FACTORS AFFECTING CONSUMER'S HEALTHY-PACKAGE FOOD CONSUMPTION INTENTION

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ABSTRACT

Eager of convenience is the natural phenomena of all mankind. Similar pattern has been observed in food related decisions. Owing to the rising trend of individuals towards the consumption of packaged food the transition of disease pattern from acute to chronic has also been noticed. Psychologically, individuals' intention is the foundation of their actual behavior. Individuals' intention and actual behavior are correlated with each other, therefore, it is expected that positive strong intention direct towards actual purchase of any object. Furthermore, the research on consumers' intention towards packaged food in developing and under developing countries are still far behind to figure out the solution on this issue. Therefore, this study has targeted Pakistani consumers to examine their intention towards healthy packaged food consumption. The objective of the study was accomplished with traffic lights symbols, health claims, user friendly food label, subjective norm, self-efficacy, attitude towards food label, five personality traits and intention to consume healthy packaged food. Ajzen's theory of planned behavior was used as the underpinning theory. For data collection self-administered questionnaire was employed to target MBA students of fourteen universities. The sample size was 537 and technique was systematic random sampling. Structural equation modeling was used to analyze the complete model. The traffic lights symbol was having ineffective for Pakistani consumers whereas health claims and user friendly food label indirectly influenced consumers' intention with the mediation of attitude. In addition to, subjective norm and self-efficacy were having positive significant effect on intention to consume healthy packaged food. Moreover, conscientiousness and agreeableness were supported for moderation effect. Theoretical and practical implications are also discussed. Finally, this research provides suggestions for future research.

Keywords: Front of pack labeling, big five personality traits, intention to consume healthy packaged food

ABSTRAK

Hasrat kepada kesenangan merupakan fenomena semulajadi bagi setiap manusia. Pola yang hampir sama telah dipertimbangkan dalam membuat keputusan berkaitan makanan. Disebabkan oleh aliran peningkatan individu terhadap penggunaan makanan yang dibungkus, maka peralihan pola penyakit daripada keadaan tidak normal kepada kronik turut disedari. Secara psikologi, keinginan individu menjadi asas kepada tingkah laku sebenar mereka. Keinginan dan tingkah laku individu berkaitan antara satu sama lain, di mana ia menjangkakan bahawa keinginan positif yang kuat cenderung ke arah pembelian sebenar bagi sesuatu objek. Selain itu, kajian tentang keinginan pengguna terhadap makanan bungkus di negara-negara membangun dan kurang membangun masih jauh di belakang untuk mendedahkan penyelesaian bagi isu ini. Oleh itu, kajian ini mensasarkan pengguna-pengguna Pakistan untuk menilai keinginan mereka terhadap penggunaan makanan bungkus berkhasiat. Objektif kajian ini telah dicapai melalui symbol lampu isyarat, tuntutan kesihatan, label makanan mesra pengguna, norma subjektif, efikasi kendiri, sikap terhadap label makanan, lima sifat utama keperibadian dan keinginan terhadap pengambilan makanan bungkus berkhasiat. Teori Ajzen berkenaan tingkah laku yang dirancang telah digunakan sebagai teori pendukung. Bagi pengumpulan data, soal-selidik yang dikendalikan secara peribadi telah mensasarkan pelajar-pelajar MBA dari empat belas universiti. Saiz sampel melibatkan 537 pelajar dengan penggunan teknik persempalan rawak yang sistematik. Model persamaan struktur telah digunakan untuk menganalisis model yang sempurna. Simbol lampu isyarat tidak berkesan bagi pengguna-pengguna Pakistan sebaliknya tuntutan kesihatan dan label mesra pengguna secara tidak langsung telah mempengaruhi keinginan pengguna dengan pengantara tingkah laku. Di samping itu, norma subjektif dan efikasi kendiri mempunyai kesan positif yang signifikan terhadap keinginan dalam pengambilan makanan bungkus berkhasiat. Tambahan pula, kesedaran dan penerimaan telah disokong oleh kesan yang sederhana. Implikasi teori dan praktikal turut dibicangkan. Akhir sekali, kajian ini menyediakan cadangan untuk penyelidikan pada masa hadapan.

Kata kunci: Label hadapan bungkusan, lima sifat utama keperibadian, keinginan terhadap pengambilan makanan bungkus berkhasiat.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Chapter one is comprised of brief description of healthy packaged food consumption intentions, problem statement, objective of the study, research questions, significance of the study, study scope and brief description of all the variables used in current study.

1.2 Packaged food consumption intention

Types of packaged food available in the market are ready to eat packaged food and ready to cook packaged food. Ready to eat packaged food is a food which does not need to reheat them such as cooked meet, smoked fish, desserts, cheese and sandwiches. On the other hand ready to cook packaged food further subdivided into ready to cook at burner, ready to cook in oven and ready to cook in microwave. In ready to cook packaged food companies pre-cook or half cook these products and little effort is required from consumer to make them eatable such as vermicelli, pure spices, meal mix, snack mix and frozen food. The researcher of the current study did not categorized the packaged food for research but to focus on the labels of these packaged food which should be informative and easy to interpret by average consumers for healthy packaged food consumption. Owing to the unavailability of formal method to educate consumers pertaining to the selection of healthy food the food label is the best source to achieve this objective. The printed information on food

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APPENDIX A - QUESTIONNAIRE

SCHOOL OF BUSINESS MANAGEMENT

UNIVERSITI UTARA MALAYSIA

FACTORS AFFECTING CONSUMER'S HEALTHY PACKAGE FOOD CONSUMPTION INTENTION

For further information, please contact zzafarmirza@gmail.com

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

School of Business Management
Universiti Utara Malaysia
06010 UUM Sintok, Kedah Darul Aman Malaysia
Tel : (604) 928 4000, Fax : (604) 928 3053

Dear Participant,

My name is Muhammad Zeeshan Zafar and doing PhD from University Utara Malaysia, Malaysia. My PhD specialization is marketing. The intended topic is "FACTORS AFFECTING CONSUMER'S HEALTHY PACKAGE FOOD CONSUMPTION INTENTION ". For the accomplishment of my PhD research your valuable opinion is necessary and you are the most suitable candidate for this survey. Therefore I am inviting you to complete the attached questionnaire.

The attached questionnaire has been designed according to your convenience. In all questions you have multiple options and you have to choose appropriate one. For your comfort the questionnaire is divided into nine sections including demographical part. The questionnaire is comprised of 84 questions.

Due to the multiple options it will take approximately 20 minutes for the completion. If you find that my work and/ or finding can assist you in your academic work I can provide copy of my complete results on your request. You can send me request at my email address which is mentioned below.

I need your volunteer participation. Your honest opinion is most decisive one. If you are interested to participate in this survey kindly complete the attached questionnaire and send me back as soon as possible at my postal address.

Regards

Muhammad Zeeshan Zafar
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Food processing companies are demonstrating the nutritional information with health claims and traffic lights symbols. The following images will guide respondents pertaining to the health claim statements and traffic lights symbols. Companies are designing methods for easy to understand food label information for informed decisions at point of purchase.

Health Claims Formats

Traffic lights Symbols Formats

Criteria for Traffic Light Labelling for Food per 100 Grams (g)			
Ingredient	Green (low content)	Amber (medium content)	Red (high content)
Fat	less than 3.0 g	between 3.0 g and 20 g	more than 20 g
Saturated fats	less than 1.5 g	between 1.5 g and 0.5 g	more than 5.0 g
Sugar	less than 0.5 g	between 0.5 g and 12.5 g	more than 12.5 g
Salt	less than 3.0 g	between 3.0 g and 1.5 g	more than 1.5 g

Criteria for Traffic Light Labelling for Drinks per 100 ml			
Ingredient	Green (low content)	Amber (medium content)	Red (high content)
Fat	less than 1.5 g	between 1.5 g and 10 g	more than 10 g
Saturated fats	less than 0.75 g	between 0.75 g and 2.5 g	more than 2.5 g
Sugar	less than 2.5 g	between 2.5 g and 6.3 g	more than 6.3 g
Salt	less than 0.3 g	between 0.3 g and 1.5 g	more than 1.5 g

Green: Eat often – desirable Amber: Eat occasionally – neutral Red: Eat sparingly – undesirable

The following questionnaire has been designed to investigate the healthy packaged food intention of an individual. Questionnaire comprises of nine sections. Each section has multiple questions.

SECTION A
TRAFFIC LIGHT SYMBOLS

Listed below are a series of statements that represents your opinion towards traffic light symbols (TLS) that are used to demonstrate the high, medium and low fat. Please indicate the degree of your agreement or disagreement with each statement by circling **ONE** of the five alternatives after each statement.

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Traffic light symbols (TLS) are used to demonstrate the high, medium and low fat. Your opinion are required for the significance of Traffic light symbols on Food label

No.	Statements					
1.	Food Nutrients with red, yellow and green traffic lights is effective for healthy-packaged food selection	**1**	**2**	**3**	**4**	**5**
2.	Familiarity of traffic lights symbols on packaged food label take consumer's attention	**1**	**2**	**3**	**4**	**5**
3.	Traffic lights symbols easily demonstrate high, medium and low (fat, sodium, salt, saturated fat and fiber) information	**1**	**2**	**3**	**4**	**5**
4.	Traffic lights symbols benefit consumer for healthy-packaged food selection.	**1**	**2**	**3**	**4**	**5**
5.	Traffic light colors' labels influence consumer to select healthy-packaged food.	**1**	**2**	**3**	**4**	**5**

SECTION B
HEALTH CLAIMS

Listed below are a series of statements that represents your opinion towards regarding product's positive effect on health. Please indicate the degree of your agreement or disagreement with each statement by circling **ONE** of the five alternatives after each statement.

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Health claims are used to disclose the information on food label regarding product's positive effect on health

No.	Statements					
6.	Energy claims such as "Low Energy", "Energy-Reduced" and "Energy Free" at food label help consumer to select healthy-packaged food.	**1**	**2**	**3**	**4**	**5**
7.	Fat claims such as "Low Fat", "Fat-Free", "Low Saturated Fat" and "Saturated Fat-Free" at food label help consumer to select healthy-packaged food.	**1**	**2**	**3**	**4**	**5**
8.	Sugar claims such as "Low Sugar", "Sugars-Free" and "With no Added Sugars" at food label help consumer to select healthy-packaged food.	**1**	**2**	**3**	**4**	**5**
9.	Vitamin claims on food labels help consumers to select healthy-packaged food.	**1**	**2**	**3**	**4**	**5**
10.	Fiber claims such as "Source of Fiber" and "High Fiber" at food label help consumer to select healthy-packaged food.	**1**	**2**	**3**	**4**	**5**
11.	Sodium/salt claims such as "Low Sodium/Low Salt", "Very Low Sodium/ Very Low Salt"," Sodium-Free/Salt Free" at food label help consumer to select healthy-packaged food.	**1**	**2**	**3**	**4**	**5**

SECTION C
USER FRIENDLY FOOD LABEL

Listed below are a series of statements that represents your opinion towards regarding information displayed on food label. Please indicate the degree of your agreement or disagreement with each statement by circling **ONE** of the five alternatives after each statement.

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Food processing companies design food label user friendly regarding information displayed on food label for easy to understand overall food label

No.	Statements					
12.	Availability of required information on food label benefit consumer.	**1**	**2**	**3**	**4**	**5**
13	Clear and easy to understand food label information benefit consumer.	**1**	**2**	**3**	**4**	**5**
14.	Simple and straightforward food label information benefit consumer.	**1**	**2**	**3**	**4**	**5**
15.	Quick facts on food label with easy to read language benefit consumer.	**1**	**2**	**3**	**4**	**5**
16.	Avoiding too much category of information at food label benefit consumer.	**1**	**2**	**3**	**4**	**5**
17.	Brief information on food label benefit consumer.	**1**	**2**	**3**	**4**	**5**
18.	Detailed with simple words' information on food label benefit consumer.	**1**	**2**	**3**	**4**	**5**

SECTION D
ATTITUDE TO READ FOOD LABEL

Listed below are a series of statements that represents your opinion towards reading food label. Please indicate the degree of your agreement or disagreement with each statement by circling **ONE** of the five alternatives after each statement.

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Individual sometime take interest or sometime ignore reading food label while purchasing food items.

No.	Statements					
19.	A food label is a good source of information for healthy-packaged food selection	**1**	**2**	**3**	**4**	**5**
20.	Easy to understand information on food labels is supportive for healthy-packaged food selection	**1**	**2**	**3**	**4**	**5**
21.	Food labels provide good quality information.	**1**	**2**	**3**	**4**	**5**
22.	Food labels contain sufficient information for healthy-packaged food selection.	**1**	**2**	**3**	**4**	**5**
23.	Symbols on food labels are a useful source of information for healthy-packaged food selection	**1**	**2**	**3**	**4**	**5**

SECTION E
SUBJECTIVE NORM

Listed below are a series of statements that represents your opinion towards individual decision making. Please indicate the degree of your agreement or disagreement with each statement by circling **ONE** of the five alternatives after each statement.

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

While purchasing any food item individual decision making influenced by some significant people

No.	Statements					
24.	People important to me think I should eat healthy-packaged food	**1**	**2**	**3**	**4**	**5**
25.	People important to me approve to eat healthy-packaged food	**1**	**2**	**3**	**4**	**5**
26.	People important to me want me to eat healthy-packaged food	**1**	**2**	**3**	**4**	**5**
27.	Many people important to me eat healthy-packaged food	**1**	**2**	**3**	**4**	**5**
28.	The mass media suggest that I should use healthy-packaged food products	**1**	**2**	**3**	**4**	**5**
29.	The mass media urge me to use healthy-packaged food products	**1**	**2**	**3**	**4**	**5**
30.	The mass media and advertising consistently recommended that I should use healthy-packaged food products	**1**	**2**	**3**	**4**	**5**

SECTION F
SELF-EFFICACY

Listed below are a series of statements that represents your opinion towards individual decision making. Please indicate the degree of your agreement or disagreement with each statement by circling **ONE** of the five alternatives after each statement.

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

While purchasing food items individual most of the time feels comfortable to take decision and sometime found him/her difficult to take decision.

No.	Statements					
31.	For me it is difficult to select healthy-packaged food due to small font size at a food label.	**1**	**2**	**3**	**4**	**5**
32.	For me it is difficult to select healthy-packaged food due to lack of knowledge about nutrients.	**1**	**2**	**3**	**4**	**5**
33.	My nature to eat quickly hinders me to select healthy-packaged food.	**1**	**2**	**3**	**4**	**5**
34.	It is entirely up to me to select healthy-packaged food	**1**	**2**	**3**	**4**	**5**
35.	Shopping foods with others (e.g., friends) make difficult for me to select healthy-packaged food	**1**	**2**	**3**	**4**	**5**
36.	For me it is difficult to select healthy-packaged food because nutritional information is placed at the back of the pack food label	**1**	**2**	**3**	**4**	**5**
37.	It is easy to select healthy-packaged food if I can understand the nutrients on the label (e.g., Calorie, fat, etc.).	**1**	**2**	**3**	**4**	**5**
38.	It is easy to select healthy-packaged food if I can understand the nutrient content per serving size on the label (e.g., Calorie 400kcal, fat 10g, etc.)	**1**	**2**	**3**	**4**	**5**
39.	It is easy to select healthy-packaged food if I can understand the percentage daily values of nutrients on the label	**1**	**2**	**3**	**4**	**5**

SECTION G
HEALTHY PACKAGE FOOD CONSUMPTION INTENTION

Listed below are a series of statements that represents your opinion towards purchasing food item. Please indicate the degree of your agreement or disagreement with each statement by circling **ONE** of the five alternatives after each statement.

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

In your daily routine, while purchasing food item, quality of food for your better health is most significant

No.	Statements					
40.	I give importance to nutrients in the purchasing of healthy-packaged food items	**1**	**2**	**3**	**4**	**5**
41.	I mostly prefer to eat healthy-packaged food	**1**	**2**	**3**	**4**	**5**
42.	I frequently purchase healthy-packaged food	**1**	**2**	**3**	**4**	**5**
43.	I am willing to pay extra for healthy-packaged food	**1**	**2**	**3**	**4**	**5**
44.	I intend to take healthy-packaged food	**1**	**2**	**3**	**4**	**5**
45.	I plan to take healthy-packaged food	**1**	**2**	**3**	**4**	**5**
46.	I want to take healthy-packaged food	**1**	**2**	**3**	**4**	**5**

SECTION H
PERSONALITY TRAITS

Listed below are a series of statements that represents your opinion towards five personalities on the bases of their distinguish attributes. Please indicate the degree of your agreement or disagreement with each statement by circling **ONE** of the five alternatives after each statement.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Disagree
1	2	3	4	5

Psychology researchers have categorize individual into five personalities on the bases of their distinguish attributes.

No.	**Extroversion**					
47.	Extroverted	**1**	**2**	**3**	**4**	**5**
48.	Energetic	**1**	**2**	**3**	**4**	**5**
49.	Talkative	**1**	**2**	**3**	**4**	**5**
50.	Bold	**1**	**2**	**3**	4	**5**
51.	Active	**1**	**2**	3	4	**5**
52.	Assertive	**1**	**2**	3	4	**5**
53.	Adventurous	**1**	**2**	**3**	4	**5**
	Agreeableness					
54.	Warm	**1**	**2**	**3**	**4**	**5**
55.	Kind	**1**	**2**	**3**	**4**	**5**
56.	Cooperative	**1**	**2**	**3**	**4**	**5**
57.	Unselfish	**1**	**2**	**3**	**4**	**5**
58.	Agreeable	**1**	**2**	**3**	**4**	**5**
59.	Trustful	**1**	**2**	**3**	**4**	**5**
60.	Generous	**1**	**2**	**3**	**4**	**5**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

No.	Conscientiousness					
61.	Organized	**1**	**2**	**3**	**4**	**5**
62.	Responsible	**1**	**2**	**3**	**4**	**5**
63.	Conscientious	**1**	**2**	**3**	**4**	**5**
64.	Practical	**1**	**2**	**3**	**4**	**5**
65.	Thorough	**1**	**2**	**3**	**4**	**5**
66.	Hardworking	**1**	**2**	**3**	**4**	**5**
67.	Thrifty	**1**	**2**	**3**	**4**	**5**
	Neuroticism					
68.	Calm	**1**	**2**	3	4	**5**
69.	Relax	**1**	**2**	3	4	**5**
70.	At ease	**1**	**2**	**3**	4	**5**
71.	Not envious	**1**	**2**	3	4	**5**
72.	Stable	**1**	**2**	3	4	**5**
73.	Contented	**1**	**2**	**3**	**4**	**5**
74.	Unemotional	**1**	**2**	**3**	**4**	**5**
	Openness					
75.	Intelligent	**1**	**2**	**3**	**4**	**5**
76.	Analytical	**1**	**2**	**3**	**4**	**5**
77.	Reflective	**1**	**2**	**3**	**4**	**5**
78.	Inquisitive	**1**	**2**	**3**	**4**	**5**
79.	Imaginative	**1**	**2**	**3**	**4**	**5**
80.	Creative	**1**	**2**	**3**	**4**	**5**
81.	Sophisticated	**1**	**2**	**3**	**4**	**5**

SECTION I
DEMOGRAPHIC QUESTIONS

Listed below are a series of statements that represents your demographic profile. Please give your personal data by ticking 'X' in the appropriate box.

82. **Your age?**

18 to 23	
24 to 29	
30 to 35	
36 and above	

83. **Gender**

Male	
Female	

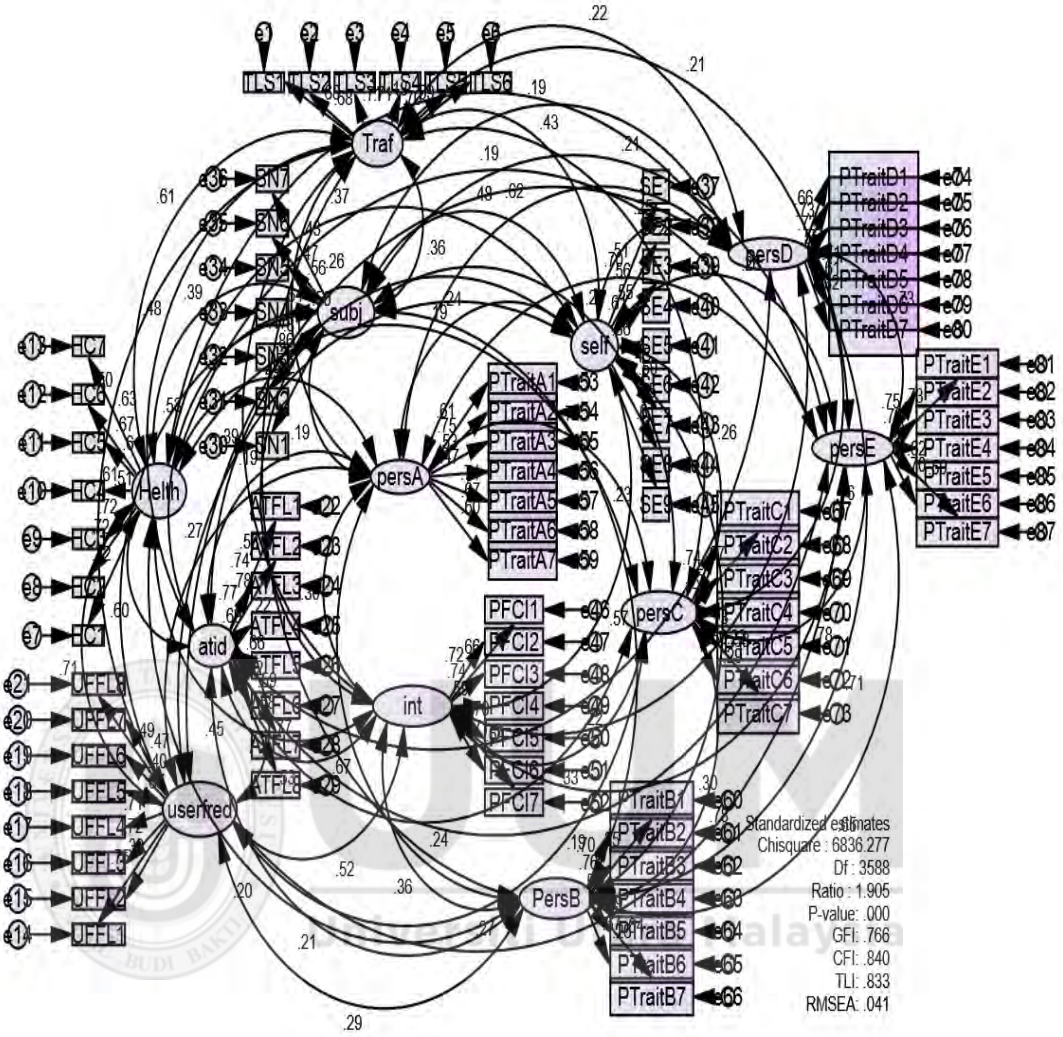
84. **Previous Education level**

Bachelor	
Master	

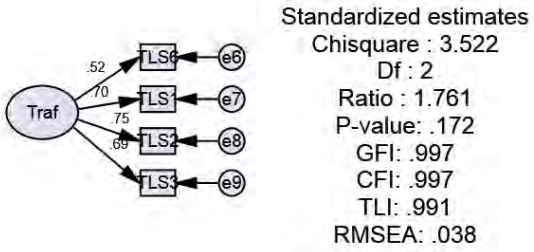
THANK YOU

Appendix B – SUPPLEMENTARY MODELS

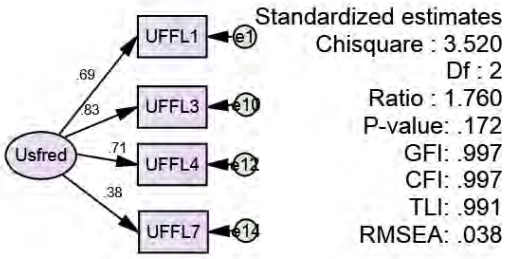
Measurement model (without fit)



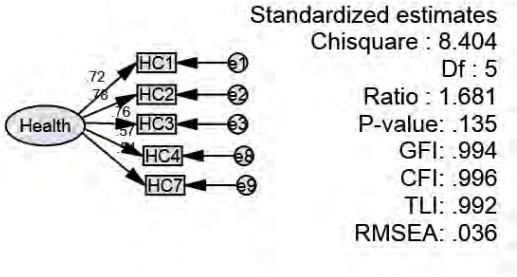
Traffic lights symbols model after fit



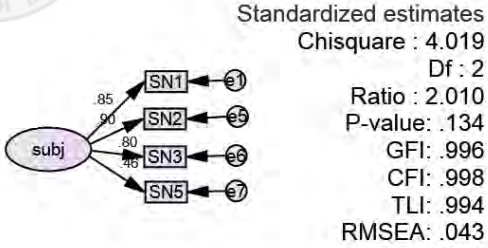
User friendly food label model after fit



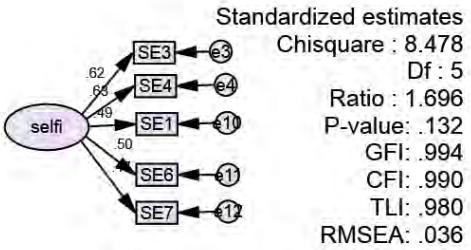
Health Claims model after fit



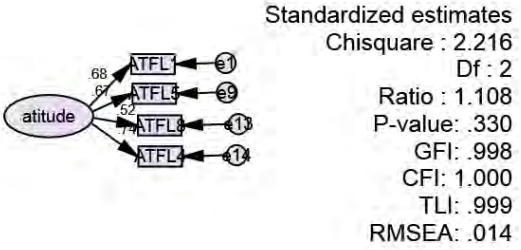
Subjective Norm model after fit



Self-Efficacy model after fit



Attitude towards food label model after fit



Intent ion to consume package food model after fit