

# 行政院國家科學委員會專題研究計畫 成果報告

e 化健康信念模式之量表發展、及模式驗證、與比較：以體重控制行為及意願為例(第 2 年)  
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行政院國家科學委員會補助專題研究計畫  成果報告  
 期中進度報告

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## **Abstract**

The purposes of the paper is to develop and to test an e-Health Belief Model (e-HBM) which is adapted from previous works of Health Behavior Model to explain the intention and behavior of Internet health information seeking and acceptance for weight control. 205 valid questionnaires were obtained that yielded the 82.7% valid response rate. Nineteen classes among ten universities and colleges students in Taiwan including undergraduate students and on-the-job students responded the survey. The major of these respondents include mechanism, chemistry, information systems, business administration, healthcare organization administration, foreign language. The screening criteria of subject selection were those who surfing healthcare information on Internet in recent month and who had weight control experience in recent year. SmartPLS was used to analysis the measurement and path in this model. The result of measurement model analysis confirmed the reliability and validity of the instrument. Path analysis revealed that (1) the respondents' intention of Internet health information seeking and acceptance for weight control has positive effect on their behavior; (2) the goodness-of-fit of the e-Health Belief model is adequate; (3) the perceived severity has the most significant positive effect on the intention, then next most significant two variables are perceived barrier and perceived benefit, the effect of perceived susceptibility is not significant; (4) cue to action has the most significant positive effect on perceived severity, then next most significant two effects are on perceived barrier and perceived benefit, the effect of cue to action is not significant on perceived susceptibility; (5) the decrease of perceived barrier increase the perceived benefit.

**Keywords:** Health Belief Model, Internet Health Information, Weight Control

## **1. Introduction**

Obesity has been gaining public concern because it causes several chronic diseases and the associated healthcare costs account for a high proportion of national health care expenditures (Quesenberry, et. al.1998, Wee, et al. 2005). To modify attitudes, shape behavior and generally persuade people to prevent the risk bringing by obesity, public health professionals are currently seeking to take advantage of the Internet's capacity to serve as a virtual clearinghouse for health information(e.g. Hunter et al. 2007). The results of (Dutta-Bergman,2004) showed that individuals who searched for health information on the Internet were indeed more likely to be health-oriented than those who did not. Therefore, spreading appropriate weight control information through the Internet can help people adopt proper health behaviors in weight control and further decrease the incidence of obesity and development of co-morbidities. One requirement for overcoming these barriers is to gain a thorough understanding of the psychological process influencing individual's beliefs toward Internet health information seeking and acceptance.

The purpose of this study is to establish an e-Health Belief Model and examine people's willingness and behavior to control weight using the health information available on the Internet. According to previous studies related to the Health Belief Model, the variables in this study include perceived susceptibility, perceived severity, perceived benefits in action, perceived barriers in action, cue to action, and willingness and behavior to use the information. From a practical perspective, the e-Health Belief Model and its associated variables can be used to explain or predict the intentions or beliefs of Internet users for accepting health recommendations from the Internet and adopting proper behaviors to control weight. Therefore, the study results could serve as a reference for health educators developing weight control programs on the Internet, or for planners of health information websites.

## **2. Material and Method**

In light of past studies on the Health Belief Model, when people perceive themselves with a higher vulnerability and susceptibility to the adverse outcomes of being overweight, they have greater recognition of the threat of being overweight to health, and therefore are more likely to develop motivation to perform weight control behaviors. There are a lot of sources of information about weight control. For example, one could search the information by oneself and obtain related materials from hospitals, clinics, friends, or from the Internet. As this study focuses on the adoption of weight control behaviors generated from health information on the Internet, the term "action" in the variables of perceived benefits in "action" and perceived barriers in "action" simply indicates "the adoption of weight control behaviors as a result of health information on the Internet." Figure 1 shows that the real practice of weight control behavior based on health information is affected by one's willingness, and this willingness is positively influenced by perceived benefits in action and negatively affected by perceived barriers in action. At the same time, willingness is positively influenced by perceived susceptibility and perceived severity. Furthermore, cue to action has a positive influence on one's perceived susceptibility, perceived severity, perceived benefits in action, and perceived barriers in action.

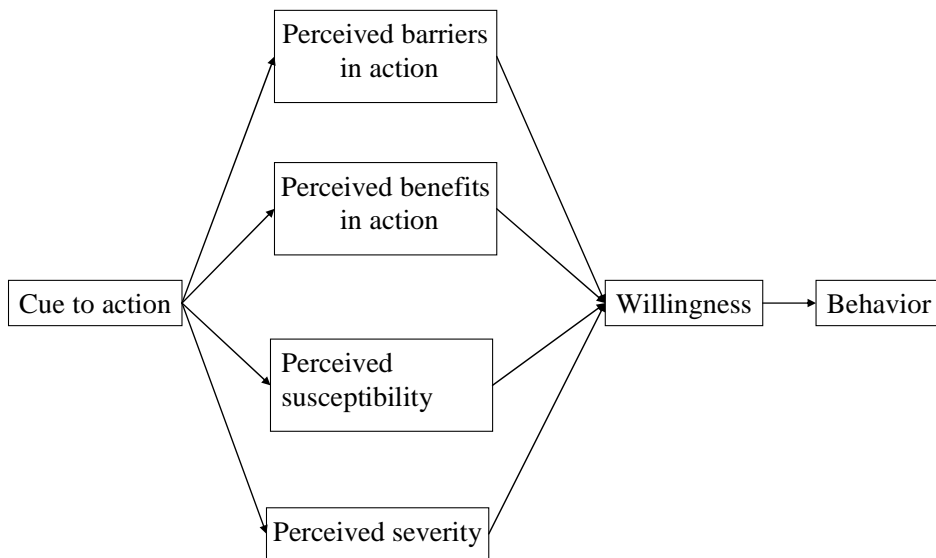


Figure 1 Research Framework

The questionnaire was developed by drafting the initial scale, meeting with experts, and a pre-test. We first listed several questions according to the literature. Then, we invited 10 Internet users who had experience in weight control to a focus interview, which helped us revise and enhance the validity of the questionnaire by making it fit the real weight control situations. Next, we invited a health education expert and three scholars from the fields of information management and healthcare management to further examine and revise the questionnaire. Finally, 5 college students who had controlled their weight based on information from the Internet were recruited for a pre-test to improve the face validity of this questionnaire. Table 1 lists the revised questionnaire, after taking into account the opinions of experts and the results of the pre-test.

Table 1 Questionnaire of variables of the Health Belief Model

Perceived severity  Likert 5-point scale, where 5 indicates very severe and 1 indicates totally careless	Causing damage to the beauty of body figure or clothing
	Impacting relations with others or the work image
	Causing the development of chronic diseases such as diabetes or cardio-vascular diseases
	Causing the development of skeletal problems (e.g., pain or disease on the waist, back, or knee)
Perceived susceptibility  Likert 5-point scale	Please rate your body weight: 1. Overweight 2. A little heavy 3. Moderate 4. A little thin 5. Underweight
	Please describe your feelings about your body figure: 1. Very dissatisfied 2. Dissatisfied 3. Moderate 4. Satisfied 5. Very

	satisfied
Perceived benefits in action	Information on the Internet makes me understand more about the benefits of weight control
Likert 5-point scale, where 5 indicates strongly agree and 1 indicates strongly disagree	Information on the Internet makes me understand more about the approaches to controlling weight
	Information on the Internet makes me understand more about the weight control drugs (e.g., drug functions, methods of use, or side effects)
	Information on the Internet helps me control weight more effectively
	Information on the Internet helps me control weight without impacting my physical and mental health
Perceived barriers in action	I have enough time to surf websites introducing health information
Likert 5-point scale, where 5 indicates very certain and 1 indicates very uncertain	I have sufficient computer equipment to surf websites introducing health information
	I think it is easy to use the Internet
	I think it is easy to learn to use the Internet
	I think the information on the websites is easy to understand
Cue to action	I usually pay attention to health or medical messages about weight control from newspapers or the mass media
Likert 5-point scale, where 5 indicates most of the time and 1 indicates none of the time.	I usually pay attention to health or medical messages about weight control from radio broadcasts
	I am aware of the importance of weight control because my relatives or friends developed health problems due to obesity

We referred to the study by Ajzen (1985) to design our questions regarding the “willingness” toward adopting weight control behaviors based on health information. To measure “willingness,” we used three questions to ask about one’s preferences, attitudes, and behavioral intentions toward using the health information on the Internet. These questions were (1) Whenever I have a question or confusion regarding weight control (e.g., diet, exercise, or taking medicine), I seek information on the Internet; (2) I think the health information on the Internet is reliable; (3) I think I could appropriately refer to the health information on the Internet. These questions were based on a 5-point Likert scale, where 5 indicated strongly agree and 1 indicated strongly disagree.

Because it is difficult to observe “real practice” of the adoption of weight control behavior on Internet health information, we adapted the self-report scale of the information using behavior scale in Wilson’s (1997) study. Wilson categorized this behavior of information usage into four categories: (1) Passive Attention—one obtains information accidentally without an intention. That is, accidentally browsing related information on the Internet. (2) Passive Search—one finds information accidentally when searching. (3) Active Search—one looks for information intentionally. (4) Ongoing Search—one looks for information continuously and intentionally. Then, we sharpened up these ideas into three questions to assess responders’ use of Internet health information about weight control in the past month: (1) I browse health-related information when surfing the Internet; (2) I actively search for suitable health-related information on the Internet when I have a question; (3) I improve my health status by referring to suitable health information. These questions were based on a 5-point Likert scale, where 5 indicated most of the time and 1 indicated none of the time.

### **3.Results**

Data was collected through on-site self-administered questionnaires. We recruited college students for this study because, based on previous investigations of Internet users, most of them were of the younger generation, and compared to other populations, college students have more chances to use the Internet. We could not obtain a list of our study population, and thus we adopted the convenience sampling method. We picked 5, 6, and 8 colleges in northern, middle, and southern Taiwan, respectively. A class in each college was selected to participate in this study. The sample included students from the departments of Mechanical Engineering, Chemistry, Information Management, Business Administration, Healthcare Administration, and Foreign Languages and Literatures, etc. Among these classes, 9 were in the day division and 10 were in the continuing-education division. The sample inclusion criterion was anyone who had experience in surfing websites regarding weight control in the past month or had controlled their weight in the past year. To increase people’s willingness to participate in the study, we provided a gift for each respondent.

After collecting our data, we used the partial least squares (PLS) method to do an examination and a path analysis using the SmartPLS program (Ver 2.0 M3) (Ringle, Wende et al. 2005). SmartPLS is a structural equation modeling (SEM) statistical package like linear structural relations (LISREL). Compared with LISREL, however, the SmartPLS variables do not need to fit a normal distribution, the requirement on randomness is looser, and when estimating the parameters of paths, the required sample size is smaller (Chin, 1998). Therefore, we used the SmartPLS for analysis.

#### **3.1 Demographic Profile**

A total of 248 questionnaires were returned. After excluding those with incomplete answers, 205 questionnaires were left, yielding an 82.7% valid response rate. A study sample of 205 is sufficient for PLS analysis. According to Chin’s (1997) suggestion, a sample size should be the number of path in the biggest model multiplied by 5-10. In this study section, there were 9 paths, and therefore, a sample size which is 10 times the number of path, that is, 90, would be acceptable.

With respect to the demographics of the study sample, most of the participants were aged between 21-25 years (24.9%), followed by the 26-30 years age group (20.5%) and <20 years age group (18%). There were more women than men, suggesting that the young woman generation account for a greater proportion of people surfing websites with health information. Most of the participants (81%) had experience in using the Internet for more than 5 years.

Regarding the perceived weight and body figure of these participants, 34.6% of the participants regarded themselves as “overweight,” 34.1% reported “a little heavy,” and 27.3%



reported “moderate,” As for body figure, 41.5% of the participants regarded their body figure as “moderate,” 32.7% were “dissatisfied,” and 18.5% were very “dissatisfied.”

Regarding past weight control experience, only 30.2% of the participants used a single approach to controlling weight, and the others had used a combination of two or more approaches. Among these approaches, diet control was the most popular method (69.8%), followed by exercise (62.0%) and using slim-up tea (23.9%). Only 28.3% of the participants had a successful experience in their prior weight control, while most of them (51.7%) regained weight after a weight loss, and 20% of them failed. Regarding the probability of attempting to control their weight in the next year, only 1 (0.5%) of them answered “definitely impossible,” and 6.3% answered “impossible.” The proportions of “probable” and “highly probable” answer were 58% and 35.1%, respectively.

### **3.2 Reliability and Validity**

We used convergence validity and discrimination validity to represent construct validity and performed a confirmatory factor analysis to obtain the Composite Reliability (CR) and Average Variance Extracted (AVE) of each research dimension, as well as the correlation coefficients of the research dimensions.

The assessment indicators of convergence validity in this study include (1) all the standardized factor loadings should be larger than 0.5 and reach a significant level; and (2) the AVE should be greater than 0.5 (Kline, 1998). The analysis results of this study showed that (1) the factor loadings for each item were greater than 0.5 (Table 3); (2) the AVEs fell between 0.644 and 0.760, meeting the threshold of 0.5 (Table 4). As a result, all of the items in this study converged to their dimensions, showing sufficient convergence validity.

The assessment indicators of discrimination validity in this study included: (1) the correlation coefficients among research dimensions should be less than 0.85; and (2) all the square roots of the AVE values of each research dimension should be greater than the correlation coefficients of other dimensions (Kline, 1998). The results of these analyses (Table 4) demonstrate the following: (1) the correlation coefficients among research dimensions were less than 0.85; and (2) all the square roots of the AVE values of each research dimension were greater than the correlation coefficients of other dimensions. Therefore, based on the criteria above, the research dimensions in this study showed good discrimination validity.

The reliability of the scale was measured using the Composite Reliability (CR), and the composite reliability of the latent variables was composed of the reliability of all the latent variables, which suggests internal consistency among the indicators of a research dimension. A recommended threshold of this value was 0.7 (Fornell & Larcker, 1981). High reliability indicates high correlations among the indicators, and therefore a researcher could be confident that the items of a dimension are consistent. The composite reliability of the dimensions in this study fell between 0.845 and 0.909, which all exceeded the 0.7 threshold, suggesting that the reliability of the research dimension was acceptable.

### **3.3 Path Analysis**

We further examined the correlation between the research dimensions through path analysis using Smart PLS. There are no indicators like GFI or AGFI in PLS to represent the overall goodness of fit index of a model. Only the R square of the internal dimensions and the path coefficients and their statistical significance values were calculated.

Figure 2 shows the results of the path analysis in this study. Table 4 also lists the correlations and significance of impact among the variables: (1) When undergoing weight control, one’s willingness to use the health information on the Internet had a positive impact on real practice ( $\beta = 0.556$ ,  $p < 0.001$ ), and the explained variation was 31%; (2) Willingness to use was significantly

impacted by one's perceived severity of the adverse outcomes of obesity (perceived severity) ( $\beta = 0.562$ ,  $p < 0.001$ ), the benefits of using health information on the Internet (perceived benefits in action) ( $\beta = 0.156$ ,  $p < 0.05$ ), and the limitations of using health information on the Internet (perceived barriers in action) ( $\beta = 0.180$ ,  $p < 0.05$ ). The combined explained variation was 52.1%. However, willingness to use was not impacted by perceived susceptibility ( $\beta = 0.054$ ,  $p > 0.05$ ). In addition, perceived severity had the greatest impact, much greater than the impact of the other two variables (perceived barriers and perceived benefits in action); (3) Cue to action (usually pay heed to the weight control information on the mass media) had a significant impact on perceived severity ( $\beta = 0.643$ ,  $p < 0.001$ ), perceived benefits in action ( $\beta = 0.213$ ,  $p < 0.05$ ), and perceived barriers in action ( $\beta = 0.262$ ,  $p < 0.05$ ), and the explained variation was 41.3%, 41.3%, 6.9%, respectively. However, cue to action did not impact the perceived susceptibility ( $\beta = 0.014$ ,  $p > 0.05$ ). In addition, the impact of perceived barriers in action on perceived benefits in action was significant. ( $\beta = 0.453$ ,  $p < 0.001$ , explained variation=41.3%).

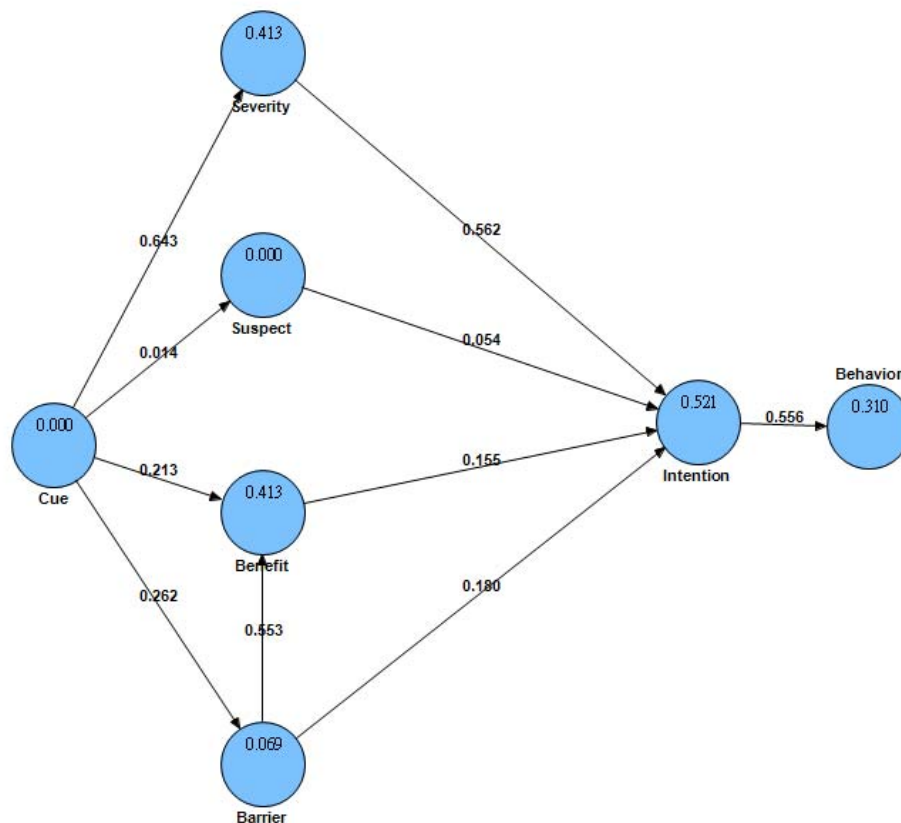


Figure 2 The result of PLS analysis

#### 4. Discussion and Conclusion

We compared the results with previous findings in studies regarding the Health Belief Model.

##### (1) When undergoing weight control, one's willingness to use the health information on the Internet has a positive impact on real practice

This finding was consistent with those in study by Ajzen (1985), that willingness to use had a significant impact on real practice. However, as the explained variation was only 31%, there may still be some other variables in addition to willingness to use that could impact one's real practice.

**(2) The Health Belief Model was capable of explaining the willingness to use and using behavior of the on-line health information when one is undergoing weight control**

There were three Meta Analysis articles regarding the Health Belief Model in local and abroad (Janz & Becker, 1984; Harrison, Mullen& Green, 1992; Kuan, 2004). In this study, the explained variation of willingness to use based on the Health Belief Model was 52.1%, which was much higher than the 27.353% calculated in a review article by Kuan (2004), who reviewed all the studies of Health Belief Model in Taiwan from 1974 to 2003. However, we could not compare this result with the other two articles as there were no summarized values of this explained variation. Nevertheless, when studying the R-square value in research cited in Harrison, Mullen, & Green (1992), the corresponding value in this study was still higher.

**(3) The level of impact of four variables of Health Belief on willingness could be listed in a descending manner as perceived severity, perceived barriers in action, and perceived benefits in action, while the impact of perceived susceptibility was not significant**

Among the four Health Belief variables, perceived severity had the greatest impact on willingness to use the health information on-line when undergoing weight control, followed by perceived barriers and perceived benefits in action. However, the impact of perceived susceptibility was not significant. This finding was inconsistent with previous ones, indicating that the explanation capability of the belief variables on motivation of health behavior varies in different research conditions.

Janz and Becker (1984) found that, regarding preventive health behavior, perceived barriers in action was the most significant predictor, followed by perceived susceptibility and perceived benefits in action, and the least impacting factor was perceived severity. Only half of the existing studies discovered a significant impact of perceived severity. Harrison, Mullen,& Green (1992) reviewed articles regarding health behaviors of adults, and discovered that the level of impact of the variables on health behavior was strongest in perceived barriers in action, followed by perceived susceptibility, perceived benefits in action, and perceived severity. Kuan (2004) reviewed articles related to the Health Belief Model conducted in Taiwan between 1974 and 2003, and discovered that for willingness of preventive health behavior, perceived barriers in action was the most influential explanation or prediction variable, followed by perceived benefits in action, perceived severity, and perceived susceptibility. In light of the review articles above, concerning preventive health behavior, perceived barriers in action was usually the most influential variable while perceived severity the least one.

The inconsistency between the current findings and previous results could be attributable to the different study behavior and sample used in this study. We studied the information seeking behavior related to weight control. Weight control is a kind of preventive health behavior, which includes the screening behavior and behaviors regarding health promotion, health maintaining, and disease prevention adopted among common healthy individuals, for instance, keeping regular exercise, controlling diet, or quitting smoking (Janz and Becker, 1984), etc. Information seeking behavior is an information searching and understanding behavior aimed to solve a problem (Wilson, 1997). We studied the “information searching and understanding behavior aimed to solve the problems of weight control.” This behavior is associated with health promotion, health maintaining, or disease prevention and hence the behavior studied here belonged to preventive health behavior.

However, to compare the difference, behaviors like regular exercise, diet control, or smoke cessation require greater mental effort for the general population, especially for those without an established habit (e.g., one that seldom does exercise, one that sometimes overeats, and heavy smokers). Information seeking behavior is a basic ability to current young generation. They had learned using a computer since elementary education, and therefore solving problems by seeking information from the Internet became common among people aged around 20-30 years. As 81% of

the study participants had experiences of using the Internet for more than 5 years, the perceived barriers in action like time, equipment, or ability did not lead to their motivation toward on-line health information searching. Instead, the risk as a result of weight control problems was the major trigger of motivation.

Risk factors include perceived susceptibility (probability of being overweight) and perceived severity (the adverse outcome of being overweight). Even though most of the studies found that individuals who perceived themselves as overweight tended to perform weight control, in Anderson et al.'s (1997) study, a small number of such people did not try to control their weight, and the main reason was unconcern for the consequences. People under 40 years accounted for the most part of the study sample. They could not have enough understanding of the consequences of obesity, like diabetes, hypertension, and cardiovascular diseases, etc. On the other hand, they cared more about the obesity-related problems on appearance, clothing, relations with others, or working image. Weinstein and Rothman (2005) found that pursuing health was not the only purpose of weight control. Some people controlled diet to keep their figure or exercised to receive applause from the others. Therefore, regardless of whether people perceived themselves as being overweight or are dissatisfied with their body figures or not, they still performed weight control through every means to avoid the consequences of obesity, including seeking information helpful for weight control on-line. According to this study, all except for 2 of the participants had at least adopted more than one method to lose weight, and even 69.7% of them had tried two or more methods. 93.1% of the participants suggested that they would do weight control in the next year. These demonstrate that weight control has been widely accepted among the young generation.

**(4) Among the four Health Belief variables, the level of impact of cue to action was greatest on perceived severity, followed by perceived barriers in action and perceived benefits in action, while the impact on perceived susceptibility was not significant**

In the past, studies of Health Belief Model merely examined the impact of cue to action on perceived susceptibility and perceived severity (Janz and Becker, 1984; Harrison, Mullen & Green, 1992). Cue to action represents some cues that trigger health behaviors. These cues can be separated into inner cues (e.g., illness and symptoms) and outer cues (e.g., physicians' recommendations, support from relatives, or education from mass media). The stimulation created by the mass media (e.g., television, broadcast, and the Internet) is the only concern in this study. Since perceived susceptibility was measured according to responders' subjective perceptions of weight and body figure rather than an objective BMI, in the era where being slim is beautiful, some people still think of themselves as being overweight even if their BMI is standard. In addition, as the subjective perception of weight and body figure could further be impacted by the evaluation of friends or relatives, it is reasonable that cue to action had no significant impact on perceived susceptibility. People who usually paid attention to the information regarding weight control in the mass media were more likely to understand the adverse outcomes of weight control problem. Thus, the impact of cue to action on perceived severity was significant.

Perceived benefits in action is the subjective evaluation of the effectiveness of the adopted behaviors in lowering the disease susceptibility or severity. Perceived barriers in action is the subjective evaluation of the potential barrier of adopting a behavior (Rosenstock et al., 1988). These are similar to the perceived technology usefulness and easiness defined in the Technology Acceptance Model (TAM). Many researchers studying the TAM-related theories have tried to understand the impact of outer variables on perception variables. Consistent with this study, Legris et al. (2003) suggested in their literature review that information stimulation or education has a positive impact on perceived technology usefulness and easiness.

**(5) Decreasing the obstacles of the perceived barriers was helpful for increasing the perceived benefits**

In most of the TAM studies, researchers found that perceived technology usefulness increased in accordance with an increase in perceived technology easiness. We added this path into the study model and found a significant impact, which was consistent with previous TAM studies.

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# 國科會補助計畫衍生研發成果推廣資料表

日期:2010/11/01

國科會補助計畫	計畫名稱: e化健康信念模式之量表發展、及模式驗證、與比較: 以體重控制行為及意願為例
	計畫主持人: 李宜昌
	計畫編號: 97-2410-H-040-001-MY2      學門領域: 醫務管理
無研發成果推廣資料	

97 年度專題研究計畫研究成果彙整表

計畫主持人：李宜昌		計畫編號：97-2410-H-040-001-MY2				計畫名稱：e化健康信念模式之量表發展、及模式驗證、與比較：以體重控制行為及意願為例		
成果項目		量化			單位	備註（質化說明：如數個計畫共同成果、成果列為該期刊之封面故事...等）		
		實際已達成數（被接受或已發表）	預期總達成數(含實際已達成數)	本計畫實際貢獻百分比				
國內	論文著作	期刊論文	0	0	100%	篇	已被國內研討會(UHIMA 2010)接受者一篇	
		研究報告/技術報告	0	0	100%			
		研討會論文	1	1	100%			
		專書	0	0	100%			
	專利	申請中件數	0	0	100%	件		
		已獲得件數	0	0	100%			
	技術移轉	件數	0	0	100%	件		
		權利金	0	0	100%	千元		
	參與計畫人力 (本國籍)	碩士生	1	1	100%	人次	訓練醫管所碩班生資料分析及推論能力	
		博士生	0	0	100%			
		博士後研究員	0	0	100%			
		專任助理	0	0	100%			
國外	論文著作	期刊論文	0	1	100%	篇	submitted and under review at Journal of Medical Internet Research	
		研究報告/技術報告	0	0	100%			
		研討會論文	0	1	100%			正在國外研討會WDSI 2011 (Western Decision Science Institute) 審查者一篇
		專書	0	0	100%			
	專利	申請中件數	0	0	100%	件		
		已獲得件數	0	0	100%			
	技術移轉	件數	0	0	100%	件		
		權利金	0	0	100%	千元		
	參與計畫人力	碩士生	0	0	100%	人次		



	(外國籍)	博士生	0	0	100%		
		博士後研究員	0	0	100%		
		專任助理	0	0	100%		

其他成果 (無法以量化表達之成果如辦理學術活動、獲得獎項、重要國際合作、研究成果國際影響力及其他協助產業技術發展之具體效益事項等，請以文字敘述填列。)	無						
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	成果項目	量化	名稱或內容性質簡述
科 教 處 計 畫 加 填 項 目	測驗工具(含質性與量性)	0	
	課程/模組	0	
	電腦及網路系統或工具	0	
	教材	0	
	舉辦之活動/競賽	0	
	研討會/工作坊	0	
	電子報、網站	0	
	計畫成果推廣之參與(閱聽)人數	0	



# 國科會補助專題研究計畫成果報告自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現或其他有關價值等，作一綜合評估。

## 1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

達成目標

未達成目標（請說明，以 100 字為限）

實驗失敗

因故實驗中斷

其他原因

說明：

## 2. 研究成果在學術期刊發表或申請專利等情形：

論文： 已發表  未發表之文稿  撰寫中  無

專利： 已獲得  申請中  無

技轉： 已技轉  洽談中  無

其他：（以 100 字為限）

Journal of Medical Internet Research under review

## 3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）（以 500 字為限）

由於肥胖造成的多種慢性疾病，而造成健保支出所佔比例之高，久已受到社會各界重視。在邁向「預防醫學、健康管理」時代，預防重於治療，為了有效控制因肥胖造成的醫療資源負擔，根本之道應該要設法預防肥胖發生，並教導體重過重者如何健康瘦身。由於網際網路無遠弗屆的力量及便利性，已經成為傳統的傳播途徑之外的新選擇，且未來越來越多 e 世代的人加入之後，將使得網際網路的影響力更加擴大。故如何能夠透過網路傳播正確健康的減重資訊與方法給國人瞭解，使得有需要的人可以採取適當的健康行為，進而降低肥胖發生率與併發症的產生，這類的研究十分重要。

從實務的角度觀之，本計畫所建立的 e 化健康信念模式及變數，可以解釋或預測網路使用者之所以接受健康資訊的建議而採取適當的體重控制行為的動機或信念，因此研究成果可供健康教育工作者在網路上推廣體重控制計劃時，或健康資訊網站規劃者在規劃設計體重控制相關網站時，作為參考。

從學術貢獻的角度來看，目前因為網路健康資訊而引起的健康預防行為之相關的學術研究仍屬缺乏。由於未來透過網路宣導或教育的機會勢必增加，而過去用來解釋健康預防行為的健康信念模式是否仍適用於網際網路的情境尚待探討。故本計畫有助於增進健康信念模式的外推效度，以便後續研究者可以繼續引用，探討網路上的健康預防行為時作為參考。