associate with higher capability. However, when consumers engage in a product trial, concrete construals make them to put more weight on feasibility. That is, consumers will consider their ability to use the product or benefits from these features, therefore tending to prefer products that are simpler in functions but easier to use. At this moment, every additional feature for consumers is "one more thing to learn, one more thing to possibly misunderstand, and one more thing to search through when looking for the thing they want" (Nielsen 1993). Thus, such "feature fatigue" effect may further result in the reduction of consumers' purchase intention for high capability but relatively low usability products.

In order to prevent consumers' inconsistent preferences and raise their purchase

intention for high capability/low usability products after a product trial, we try to alter consumers' product preferences by using the mechanism of mental simulation (Taylor et al. 1998; Escalas and Luce 2003, 2004; Zhao, Hoeffler, and Zauberan 2007) to shift their mental construals before or after a product trial. In the next section, we reviewed the literature on mental simulation and elaborate the mechanism we applied.

2.3 Mental Simulation

Mental simulation is the imitative mental representation of an event or a series of events (Taylor and Schneider 1989). Prior research has distinguished between process simulation (i.e., process-focused thoughts), which encourages people to imagine the step-by-step process of reaching a certain goal, and outcome simulation (i.e., outcome-focused thoughts), which encourages people to think about the desirable outcome of fulfilling the goal (Taylor et al. 1998; Escalas and Luce 2003, 2004).

In view of research on CLT (Trope and Liberman 2003) has found that people tend to focus on concrete aspects of near-future events and abstract aspects of distant-future events, this shift in consideration could further lead to temporally inconsistent preferences. Zhao, Hoeffler, and Zauberan (2007) combined ideas of process versus outcome simulation with ideas of levels of mental representation in their research to lead preference consistency on choice over time. They proposed that process simulation encourages a low-level mental construal, highlighting the concrete feasibility-related aspects of an event. In contrast, outcome simulation encourages a high-level mental construal, highlighting the abstract desirability-related aspects of an event. With this association between these two theories in mind, they argued that the pattern of preference inconsistency on choice

over time could be attenuated by regulating the levels of mental representations with either process simulation or outcome simulation. Similarly, [Hamilton and Thompson \(2007\)](#) also suggested that encouraging consumers to think concretely before they expose to a product advertisement could raise their overall evaluations, satisfaction, and purchase intentions for high feasibility products when consumers only expose to a product advertisement. Whereas asking consumers to choose products for others before a product trial, which heighten their tendency to construe things more abstractly ([Lieberman, Trope, and Stephan 2007](#)), could raise their satisfaction, and purchase intentions for high desirability products even when consumers engage in a product trial.

Even though these researches have proposed the ideas to alter consumers' preferences by using mental simulation to shift their mental construals in different situations, however, for many products, there is a very little probability for consumers who do not simultaneously expose to a product advertisement and engage in a product trial before they decide to buy a product. Not to mention the less natural ways to ask consumers to implement mental simulation even before exposing to the products. In this research, we tried to construct a more general experience with a product for consumers in reality, and a more natural way to provide mental simulation after consumers expose to the product. That is, we would try to implement a process simulation after consumers expose to a indirect experience (e.g. read a product advertisement) but before a product trial to shift their mental representation to evaluate the product from abstract construal to concrete construal, or implement an outcome simulation after consumers engage in a product trial to shift their mental representation from concrete construals to abstract construals.

2.4 Literature Critique

Thompson, Hamilton, and Rust (2005) proposed the cause of feature fatigue is from that consumers would use different levels of mental construal to evaluate products before trial and after using a product. For this reason, consumers tend to prefer high capability/low usability products before trial, whereas tend to prefer high usability/low capability products after trial. In Thompson, Hamilton, and Rust (2005)'s research, they only suggested firms to launch more specialized products with a limited number of features to prevent from feature fatigue. However, consumers like to load many functions into one product that gradually becomes a primary consideration for them whether buying electronic and technological products (e.g., smart phone). Thus, it's necessary for firms to deal with feature fatigue for products with many features as their selling point.

On the basis of feature fatigue that is induced by consumers who tend to use abstract construal and put more weight on product capability before trial, whereas tending to use concrete construal and put more weight on product usability after trial. We adopt Zhao, Hoeffler, and Zauberan (2007)'s idea in using mental simulation to alter consumers' mental construal and their evaluative weights for products. They proposed and showed that counter to people's natural tendencies, outcome simulation for near-future events and process simulation for distant-future events lead to preference consistency over time. However, unlike their research which primarily focused on consumers' choice for high desirability/low feasibility or high feasibility/low desirability options over time. We put more concentration on providing applicable solutions to defeat feature fatigue and finally raise consumers' purchase intention for high capability/low usability products. In the following section, we will develop the research framework.

3. Research Methods and Hypotheses

3.1 Research Framework

The purpose of this research is to apply the mechanism of mental simulation to defeat feature fatigue effect (Thompson, Hamilton, and Rust 2005) and raise their purchase intention after they engage in a product trial (see Figure 2).

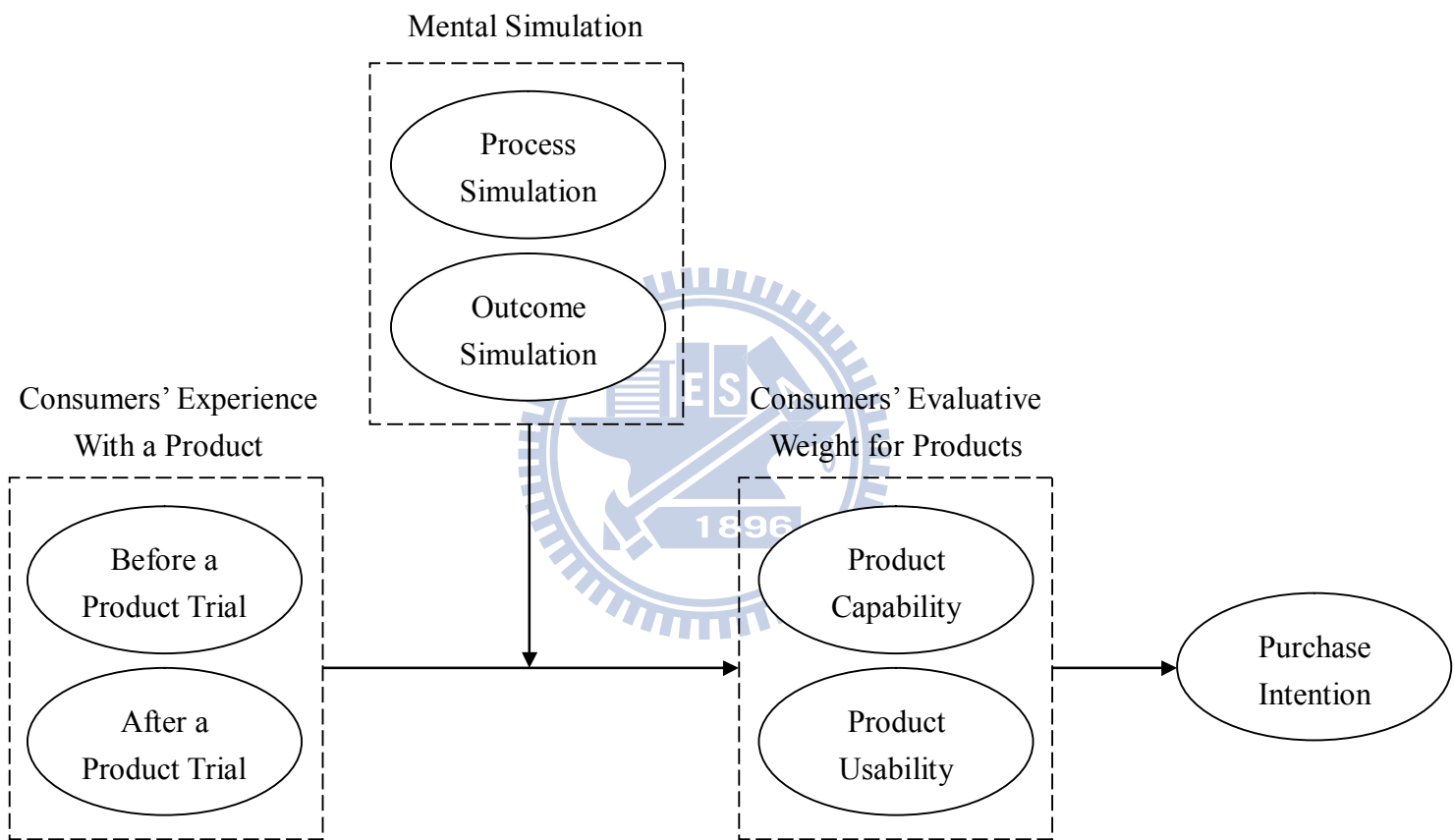


Figure 2 The Figure of Research Framework

Firstly, previous research suggested that consumers tend to prefer products with many features and capabilities before using a product, in contrast, they tend to prefer simpler products that are easier to use after using a product (Thompson, Hamilton, and Rust 2005). The phenomenon of preference inconsistency is due to consumers tend to use abstract construal and put more weight on product capability to evaluate

products before a product trial, but tending to use concrete construal and put more weight on product usability to evaluate products after a product trial. However, with the larger the number of features that is added to products, it not only means the product with higher capability but also means that the greater the difficulty of learning and using the product (Nielsen 1993). When consumers change their considerations and give more weight to product usability in product evaluations after trial, the product with many features will make consumers to perceive so-called feature fatigue. In that case, it may further lead consumers to lower their purchase intention for the product after trial.

In order to defeat consumers' perception of feature fatigue and raise consumers' purchase intention after a product trial. We combine ideas of levels of mental construal with ideas of mental simulation in this research. Through manipulating a process simulation before trial or an outcome simulation after trial, we not only test the possibility to alter importance of product capability and usability when consumers evaluate products before or after trial, but also verify the impacts of implementing mental simulation on consumers' purchase intentions after a product trial in the two situations. In the following section, we will develop research hypotheses on the basis of this research framework.

3.2 Research Hypotheses

3.2.1 The Relative Weights that Consumers Give to Evaluate Products Before and After Product Trials

Previous research suggested that capability and usability are the two major determinants when consumers evaluate their purchase of a product (McLaughlin and Skinner 2000; Mukherjee and Hoyer 2001; Nowlis and Simonson 1996; Thompson,

Hamilton, and Rust 2005). However, the relative weights that consumers assign to evaluate products may vary across situations.

Before engaging in product trials, consumers only interact with products through indirect experience, such as exposing to a product advertisement. Since indirect product experiences need consumers to manipulate and integrate stimulus information that is not immediately available to the senses, and processing these information usually requires abstraction (Liberman, Trope, and Stephan 2007), it would trigger consumers to use a more abstract construal to evaluate the product. In contrast, when consumers engage in product trials, such direct experience with products allow consumers to react to an immediate, vivid stimulus and provide greater sensory contact with the stimulus, it would induce a more concrete mental construal to evaluate a product. Furthermore, since abstract construals will shift consumers' attention toward desirability considerations (i.e. the value of an action's end state), whereas concrete construals will shift their attention toward feasibility considerations (i.e. the ease or difficulty of reaching the end state) (Liberman and Trope 1998). Therefore, consumers may tend to put more weight on the product's ability to perform desired functions (i.e. product capability) before a product trial, but tending to assign more weight to the difficulty of learning and using the product (i.e. product usability) after a product trial. On the basis of the above reasoning, we propose the following hypotheses:

H1a: Consumers would give more weight to product capability than to product usability in product evaluations before a product trial.

H1b: Consumers would give more weight to product usability than to product capability in product evaluations after a product trial.

3.2.2 The Effects of Mental Simulation on Consumers' Preference Consistency Before and After Product Trials

Since consumers usually perceive products with greater capability as the number of features increases (Thompson, Hamilton, and Rust 2005), products with many features will get a higher evaluation when consumers attach more importance on product capability before a product trial. However, when consumers engage in a product trial, concrete construals will alter their considerations toward their ability to use the product or benefits from these features. At this moment, every additional feature not only stands for the enhancement in product capability, but also means the increasing difficulty for consumers to learn and use a product (Wiklund 1994; Nielsen 1993). As a result, product with many features becomes too much of a good thing and leads consumers to perceive feature fatigue. It not only detracts consumers' purchase intention for the product, but also causes them tending to prefer other products with simpler functions that are easier to use. In order to attenuate the impact of feature fatigue on consumers' purchase intentions and preference consistency, we try to use the mechanism of mental simulation (Zhao, Hoeffler, and Zauberan 2007) to regulate the levels of mental construal before or after trial. In formulating our hypotheses, we compare the two types of simulation with the natural preference (i.e., no simulation) before or after a product trial.

For situations before a product trial, the indirect experience with a product would naturally evoke consumers to use abstract construals and put more weight on product capability, and product usability are neglected. Outcome simulation, which redundantly focuses on abstract, desirability-related considerations, may not be effective in shifting the weights for consumers in product evaluations. Whereas a process simulation that focuses on concrete, feasibility-related considerations could

shift consumers to put more weight on product usability, making them more consistent with preferences that naturally arise after trial.

Even if engaging a process simulation may raise consumers' tendency to prefer for product with simpler functions that are easier to use, however, the degree of reduction in purchase intention for products with many functions is slight. Owing to consumers evaluate products through the product information from indirect experiences (e.g. product advertisement) before a product trial. They would firstly receive the information about the advertised product which is equipped with many functions. Even if consumers change their considerations toward feasibility-related thoughts, compared with no simulation condition, to remind the connection between increasing the number of product features and the difficulty of using a product before trial can be a precaution for consumers. It may prevent from the direct impact of product features on usability to induce frustrated or dissatisfied (Thompson, Hamilton, and Rust 2005) when they engage in a product trial. It may further attenuate the effect of feature fatigue to detract consumers' purchase intention after trial. Thus, we propose the following hypotheses:

H2a: Consumers who engage in process simulation would give more weight to product usability than to product capability in product evaluation before trial.

H2b: Process simulation (before trial) is more likely to result in preference consistency.

H2c: Relative to no simulation, process simulation (before trial) is more likely to lead to higher level of purchase intention.

For situations after a product trial, concrete construals play a dominant role to make consumers put more weight on product usability when evaluating products, whereas abstract construals are neglected. Since outcome simulation could activate abstract construals and increase desirability-related considerations, outcome

simulation after trial may lead consumers to put more weight on product capability, making them more consistent with preferences that naturally arise before trial and attenuate the reduction in purchase intention. However, process simulation may not be effective in shifting the weights for consumers in product evaluation, because it redundantly focuses on the naturally evoked concrete, feasibility-related considerations. Thus, we propose the hypotheses:

H3a: Consumers who engage in outcome simulation would give more weight to product capability than to product usability in product evaluation after trial.

H3b: Outcome simulation (after trial) is more likely to result in preference consistency.

H3c: Relative to no simulation, outcome simulation (after trial) is more likely to lead to higher level of purchase intention.

3.3 Experimental Design

For the sake of being closer to the situations that consumers evaluate products in reality, we conduct 2 (product trial: before vs. after) x 3 (simulation: control vs. process vs. outcome) within-subjects design for three experimental scenarios: natural preference, process simulation, and outcome simulation (see Table 1). Each subject participated in both before and after a product trial conditions for one of the scenarios. To test our hypotheses, we compare consumers' ratings of capability and usability before/after a product trial, and their purchase intention after a product trial. iPod touch, a personal digital assistant (PDA), is the tested product of this study. Data are collected through survey instrument. When subjects finish filling out the surveys, they are given a gift as a return of the favor.

Table 1 The Three Experimental Scenarios

Scenario	Before Trial	After Trial
Natural Preference	No Simulation	No Simulation
Process Simulation	Process Simulation	No Simulation
Outcome Simulation	No Simulation	Outcome Simulation

3.3.1 The Scenario Design of Natural Preference Condition

In the before trial condition, we use product advertisement to represent consumers' indirect experiences in this study. Owing to descriptive action verb and adjective may interfere in consumers' mental representation to construe objects (Semin and Fiedler 1988), we design the advertisement with neutral words to describe the basic three features of iPod touch. In all the three scenarios, subjects firstly viewed the product advertisement of iPod touch (see Appendix 1.1), and rated the relative weights they assign on product capability or usability after exposing to the advertisement. Then, we asked subjects using iPod touch to play a shooting game. After completing the task, they rated the relative weights they assign on capability or usability again and measure their purchase intention for iPod touch.

3.3.2 The Scenario Design of Process Simulation Condition

To alter subjects toward feasibility-related considerations, we design a product manual which described six ways about how to use iPod touch (see Appendix 1.2). In the before trial condition, after subjects viewed the advertisement, we provided a manual and asked them to imagine the process of using iPod touch (Escalas and Luce 2003, 2004; Zhao, Hoeffler, and Zauberan 2007). Subjects rated the relative weights they assign on product capability or usability after exposing to the product

manual. Then, we asked subjects using iPod touch to play a shooting game. After completing the task, they rated the relative weights they assign on capability or usability again and measure their purchase intention for iPod touch.

3.3.3 The Scenario Design of Outcome Simulation Condition

To alter subjects toward abstract, desirability-related considerations, we design a more detailed introduction of product functions for iPod touch (see Appendix 1.3). In the before trial condition, the experimental process is identical with natural preference. However, after subjects perform the task, we provided the functional introductions and asked them to imagine the end benefit of using iPod touch (Escalas and Luce 2003, 2004; Zhao, Hoeffler, and Zauberman 2007). Subjects then rated the relative weights they assign on product capability or usability and their purchase intention for iPod touch.

3.4 Operation Definition and Measurement of Variables

3.4.1 Operation Definition

Consistent with the previous research, we refer to product capability as the product's ability to perform desired functions (Mukherjee and Hoyer 2001; Thompson, Hamilton, and Rust 2005), and refer product usability as the difficulty of learning and using the product (Chin, Diehl, and Norman 1988; Thompson, Hamilton and Rust 2005; Davis 1989; Adams, Nelson and Todd 1992). Purchase intention is defined as the likelihood that the buyer intends to purchase the product (Dodds, Monroe, and Grewal 1991).

3.4.2 Measurement of Variables

We reviewed relevant research (Davis 1989; Chin, Diehl, and Norman 1988) and use Osgood Semantic Differential 5-point Scale for three items to measure the

relative weights consumers give to product capability (endpoint of 5) and usability (endpoint of 1). Product capability items are modified from the research on product evaluation to measure perceived product capability and value inference (Mukherjee and Hoyer 2001; Thompson, Hamilton, and Rust 2005), whereas product usability items are modified from the research on product evaluation to measure perceived usability or perceived ease of use (Chin, Diehl, and Norman 1988; Thompson, Hamilton and Rust 2005; Davis 1989; Adams, Nelson and Todd 1992) to fit in into the study. On the other hand, we use Likert 5-point scale ranking from 1 (strongly disagree) to 5 (strongly agree) to measure purchase intention, 4 items are modified from the relevant research on purchase intention (Dodds, Monroe, and Grewal 1991; Grewal, Monroe, and Krishnan 1998; Wood and Moreau 2006). After the initial survey instrument is finished, all the items are reviewed by 1 professor and 2 Ph. D. candidates. Some modifications are made accordingly. The final survey instrument is in the Appendix 2.1, 2.2, 2.3.

Furthermore, to ensure that subjects performed the mental simulations, they were asked to answer two manipulation check items following the simulation exercise. The items are modified from the relevant research (Escalas and Luce 2003, 2004) to fit in into our study. One item assessed the degree to which their thoughts were focused on the process of using the product, all rated on a scale ranging from 1 (*not at all*) to 100 (*very much*): “While viewing the product manual, how much did you think about the difficulty of using iPod touch?”. The other item assessed the degree to which subjects’ thoughts focused on the outcome or end result of using the product rated on a scale ranging from 1 (*not at all*) to 100 (*very much*): “Please indicate how much you thought about the end benefits or results of iPod touch while you were viewing the functional introductions,”.

4. Results and Analyses

4.1 Results of Pretest

Considering that product trial refers to the first usage experience of a product, we selected subjects who do not have usage experience with iPod touch before to join our survey. The pretest was conducted with a sample of 30 subjects for natural preference condition, 20 subjects for process simulation condition, and 21 subjects for outcome simulation condition. Reliability tests were examined. Cronbach's α ranking from .784 (the relative weights consumers give to product capability and usability) to .870 (purchase intention), which implies good reliabilities.

4.2 Formal Investigation

4.2.1 Subjects and Data Structure

To fit into the target consumers of iPod touch, we mainly invite subjects who are 20~50 years old but do not have usage experience to join our survey. Subjects were randomly chosen at Taoyuan International Airport and Hsinchu train station. The data collection process lasts for 7 days. In total, 150 surveys are collected and used for analysis. In the 150 surveys, we respectively collect 50 surveys for the three scenarios.

Table 2 shows the information of the data structure. Of the sample, 52% were male and 48 % were female. Age of 20-29 stands for the highest portion (69.3%). 45.3 % are student and 34 % are office worker.

Table 2 Profile of the Respondents by Age, Gender, and Occupation

Characteristics	Number	Percent	Characteristics	Number	Percent
Age			Occupation		
19 and under	16	10.7%	Student	68	45.3%
20-29	104	69.3%	Professional	3	2%
30-39	26	17.3%	Army and Police	11	7.3%
40-49	4	2.7%	Office worker	51	34%
50-59	0	0%	Self-employed	4	2.7%
60 and above	0	0%	Housekeeper	2	1.3%
Gender			Others		
Male	78	52%		11	7.3%
Female	72	48%			

4.2.2 Reliability Analysis

The quality of the measurement is assessed on reliability. The level of internal consistency (reliability) in each variable is acceptable, with Cronbach's α score range from .829 (the relative weights consumers give to product capability and usability) to .846 (purchase intention), indicating good measurement reliabilities.

4.2.3 Manipulation Checks

As expected (see Table 3 and Figure 3), the presence of process simulation resulted in more agreement with the process-focused, manipulation-check measures. There was a significant difference in the scores for process-focused item in process simulation scenario ($M = 69.68$) and outcome simulation scenario ($M = 64.06$, $F = 6.498$, $p < .01$). The outcome simulation manipulation check also shows a significant difference in the scores for outcome-focused item in process simulation scenario ($M = 60.36$) and outcome simulation scenario ($M = 77.12$, $F = 10.040$, $p < .01$). Thus, in the process simulation scenario, subjects thought more about the process of using the iPod touch, whereas subjects who in the outcome simulation scenario thought more exclusively about the end result of using iPod touch. This pattern is consistent

with our general argument.

Table 3 Results of Manipulation Checks for Two Simulation Scenarios

Item	Scenario	N	Mean	Std Deviation	F	<i>p</i> -value (sig.)
Outcome-focused item	Process simulation	50	60.36	25.26	10.040	.000(***)
	Outcome simulation	50	77.12	16.47		
Process-focused item	Process simulation	50	69.68	21.03	6.498	.000(***)
	Outcome simulation	50	64.06	25.38		

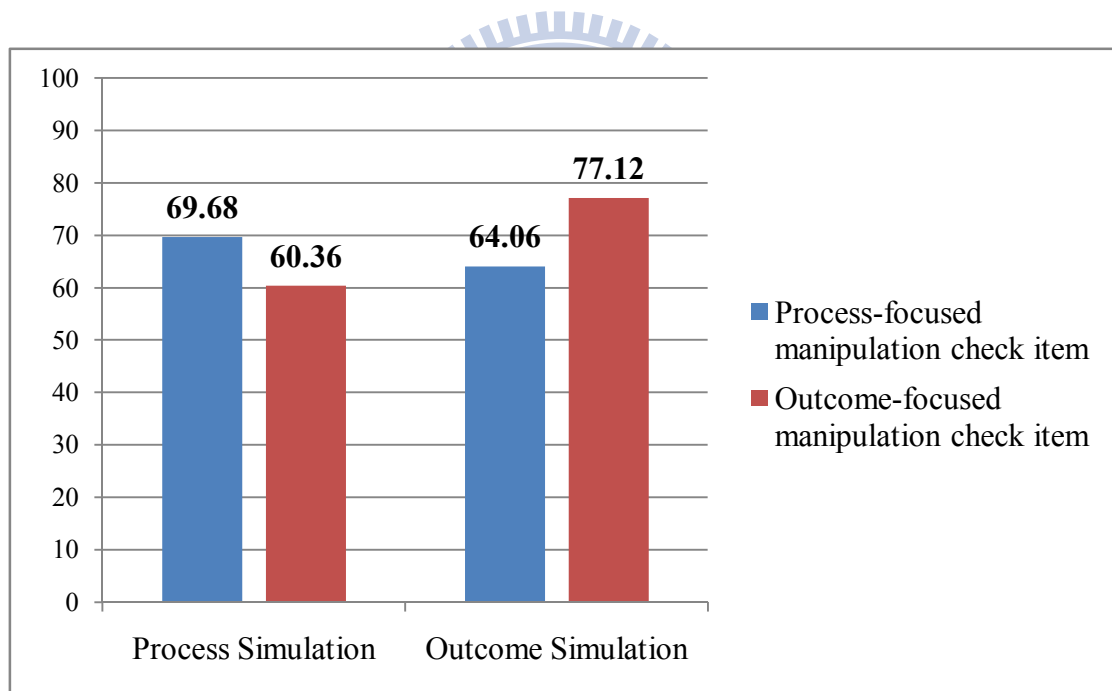


Figure 3 Means of Manipulation Check Items for Two Simulation Scenarios

4.3 Hypotheses Test

To verify our hypotheses, we respectively use paired-samples t tests and independent-samples t test to compare means and differences for three scenarios.

4.3.1 Tests of H1a, H1b in Natural Preferences Scenario

A paired-samples t test on the relative weights consumers naturally give to product capability and usability before or after a product trial showed a significant difference in the scores for before trial ($M = 3.66$, $SD = 1.09$) and after trial ($M = 3.00$, $SD = 1.29$) conditions; $t(49) = 4.423$, $p = .000$ (see Table 4). The results are consistent with H1a and H1b, indicating that subjects gave more weight to product capability before they engage in a product trial, whereas put more weight on product usability after a product trial (see Figure 4).

Table 4 Results of Consumers' Evaluative Weight for Product in Natural Preference Scenario

Natural Preference Scenario	N	Mean	Std. Deviation	t	df	p-value sig. (2-tailed)
Before trial	50	3.66	1.09	4.423	49	.000(***)
After trial	50	3.00	1.29			

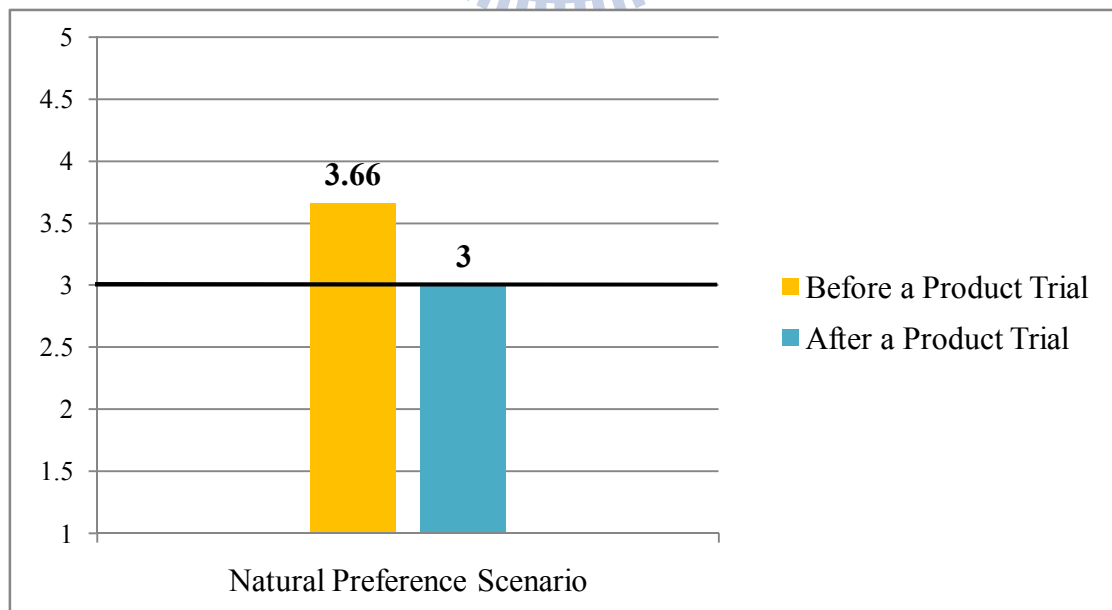


Figure 4 Consumers' Evaluative Weight for Product in Natural Preference Scenario

4.3.2 Tests of H2a, H2b, H2c in Process Simulation Scenario

H2a proposed that consumers who engage in a process simulation before trial would give more weight to product usability than to product capability on product evaluation. We ran an independent-samples t test on the consumers' evaluative weight for products before trial between natural preference and process simulation scenarios to test H2a. Firstly, the Levene's Test for Equality of Variances revealed the significant value is .213. The value greater than .05 means that the variability in the two scenarios is about the same. We further looked at the results of our t-test. These results showed a significant difference in the scores between natural preference (M = 3.66, SD = 1.09) and process simulation (M = 3.17, SD = 1.16) scenarios; $t(98) = 2.188$, $p = .031$ (see Table 5). The results indicated that subjects would put more weight on product usability when they engaged in a process simulation manipulation before trial (see Figure 5), in support of H2a.

Table 5 Results of Consumers' Evaluative Weight for Product in Natural vs. Process Simulation Scenario before Trial

Before Trial	N	Mean	Std. Deviation	t	df	<i>p</i> -value sig. (2-tailed)
Natural Preference Scenario	50	3.66	1.09	2.188	98	.031(**)
Process Simulation Scenario	50	3.17	1.16			

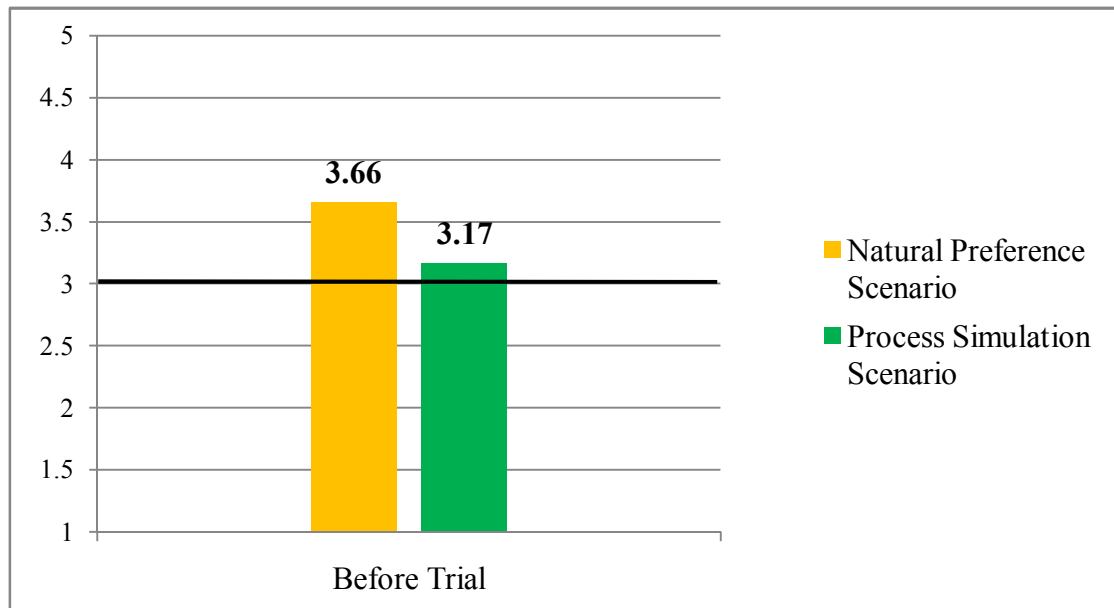


Figure 5 Consumers' Evaluative Weight for Product in Natural vs. Process Simulation Scenarios before Trial

In H2b, we predicted that participating in a process simulation before trial is more likely to lead preference consistency for consumers before and after a product trial. An independent-samples t test was implemented to compare the relative weights consumers give to product capability and usability between natural preference scenario (after trial) and process simulation scenario (before trial). The Levene's Test for Equality of Variances revealed the significant value is .348. It means that the variability in the two scenarios is not significantly different. Then, we compared the relative weights consumers give to product capability and usability between natural preference scenario (after trial) ($M = 3.00$, $SD = 1.29$) and process simulation scenario (before trial) ($M = 3.17$, $SD = 1.16$); $t(98) = -.677$, $p = .5$ (see Table 6). The results didn't indicate a significant difference in the two scenarios (see Figure 6), which is consistent with H2b.

Table 6 Results of Consumers' Evaluative Weight for Product in Natural Preference Scenario (After Trial) vs. Process Simulation Scenario (Before Trial)

	N	Mean	Std. Deviation	t	df	p-value sig. (2-tailed)
Natural Preference Scenario (After Trial)	50	3.00	1.29	-.677	98	.5 (n.s.)
Process Simulation Scenario (Before Trial)	50	3.17	1.16			

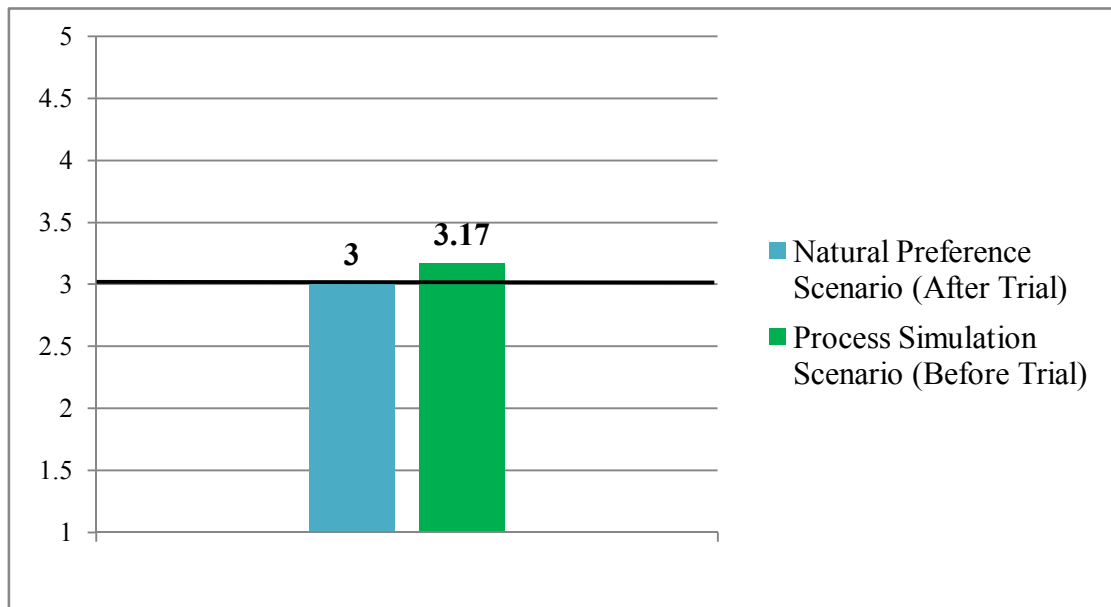


Figure 6 Consumers' Evaluative Weight for Product in Natural Preference Scenario (After Trial) vs. Process Simulation Scenario (Before Trial).

Furthermore, we ran an independent-samples t test to compare consumers' purchase intention between natural preference and process simulation scenarios. The Levene's Test for Equality of Variances revealed the significant value is .643. It means that the variability in the two scenarios is not significantly different. The results of our t-test also showed a significant difference in the scores between natural preference (M = 3.16, SD = 0.66) and process simulation (M = 3.37, SD =

0.61) scenarios; $t(98) = -1.688$, $p = .095$ (see Table 7). Consistent with H2c, process simulation (before trial) would lead to a higher purchase intention for consumers after they participate in a product trial (see Figure 7).

Table 7 Results of Purchase Intention in Natural Preference Scenario vs. Process Simulation Scenario

Purchase Intention	N	Mean	Std. Deviation	t	df	<i>p</i> -value sig. (2-tailed)
Natural Preference Scenario	50	3.16	.66	-1.688	98	.095 (*)
Process Simulation Scenario	50	3.37	.61			

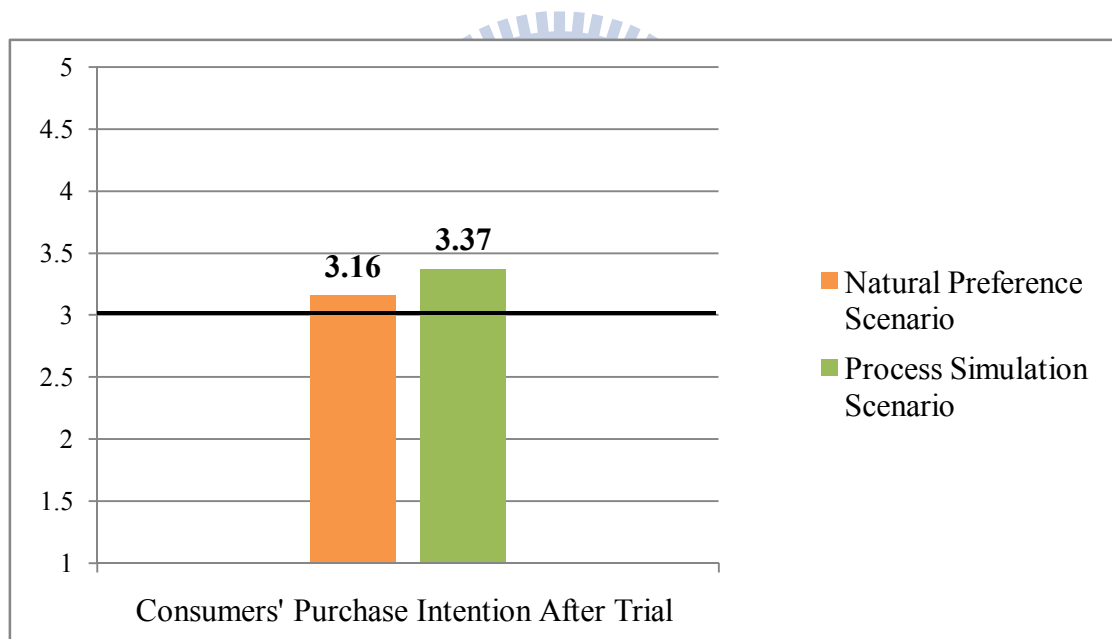


Figure 7 Consumer's Purchase Intention in Natural Preference Scenario vs. Process Simulation Scenario

4.3.3 Tests of H3a, H3b, H3c in Outcome Simulation Scenario

In H3a, we predicted that consumers who engage in an outcome simulation after trial would give more weight to product capability than to product usability on product evaluation. An independent-samples t test was implemented to test H3a. The

Levene's Test for Equality of Variances revealed the significant value is .070. The value greater than .05 means that the variability in your two conditions is about the same. Moreover, The relative weights consumers give to product capability and usability after a product trial showed a significant difference in the scores for natural preference (M = 3.00, SD = 1.29) and outcome simulation (M = 3.67, SD = 1.07) scenarios; $t(98) = -2.84$, $p = .005$ (see Table 8). The result indicated that subjects would put more weight on product capability when they engaged in an outcome simulation manipulation after trial (see Figure 8), in support of H3a.

Table 8 Results of Consumers' Evaluative Weight for Product in Natural vs. Outcome Simulation Scenarios After Trial

After Trial	N	Mean	Std. Deviation	t	df	p-value sig. (2-tailed)
Natural Preference Scenario	50	3.00	1.29	-2.84	98	.005(**)
Outcome Simulation Scenario	50	3.67	1.07			

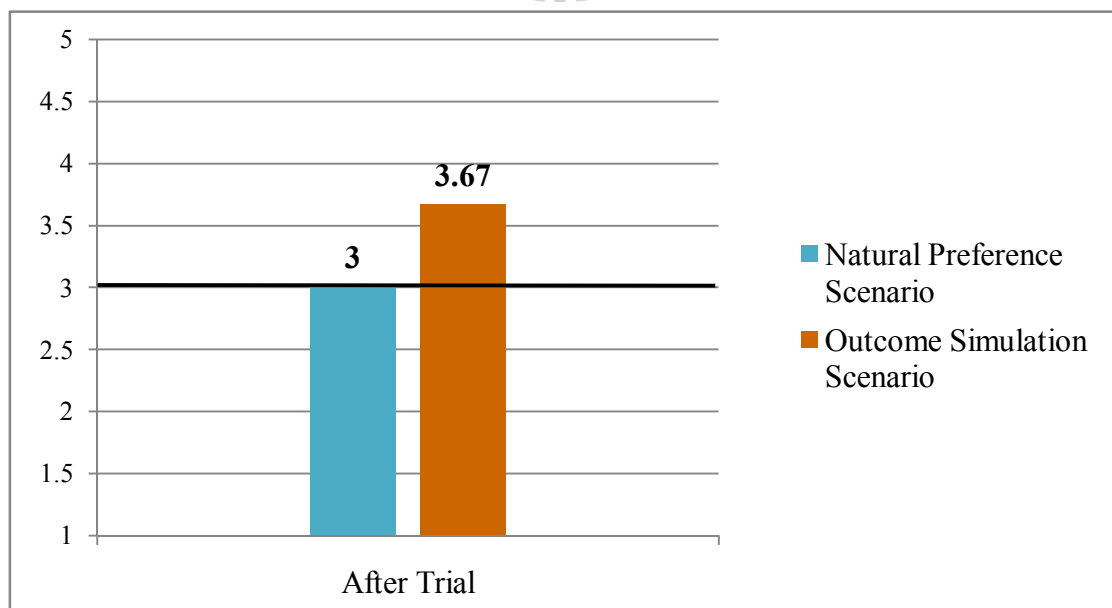


Figure 8 Consumers' Evaluative Weight for Product in Natural vs. Outcome Simulation Scenario After Trial.

H3b proposed that participating in an outcome simulation is more likely to lead preference consistency for consumers before and after a product trial. We also ran an independent-samples t test on the relative weights consumers give to product capability and usability between natural preference scenario (before trial) and outcome simulation scenario (after trial). The Levene's Test for Equality of Variances showed the significant value is .831. It means that the variability in the two scenarios is not significantly different. Then, we looked at the results of our t-test, the results didn't indicate a significant difference in the scores between the natural preference scenario (before trial) (M = 3.66, SD = 1.09) and outcome simulation scenario (after trial) (M = 3.67, SD = 1.07); $t(98) = -.061$, $p = .951$ (see Table 9 and Figure 9). This, the result supports H3b.

Table 9 Results of Consumers' Evaluative Weight for Product in Natural Preference Scenario (Before Trial) vs. Outcome Simulation Scenario (After Trial)

	N	Mean	Std. Deviation	t	df	p-value sig. (2-tailed)
Natural Preference Scenario (Before Trial)	50	3.66	1.09			
Outcome Simulation Scenario (After Trial)	50	3.67	1.07	-0.061	98	.951 (n.s.)

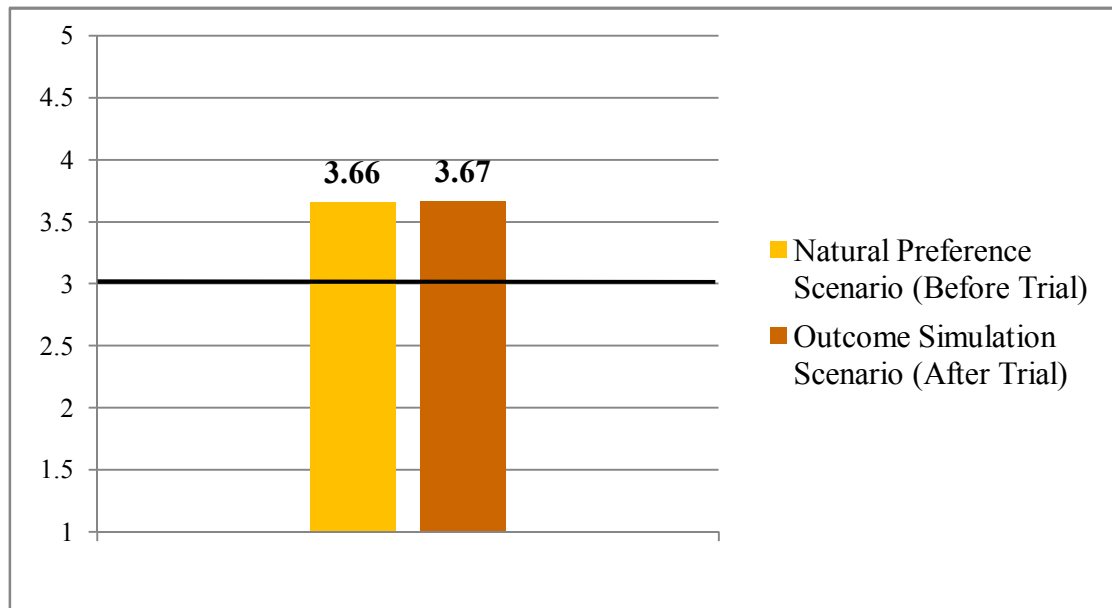


Figure 9 Consumers' Evaluative Weight for Product in Natural Preference Scenario (Before Trial) vs. Outcome Simulation Scenario (After Trial).

Lastly, an independent-samples t test was implemented to compare consumers' purchase intention between natural preference and outcome simulation scenarios. The Levene's Test for Equality of Variances showed the significant value is .934. It means that the variability in the two scenarios is not significantly different. The results of our t-test showed a significant difference in the scores between natural preference ($M = 3.16$, $SD = 0.66$) and outcome simulation ($M = 3.44$, $SD = 0.67$) scenarios; $t(98) = -2.317$, $p = .035$ (see Table 10). It indicates that consumers would increase their purchase intention for the product they participate in a trial when they engage in an outcome simulation manipulation after trial (see Figure 10), which is consistent with H3c.

Table 10 Results of Purchase Intention in Natural Preference Scenario vs. Outcome Simulation Scenario

Purchase Intention	N	Mean	Std. Deviation	t	df	p-value sig. (2-tailed)
Natural Preference Scenario	50	3.16	.66	-2.317	98	.035 (**)
Outcome Simulation Scenario	50	3.44	.67			

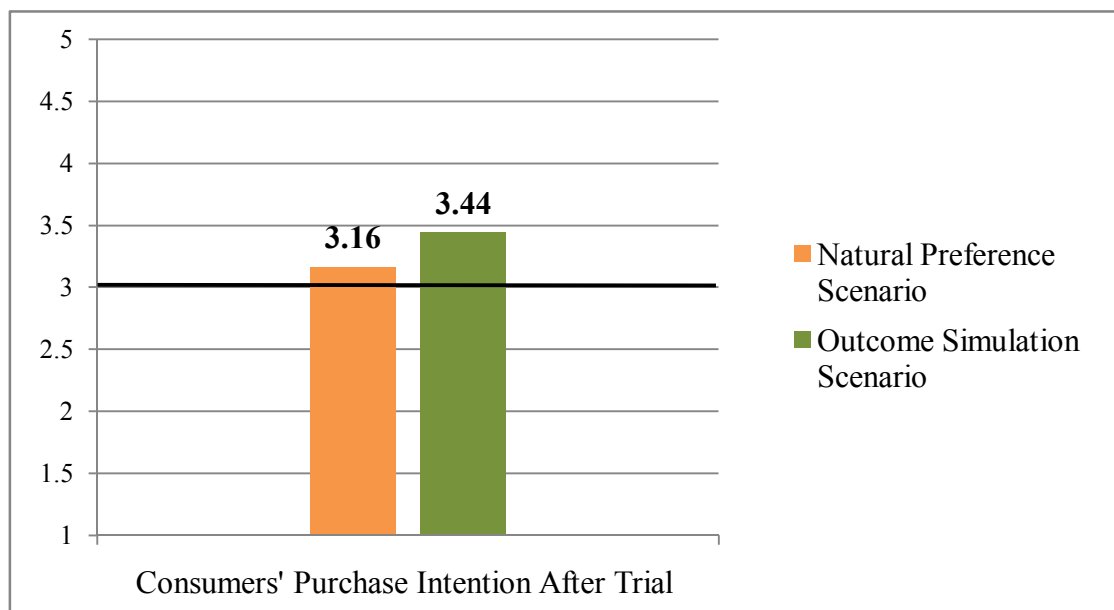


Figure 10 Consumer's Purchase Intention in Natural Preference Scenario vs. Outcome Simulation Scenario

4.3.4 Discussion

The results of our study firstly show that product trial could structurally changes consumers' preferences, supporting the existence of a feature fatigue effect. However, our findings also suggest that, although process simulation would alter consumers' considerations toward feasibility-related focus and put more weight on product usability before trial. The mechanism of process simulation still could help raise consumers' purchase intention for high capability/low usability product after

engaging in a product trial. Moreover, even after a product trial, by using outcome simulation after trial to shift consumers toward abstract, desirability-related focus, it would lead consumers to again put more weights on product capability. Not only make consumer to be consistent with the preference naturally arise before trial, but also obtain the increasing of purchase intention. Thus, the results of our study demonstrate that mental simulation is a useful method to detract feature fatigue.



5. Discussion and Implication

5.1 Discussion

On the basis of previous research ([Lieberman and Trope 1998](#); [Thompson, Hamilton and Rust 2005](#)), consumers who put more weight on product capability before trial prefer product with many feature and capabilities, while those who give more weight on product usability after trial prefer simpler product that are easier to use. Our goal in this research is not only to demonstrate that a shift in construal is the mechanism responsible for this change in preferences, but also examine the effects of mental simulation on consumers' preference consistency and purchase intention for high capability/low usability products after trial. Mental simulation refers to the imitative mental representation of an event or series of events ([Taylor and Schneider 1989](#)). In this research, we respectively manipulated outcome versus process simulation in our designed experimental scenarios. Not only compared the changes in relative weights consumers put on product capability and usability before or after a product trial but also their purchase intentions with no simulation condition.

The results of our study showed that, firstly, product information which get from product description or advertisement (i.e., indirect experience) before trial evoke abstract construal, it would further make consumers to put more weight on product capability (H1a) and prefer high capability/low usability products. In contrast, product information which get from product trial (i.e., direct experience) evoke concrete construal, it would further make consumers to give more weight to product usability (H1b) and alter to prefer high usability/low capability products. Thus, equipping more and more functions on products is not always a good

marketing strategy to enhance product value and raise consumers' purchase intention.

To prevent the strategy run counter to firms' desires, we combined ideas that shift in construal is the mechanism responsible for this change in preferences and ideas with the mechanism of mental simulation to shift consumers' mental construals. We try to manipulate process simulation or outcome simulation at the point seems to be critical in shaping product preferences. By manipulating process simulation which encourage people to imagine the process of using a product to alter consumers giving more weight to product usability before trial (H2a), even if such ways may raise some consumers' tendency to prefer high usability/low capability product consistent with natural preference after trial (H2b), however, we argued the impact on purchase intention for high capability/low usability products is a little extant. Since consumers who firstly read product advertisement and use abstract construal to evaluate products will naturally give a higher evaluation for high capability/low usability products. Compared to no simulation condition, reminding consumers with the relationships between higher capabilities with increasing difficulty to using the product can be regarded as a precaution mechanism. It could prevent consumers from the effect of product usability to evoke the perception of frustration or dissatisfaction for high capability/low usability product, therefore to attenuate the possibility to lower purchase intention (H2c).

Except for process simulation, manipulating outcome simulation after trial is also an effective way to prevent the reduction in product purchase intention. Even though consumers may perceived the difficulty of learning and using a product with many features, however, the considerations of these context factors could be alter by evoke consumers to focus on the desired functions they are fascinated with the

products at first(H3a). Such way not only can shift product preference toward consistency before and after trial (H3b), but also help to raise purchase intention (H3c).

To sum up, the primary contributions in this research are as follows. First, providing the suitable mental simulation on a right time is an effective way to complement the fatal defect of providing too many features. Our research demonstrates that manipulating consumers' mental construal to shift the relative weight they give to product capability and usability can increase the consistency between consumers' preferences before and after a product trial and raise their purchase intention. Second, although encourage consumers to consider the process of using a product before trial may make firms to take a risk for lowering the product's evaluation for some people, interestingly, the result of our study showed that "facing the shortcomings in advance is not necessarily a bad thing." If consumers learn about the negative effects of too many features before a product trial, it can help consumers to attenuate negative reactions in response to the higher difficulty of learning and using a product when they are engaging a trial. Third, even if consumers learn about the negative effects of too many features after a product trial, the result of our research also demonstrates that this learning may be forgotten as long as product capability again becomes the key driver of evaluations. Finally, even if [Thompson and Hamilton \(2007\)](#) fail to alter consumers' preference toward high capability/low usability products by manipulating outcome simulation before trial, they argued that concrete elaboration task was more effective in shifting mental construal than the abstract elaboration task. However, our research reveals that outcome simulation after trial is possible to shift concrete construal toward abstract construal. That is, shifting consumers toward abstract construal after trial may be

more effective than pre-embedding abstract construal before a product trial to change consumers' preference. Thus, controlling the suitable time to provide the right mental simulation is very critical for firms to implement a successful marketing strategy.

5.2 Managerial Implication

With the rapid development in technology, the competitions between firms also become fierce, especially among 3C products. In order to stand out from numerous products, firms often try to enhance and differentiate their products by increasing the number of product features. Even though this classic marketing strategy can help firms gain competitive advantages by providing greater functionality for consumers, the effect of feature fatigue can also result in detriment on consumers' purchase intentions for such products. To defeat feature fatigue, our research provides two ways to deal with the problem.

First, when products are high capability but lower in product usability, be active to remind consumers to imagine the process of using product before they engage in a product trial. Although providing product trial has many advantages, firms are often willing to provide trial opportunity before consumers purchase the product, however, the most prominent obstacle is getting consumers to try the product for the first time (Meuter et al. 2005), since product trial often involves a significant behavior change for consumers whose patterns are ingrained. On this premise, if consumers encounter the frustrated or anxiety feeling from using the product with many functions but difficult to use when they participate in a product trial. It may dramatically reduce the product evaluation and detract consumers' willingness to use the product in their daily life. Therefore, if firms can train their frontline employees to remind consumers to imagine the process of using a product before trial, it will

help to provide a precaution for consumers not to resist the adoption of products which emphasize the loading of many features.

Second, even consumers are interesting on the desire functions the product provide before trial, however, the difficulty of using a product may lead consumers to hesitate about whether to buy the product after trial. At this moment, stimulating consumers to imagine the benefits of using the products and focus on the product with good capabilities can help to distract consumers' attention away from the possible dissatisfaction induced by the process of using the product. That is, once consumers realize the trade-off between many functions and increasing difficulty of learning and using the product; and product capability again becomes the key driver of evaluations. Product usability would turn to become inconspicuous. Also, such negative feelings induced by perceived difficulty of learning and using the product would subside over time with the increasing familiarity and frequency to using the product. Thus, when consumers fascinate to the functions but hesitate for the the time and effort they need to spend for adapting the use of product after they engage in a product trial, in such case, if frontline employees can stimulate consumers to focus on desired functions and convince them that these functions are worthy to spend time and effort for learning how to use. It will be helpful to keep consumers' purchase intention.

Moreover, the two kinds of mental simulation not only can help to improve consumers' purchase intention, but also for firms in training their employees. Especially for those that introduce a large number of information technological products or services into their daily business operations. For example, logistics industries gradually adopt ““Handy Terminal” and “Tracking and Tracing System” to instantly track their products on the supply chain. For employees who do not have

usage experience before, they usually need to spend much time and effort to adapt the use of such products or services in their daily work. In view of this, applying mental simulation in suitable time for employees' training and education may be a good manner for employees to make them quickly adapt these technological products or services in helping their work.

5.3 Limitations and Suggestions for Future Research

5.3.1 Limitations

In our research, owing to limited time, subjects only perform one task during a product trial for the tested product (iPod touch). This may somehow affects subjects' perceived product usability toward tested product. Also, owing to limited time and budget, only one product category is examined. In the future, other product categories can be investigated to test the generalization of our research.

5.3.2 Suggestions for Future Research

Building on the findings of our research, some directions are offered for future research. First, owing to this research only select subjects who never use iPod touch before to participate in our surveys, future research can investigate individual's learning curve and readiness for such products with many features, and divide subjects into several groups for more detailed analyses.

Second, the effects of mental simulation on preference consistency and purchase intention for high usability/low capability products can be further investigated and compared with high capability/low usability products in the future. We expect that manipulating process simulation for high usability/low capability products before trial will shift consumers to be consistent with preference that are arise after trial and raise their purchase intention. However, outcome simulation

which induces people to put more weight on product capability may detract the attraction of high usability/low capability products. Thus, future research can examine the effectiveness and application of process versus outcome simulation to raise consumers purchase intention for high usability/low capability products.

Third, previous research on the consistency between attitudes and behaviors (Karde et al. 2006; Regan and Fazio 1977; Smith and Swinyard 1983) shows that consumers who form attitude on the basis of product trial exhibit greater attitude-behavior consistency. However, in light of our findings, an important question is whether shifting consumers from concrete construal toward abstract construal can still keep the predictive power of attitudinal measures. It would be interesting to examine the consistency between attitudes and behaviors.

Finally, since there are more and more industries adopt a large number of information technologies into their daily business operations. Future research also can investigate the application of mental simulation on training employees to well cooperate with these technological products and services. Especially for traditional industries, such as training polices to use PDA to write out a ticket and trace the information of offenders.

References

1. Adams, Dennis A., R. Ryan Nelson, and Peter A. Todd (1992), "Perceived Usefulness, Ease of Use, and Usage of Information Technology: A Replication," *MIS Quarterly*, June, 227-47.
2. Buehler, Roger, Dale Griffin, and Michael Ross (1994), "Exploring the "planning fallacy": Why people underestimate their task completion times," *Journal of Personality and Social Psychology*, 67, 366-81.
3. Brown, Christina L. and Gregory S. Carpenter (2000), "Why Is the Trivial Important? A Reasons-Based Account for the Effects of Trivial Attributes on Choice," *Journal of Consumer Research*, 26 (March), 372–85.
4. Chandran, Sucharita and Geeta Menon (2004), "When a Day Means More than a Year: Effects of Temporal Framing on Judgments of Health Risk," *Journal of Consumer Research*, 31 (September), 375–89.
5. Chin, John P., Virginia A. Diehl, and Kent L. Norman (1988), "Development of an Instrument Measuring User Satisfaction of the Human-Computer Interface," in *Human Factors in Computing Systems, CHI'88 Conference Proceedings*. New York: Association for Computing Machinery, 213–18.
6. Davis, Fred D. (1989), "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly*, September, 319-40.
7. Dodds, William B., Kent B. Monroe, and Dhruv Grewal (1991), "Effects of Price, Brand, and Store Information on Buyers' Product Evaluations," *Journal of Marketing Research*, 28 (August), 307-19.
8. Dunning, David, Dale W. Griffin, James D. Milojkovic, and Lee Ross (1990), "The Overconfidence Effect in Social Prediction," *Journal of Personality and Social Psychology*, 58, 568-81.
9. Escalas, Jennifer Edson and Mary Frances Luce (2003), "Process Versus Outcome Thought Focus and Advertising," *Journal of Consumer Psychology*, 13 (3), 246–54.
10. Escalas, Jennifer Edson and Mary Frances Luce (2004), "Understanding the Effects of Process-Focused Versus Outcome-Focused Thought in Response to Advertising," *Journal of Consumer Research*, 31 (September), 274–85.
11. Fazio, Russell H. and Mark P. Zanna (1981), "Direct Experience and Attitude-Behavior Consistency," In L. Berkowitz (Ed.), *Advances in*

experimental social psychology (Vol. 14, pp. 161–202). New York: Academic Press.

12. Gollwitzer, Peter M. and Gordon B. Moskowitz (1996), “Goal Effects on Action and Cognition,” In E. T. Higgins & A. W. Kruglanski (Eds.), *Social Psychology: Handbook of Basic Principles* (pp. 361 - 399). New York: Guilford Press.
13. Grewal, Dhruv, Kent B. Monroe, and R. Krishnan (1998), “The Effects of Price-Comparison Advertising on Buyers' Perceptions of Acquisition Value, Transaction Value, and Behavioral Intentions,” *Journal of Marketing*, 48 (April), 46-59.
14. Griffin, Dale W., David Dunning, and Lee Ross (1990), “The Role of Construal Processes in Overconfident Predictions about Self and Others,” *Journal of Personality and Social Psychology*, 59, 1128-1139.
15. Griffin, Dale W. and Lee Ross (1991), “Subjective Construal, Social Inference and Human Misunderstanding,” In M. Zanna. (Ed.), *Advances in experimental social psychology* (Vol. 24, pp. 319-359). New York: Academic Press.
16. Groot, Manon de, Gerrit Antonides, Daniel Read, and W. Fred van Raaij (2009), “The Effects of Direct Experience on Consumer Product Evaluation,” *The Journal of Socio-Economics*, 38, 509-18.
17. Hamilton, Rebecca W. and Debora Viana Thompson (2007), “Is There a Substitute for Direct Experience? Comparing Consumers’ Preferences after Direct and Indirect Product Experiences,” *Journal of Consumer Research*, 34(Dec), 546-55.
18. Hoch, Stephen J. and John Deighton (1989), “Managing What Consumers Learn from Experiences,” *Journal of Marketing*, 53 (April), 1-20.
19. Hoch, Stephen J. and George F. Loewenstein (1991), “Time-Inconsistent Preferences and Consumer Self-Control,” *Journal of Consumer Research*, 17 (March), 492-507.
20. Kahneman, Daniel and Amos Tversky (1979), “Intuitive Prediction: Biases and Corrective Procedures,” *Management Science*, 12, 313-27.
21. Kahneman, Daniel, Jack Knetsch, and Richard H. Thaler (1991), “The Endowment Effect, Loss Aversion, and Status Quo Bias,” *Journal of Economic Perspectives*, 4, 179-92.

22. Kempf, Deanna S. and Robert E. Smith (1998), "Consumer Processing of Product Trial and the Influence of Prior Advertising: A Structural Modeling Approach," *Journal of Marketing Research*, 35, 325–38.
23. Liberman, Nira and Yaacov Trope (1998), "The Role of Feasibility and Desirability Considerations in Near and Distant Future Decisions: A Test of Temporal Construal Theory," *Journal of Personality and Social Psychology*, 75(1), 5-18.
24. Liberman, Nira, Yaacov Trope, and Elena Stephan (2007), "Psychological Distance," in *Social Psychology: Handbook of Basic Principles*, Vol. 2, ed. Arie W. Kruglanski and E. Tory Higgins, New York: Guilford, 353–83.
25. Meuter, Matthew L., Mary Jo Bitner, Amy L. Ostrom, and Stephen W. Brown (2005), "Choosing Among Alternative Service Delivery Modes: An Investigation of Customer Trial of Self-Service Technologies," *Journal of Marketing*, 69 (April), 61–83.
26. Mooy, Sylvia C. and Henry S.J. Robben (2002), "Managing Consumers' Product Evaluations through Direct Product Experience," *Journal of Product & Brand Management*, 11(7), 432-46.
27. Mukherjee, Ashesh and Wayne D. Hoyer (2001), "The Effect of Novel Attributes on Product Evaluation," *Journal of Consumer Research*, 28 (December), 462–72.
28. Nielsen, Jacob (1993), *Usability Engineering*. San Diego: Academic Press.
29. Nowlis, Stephen M. and Itamar Simonson (1996), "The Effect of New Product Features on Brand Choice," *Journal of Marketing Research*, 33 (February), 36–46.
30. Pham, Lien B. and Shelley E. Taylor (1999), "From Thought to Action: Effects of Process- Versus Outcome-Based Mental Simulations on Performance," *Personality and Social Psychology Bulletin*, 25(2), 250–60.
31. Sherman, Steven J. (1980), "On the Self-Erasing Nature of Errors of Prediction," *Journal of Personality and Social Psychology*, 39, 211-21.
32. Smith, Robert E. and William R. Swinyard (1983), "Attitude-Behavior Consistency: The Impact of Product Trial Versus Advertising," *Journal of Marketing Research*, 20 (August), 257–67.
33. Smith, Robert E. and William R. Swinyard (1988), "Cognitive Response to

Advertising and Trial: Belief Strength, Belief Confidence and Product Curiosity,” *Journal of Advertising*, 17 (3), 3–14.

34. Taylor, Shelley E., Inna D. Rivkin, and David A. Armor (1998), “Harnessing the Imagination: Mental Simulation, Self-Regulation and Coping,” *American Psychologist*, 53 (April), 429–39.
35. Taylor, Shelley E. and Sherry K. Schneider (1989), “Coping and the Simulation of Events,” *Social Cognition*, 7 (2), 174–94.
36. Thompson, Debora Viana, Rebecca W. Hamilton, and Roland T. Rust (2005), “Feature Fatigue: When Product Capabilities Become Too Much of a Good Thing,” *Journal of Marketing Research*, 42 (November), 431-42.
37. Trope, Yaacov and Nira Liberman (2000), “Temporal Construal and Time-Dependent Changes in Preference,” *Journal of Personality and Social Psychology*, 79 (6), 876–89.
38. Trope, Yaacov and Nira Liberman (2003), “Temporal Construal,” *Psychological Review*, 110 (3), 403–21.
39. Trope, Yaacov, Nira Liberman, and Cheryl Wakslak (2007), “Construal Levels and Psychological Distance: Effects on Representation, Prediction, Evaluation, and Behavior,” *Journal of Consumer Psychology*, 17 (2), 83–95.
40. Vallone, Robert P., Dale W. Griffin, Sabrina Lin, and Lee Ross (1990), “The Overconfident Prediction of Future Action and Outcomes by Self and Others,” *Journal of Personality and Social Psychology*, 58, 582-92.
41. Wiklund, Michael (1994), *Usability in Practice: How Companies Develop User-Friendly Products*. San Diego: Academic Press.
42. Wood, Stacy L. and C. Page Moreau (2006), “From Fear to Loathing? How Emotion Influences the Evaluation and Early Use of Innovations,” *Journal of Marketing*, 70 (July), 44-57.
43. Wright, Alice A. and John G. Lynch, Jr. (1995), “Communication Effects of Advertising versus Direct Experience When both Search and Experience Attributes Are Present,” *Journal of Consumer Research*, 21 (March), 708–18.
44. Zhao, Min, Steve Hoeffler, and Gal Zauberman (2007), “Mental Simulation and Preference Consistency over Time: The Role of Process- Versus Outcome-Focused Thoughts,” *Journal of Marketing Research*, 44 (August), 379-88.

iPod touch 是什麼？

它是您的影音媒體播放器

也是您的口袋電腦

更是您的隨身遊戲機



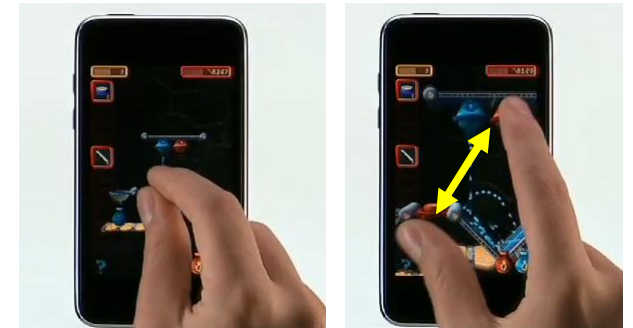
請觀看下列圖示並想像您實際操作 iPod touch 的感覺



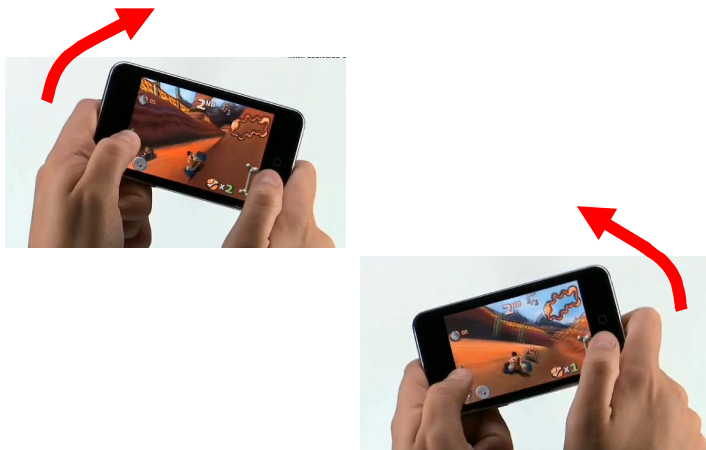
使用手指頭點擊螢幕，選取您想要執行的功能



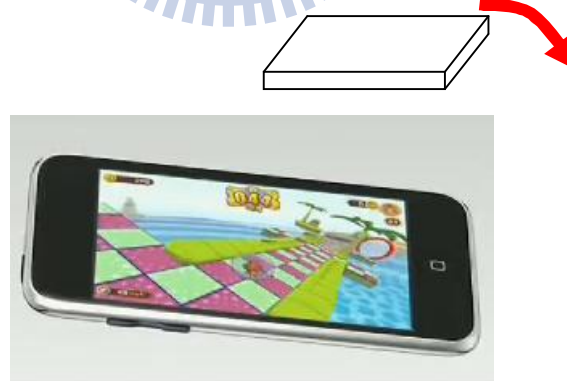
使用手指頭掃過螢幕，可快速捲動畫面，
瀏覽或搜尋各種不同的功能選單



使用雙指撥合來縮小或放大畫面



旋轉機身來操控遊戲的方向感應



傾斜機身來調整畫面的遠近呈現，
以及操控遊戲的方向感應



搖晃機身來操控各項功能指令

Appendix 1.3 The Functional Introductions for Outcome Simulation Manipulation



網頁瀏覽

只要連上 Wi-Fi，隨時拜訪您喜愛的網站



郵件

即時收發電子郵件
隨處都是您的行動辦公室



音樂

自動為您整理曲風相似的歌曲列表
給您不間斷的音樂饗宴



照片

隨身帶著喜愛的照片
透過電子郵件或藍芽分享給朋友



遊戲

享受逼真的遊戲畫面
讓您告別無聊時刻



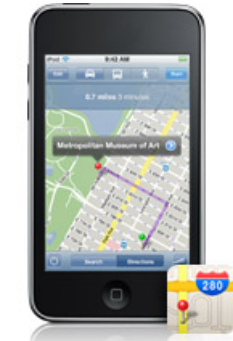
YouTube

隨時觀賞最新最熱門的精彩影片
輕鬆掌握流行話題



App Store

隨時免費下載或購買
上千種豐富廣泛的應用程式



地圖

提供導航資訊、指引最佳路徑
幫助您有效節省交通時間

iPod touch 隨時隨地將令人驚喜的體驗放在您的掌心上

讓您盡情享受樂趣不斷、精彩無比的生活

Appendix 2.1 Questionnaire for Natural Preference Scenario

您好：

本問卷目的為調查消費者對於「iPod touch」的看法。您所填答的資料僅供學術用途，不會外流，請放心填答，非常感謝您的支持。

交通大學 運輸科技與管理學系

任維廉 教授

中華民國 99 年 7 月

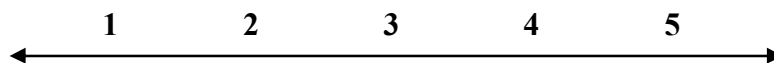
第一部分、本部分主要是詢問「當您看到 iPod touch 的產品介紹時，第一時間是否會在意下列的敘述情況」。所有問題無關對錯，請依據您的真實想法，回答以下這些問題：

當我們第一次接觸一個產品的時候，

都會很自然去思考它有什麼功能和用途，或者在使用上是簡單還是複雜的，

而影響我們對這個產品的看法。

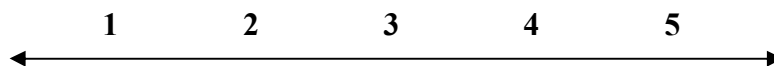
1. 當我第一眼看到這個廣告介紹時，我會比較在意 iPod touch：



學習使用各項功能所需耗費的心力

具備的功能多寡

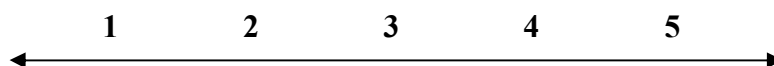
2. 看完這個廣告介紹，我會比較重視 iPod touch：



是否容易學習使用

各類應用程式的廣泛程度

3. 看完這個廣告介紹，我比較在意的是 iPod touch：



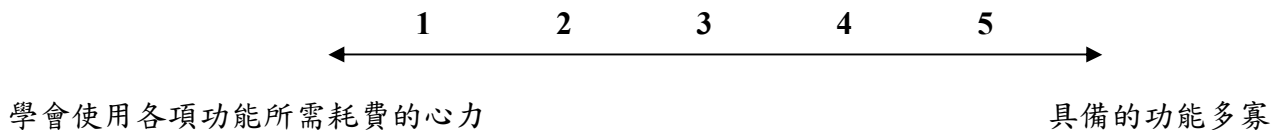
使用操作是否簡單

各項功能的運作是否順暢穩定

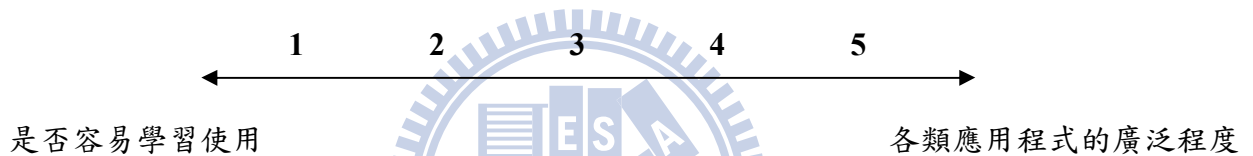
Appendix 2.1 Questionnaire for Natural Preference Scenario

第二部分、本部分主要是詢問「當您試用 iPod touch 之後，是否會變得比較在意下列的敘述情況」。所有問題無關對錯，請依據您的真實想法，回答以下這些問題：

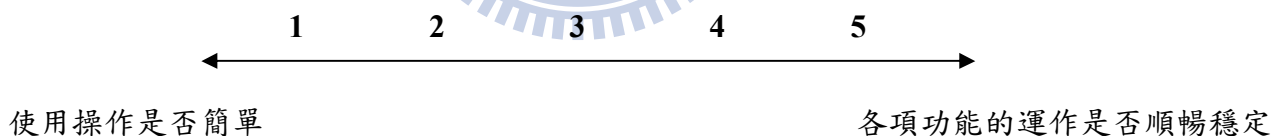
1. 當我試用 iPod touch 之後，我變得比較重視 iPod touch：



2. 試用之後，我現在比較在意 iPod touch：



3. 試用之後，我現在比較重視 iPod touch：



請翻到背面繼續作答

第三部分、請您依據目前的實際感受，填寫您對於下列各項敘述情形的
同意程度：（請打勾）

	非常不同意	不同意	普通	同意	非常同意
1. 我願意購買 iPod touch	①	②	③	④	⑤
2. 未來如果有需要，我會優先考慮 iPod touch	①	②	③	④	⑤
3. 我會購買 iPod touch 的可能性很高	①	②	③	④	⑤
4. 我會考慮購買 iPod touch	①	②	③	④	⑤

【個人基本資料】

D1.您的性別： 男 女

D2.您的年齡為： 19 歲以下 20-29 歲 30-39 歲 40-49 歲
 50-59 歲 60 歲以上

D3.您的職業為： 學生 教師 軍警 上班族
 自己開業 家管 其他

問卷到此結束，煩請您再檢查一次有無遺漏的地方。
再次感謝您的支持，謝謝！

您好：

本問卷目的為調查消費者對於「iPod touch」的看法。您所填答的資料僅供學術用途，不會外流，請放心填答，非常感謝您的支持。

交通大學 運輸科技與管理學系
中華民國 99 年 7 月

第一部分、本部分主要是詢問「當您看到 iPod touch 的產品介紹時，第一時間是否會在意下列的敘述情況」。請依據您的真實想法，回答以下這些問題：

當我們第一次接觸一個產品的時候，

都會很自然去思考它有什麼功能和用途，或者在使用上是簡單還是複雜的，

而影響我們對這個產品的看法。

1. 我認為 iPod touch 能夠提供很多生活上的好處 _____
(請在 1 (非常不同意) 到 100 (非常同意) 之間填寫一個數字)
2. 我會想到 iPod touch 使用上的難易程度 _____
(請在 1 (完全不會想到) 到 100 (非常容易想到) 之間填寫一個數字)
3. 當我第一眼看到這個廣告介紹時，我會比較在意 iPod touch：

← 1 2 3 4 5 →

學習使用各項功能所需耗費的心力

具備的功能多寡

4. 看完這個廣告介紹，我會比較重視 iPod touch：

← 1 2 3 4 5 →

是否容易學習使用

各類應用程式的廣泛程度

5. 看完這個廣告介紹，我比較在意的是 iPod touch：

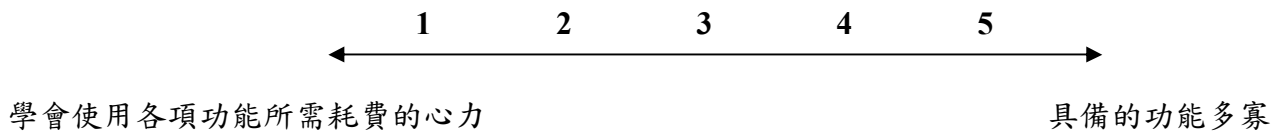
← 1 2 3 4 5 →

使用操作是否簡單

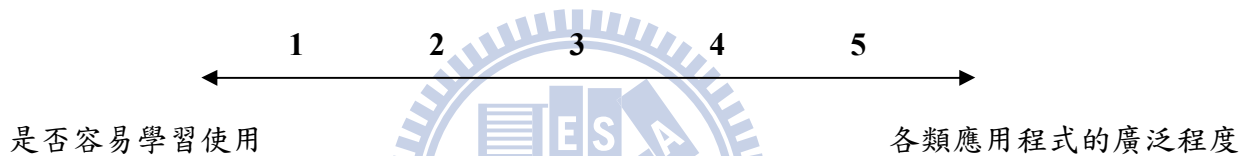
各項功能的運作是否順暢穩定

第二部分、本部分主要是詢問「當您試用 iPod touch 之後，是否會變得比較在意下列的敘述情況」。所有問題無關對錯，請依據您的真實想法，回答以下這些問題：

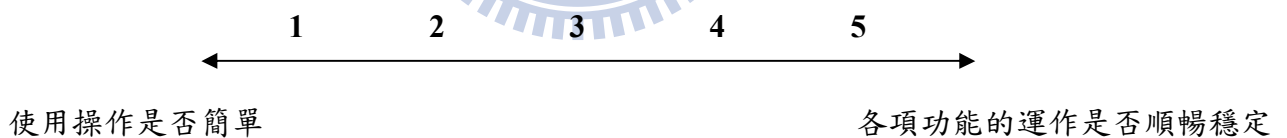
1. 當我試用 iPod touch 之後，我變得比較重視 iPod touch：



2. 試用之後，我現在比較在意 iPod touch：



3. 試用之後，我現在比較重視 iPod touch：



請翻到背面繼續作答

第三部分、請您依據目前的實際感受，填寫您對於下列各項敘述情形的
同意程度：（請打勾）

	非常不同意	不同意	普通	同意	非常同意
5. 我願意購買 iPod touch	①	②	③	④	⑤
6. 未來如果有需要，我會優先考慮 iPod touch	①	②	③	④	⑤
7. 我會購買 iPod touch 的可能性很高	①	②	③	④	⑤
8. 我會考慮購買 iPod touch	①	②	③	④	⑤

【個人基本資料】

- D1.您的性別： 男 女
- D2.您的年齡為： 19 歲以下 20-29 歲 30-39 歲 40-49 歲
 50-59 歲 60 歲以上
- D3.您的職業為： 學生 教師 軍警 上班族
 自己開業 家管 其他

問卷到此結束，煩請您再檢查一次有無遺漏的地方。
再次感謝您的支持，謝謝！

Appendix 2.3 Questionnaire for Outcome Simulation Scenario

您好：

本問卷目的為調查消費者對於「iPod touch」的看法。您所填答的資料僅供學術用途，不會外流，請放心填答，非常感謝您的支持。

交通大學 運輸科技與管理學系

任維廉 教授

中華民國 99 年 7 月

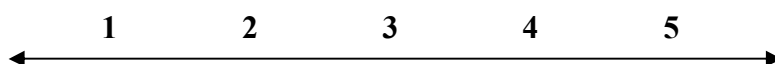
第一部分、本部分主要是詢問「當您看到 iPod touch 的產品介紹時，第一時間是否會在意下列的敘述情況」。所有問題無關對錯，請依據您的真實想法，回答以下這些問題：

當我們第一次接觸一個產品的時候，

都會很自然去思考它有什麼功能和用途，或者在使用上是簡單還是複雜的，

而影響我們對這個產品的看法。

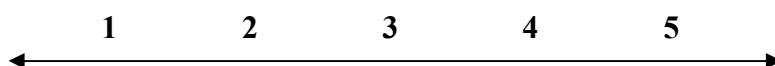
1. 當我第一眼看到這個廣告介紹時，我會比較在意 iPod touch：



學習使用各項功能所需耗費的心力

具備的功能多寡

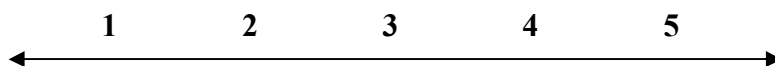
2. 看完這個廣告介紹，我會比較重視 iPod touch：



是否容易學習使用

各類應用程式的廣泛程度

3. 看完這個廣告介紹，我比較在意的是 iPod touch：



使用操作是否簡單

各項功能的運作是否順暢穩定

Appendix 2.3 Questionnaire for Outcome Simulation Scenario

第二部分、本部分主要是詢問「當您試用 iPod touch 之後，是否會變得比較在意下列的敘述情況」。所有問題無關對錯，請依據您的真實想法，回答以下這些問題：

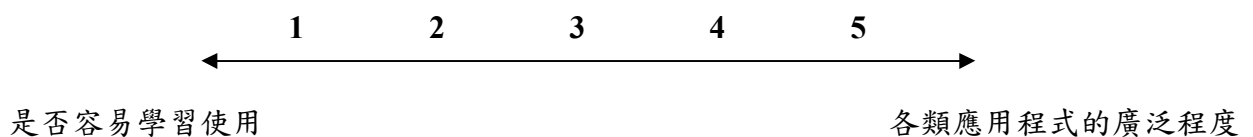
1. 在閱讀 iPod touch 各項功能的介紹時，
我認為 **iPod touch 能夠提供很多生活上的好處** _____
(請在 1 (非常不同意) 到 100 (非常同意) 之間填寫一個數字)

2. 在閱讀 iPod touch 各項功能的介紹時，
我會想到 **iPod touch 使用上的難易程度** _____
(請在 1 (完全不會想到) 到 100 (非常容易想到) 之間填寫一個數字)

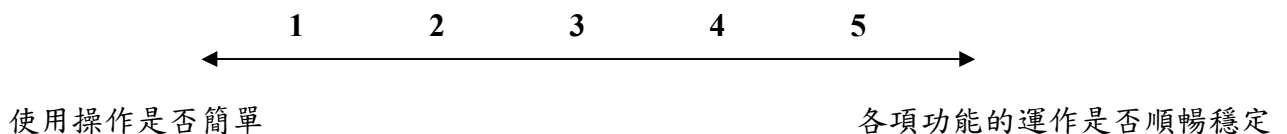
3. 當我試用 iPod touch 之後，我變得比較重視 iPod touch：



4. 試用之後，我現在比較在意 iPod touch：



5. 試用之後，我現在比較重視 iPod touch：



請翻到背面繼續作答

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11. 我會購買 iPod touch 的可能性很高	①	②	③	④	⑤
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再次感謝您的支持，謝謝！

簡 歷



姓名：邱 羿 菁

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E-mail：Lcd917@gmail.com

學歷：

民國99年8月 國立交通大學運輸科技與管理學系碩士班畢業

民國97年6月 國立交通大學運輸科技與管理學系畢業

民國93年6月 國立台東女中畢業

民國90年6月 台東縣立新生國中畢業

民國87年6月 台東縣立馬蘭國小畢業

