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## **A STUDY OF STUDENTS' FOOD SECURITY AND SELF-SUFFICIENCY ECONOMY PRACTICE**

### **Abstract:**

This paper aims to study consumption behavior and self-sufficiency economy practice of students from Suratthani Rajabhat University. The sample of this study consisted of 391 students selected by stratified sampling technique. Questionnaires were used for data collection. The four dimensions of food security, namely; food availability, food access, food utilization, and food stability, and the three pillars and two conditions of the philosophy of sufficiency economy were investigated. Statistical tools employed for data analysis were percentage, mean, standard deviation, and t-test. The results revealed that: 1) the students had good behavior on food security management, and 2) the students' self-sufficiency economy practice was at good level.

### **Keywords:**

food security, self-sufficiency economy, practice

**JEL Classification:** Q56

## Introduction

Food insecurity can affect the way we live and live our lives. Food insecurity causes malnutrition or over nutrition. Fast food consumption has become commonplace among consumers. It is found that most of teenagers and young people consume fast food. Fast food is very popular among teenagers and young people. They consume unhealthy fast food more and more (Wartornpaibul, 2014). Food security can affects human's way of living. The consumption behavior of high-calorie, nutritionally poor, and unhealthy fast food is bad for health. Moreover, the inability to consistently access adequate amounts of nutritious food will lead to inactive and unhealthy lives. Proper food consumption behavior and food security management will lead to self-reliance and social justice (Praneetham and Leekancha, 2015). The Thai government has added a food control system to ensure that all people have access to adequate food, have balanced nutrition, and safety food that people want (Sribuathong and Trevanich, 2010).

The Food and Agriculture Organization (FAO) defined food security that it is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preference for an active and healthy life (FAO, 2006). Generally, there are different important elements to accomplish the food security for people. The four dimensions of food security can be identified as food availability (sufficient quantities, production, distribution and exchange), food access (affordability, allocation and preference), food utilization (nutritional and societal values and safety), and food stability (availability and access dimensions of food security) (FAO, 2006; Thiengkamol, 2011; Praneetham and Leekancha, 2015).

Along with concept of the philosophy of sufficiency economy and its three pillars, the Chaipattana Foundation (2017) mentioned that sufficiency economy is a philosophy based on the fundamental principle of Thai culture. It is a method of development based on moderation, prudence, and social immunity, one that uses knowledge and virtue as guidelines in living. Significantly, there must be intelligence and perseverance which will lead to real happiness in leading one's life. On a personal level, the philosophy of sufficiency economy can be adopted by all people simply by adhering to the middle path. The Philosophy of Sufficiency Economy and its Three Pillars comprise of **moderation** (Sufficiency at a level of not doing something too little or too much at the expense of oneself or others, for example, producing and consuming at a moderate level.), **reasonableness** (The decision concerning the level of sufficiency must be made rationally with consideration of the factors involved and careful anticipation of the outcomes that may be expected from such action.) **risk management** (The preparation to cope with the likely impact and changes in various aspects by considering the probability of future situations.), decisions and activities must be carried out at a sufficient level depending on two conditions: **knowledge**, comprising all-round knowledge in the relevant fields and prudence in bringing this knowledge into consideration to understand the relationship among the field so as to

use them to aid in the planning and ensure carefulness in the operation, ***virtue*** to be promoted, comprising the awareness of honesty, patience, perseverance, and intelligence in leading one's life. Modern development has caused changes in all aspects of Thai society. The positive impacts of the development are economic growth, progress of material and public utilities, modern communication systems, and improvement and expansion of education.

As mentioned above, teenagers and young people prefer to eat unhealthy fast food more and more. The researchers believe that students who have behavior or practice in accordance with the philosophy of sufficiency economy should have good behavior on food security management. Therefore, the researchers are interested in studying consumption behavior and self-sufficiency economy practice of students. The information from the study can be guidance for planning and develop an appropriate food security management model, encourage appropriate and modest food habits, in order to access food at all times, and consume safety and healthy food, which can leads to stable and self-reliant food security management.

## **The Purpose of the Research**

The objective of this research was to study consumption behavior and self-sufficiency economy practice of students from Suratthani Rajabhat University.

## **Methodology**

The quantitative research was done by using questionnaire as tool for data collection. The stratified sampling technique was employed to select 391 students. The research instrument was the close-ended questionnaire with a five-level rating scales on behavior in sufficiency economy and food security. The content and structural validity were determined by Item Objective Congruent (IOC) with 3 experts. The reliability was done by collecting the sample group from 60 students. The reliability was determined by the Cronbach's Alpha while the reliability test of the whole questionnaire was 0.941. The mean, percentage, standard deviation, and t-test were used to analyze the data.

## Results

Table 1: Demographic Characteristics of Respondents

Characteristics		
Sex	Frequency	Percent
Male	165	42.2
Female	226	57.8
Total	391	100.0
Age	Year	Percent
Less than 19 Years old	49	12.50
19-20 Years old	178	45.50
21-22 Years old	70	17.90
More than 22 Years old	94	24.00
Education Level	Frequency	Percent
Freshman	38	9.5
Sophomores	71	17.8
Juniors	58	14.5
Seniors	207	51.8
Total	391	100.0

From Table 1, the result showed that the respondents of this study were 391 students. Most of them were female with 57.8%. The ages were between 19 - 20 years old with 45.50%. Most of the respondents were senior students with 51.8%.

Table 2: Results of the self-sufficiency economy practice of students

Self-sufficiency economy practice topics	$(\bar{x})$	SD	Meaning
Moderation	3.43	0.62	moderate
Reasonableness	3.68	0.61	good
Risk management/ Self-immunity	3.59	0.59	good
Knowledge condition (prudent and appropriate knowledge)	3.49	0.74	moderate
Virtue / Integrity condition (honesty, diligence, wisdom, sharing, perseverance)	3.95	0.63	good
Total	3.62	0.50	good

From Table 2, the result showed that, overall, the students' self-sufficiency economy practice was at "good" level (Mean = 3.62). The result showed that self-sufficiency economy practice of students on virtue / integrity condition was at the highest level compared to other practice (Mean = 3.95), followed by Reasonableness (Mean = 3.68), risk management/ self-immunity (Mean = 3.59), knowledge condition (Mean = 3.49), and lastly moderation (Mean = 3.43).

Table 3: Results of the behavior on food security management of students

Food security topics	$\bar{x}$	SD	Meaning
Availability	3.49	0.52	moderate
Access	3.34	0.43	moderate
Utilization	3.63	0.51	good
Stability	3.71	0.58	good
Total	3.55	0.39	good

From Table 3, the result showed that, overall, the students' behavior on food security management was at "good" level (Mean = 3.55). Based on data analysis, students' behavior on food stability was at the highest level compared to other behavior (Mean = 3.71), followed by food utilization (Mean = 3.63), food availability (Mean = 3.49), and lastly food access (Mean = 3.34).

Table 4: Comparison between male and female students on consumption behavior

Food security topics	Male		Female		t-value	p-value
	$\bar{x}$	SD	$\bar{x}$	SD		
Availability	3.45	0.51	3.52	0.53	-.734	.463
Access	3.33	0.45	3.34	0.43	-1.467	.143
Utilization	3.63	0.49	3.64	0.52	-.408	.684
Stability	3.71	0.57	3.71	0.58	-.286	.775
Total	3.54	0.39	3.56	0.40	-.091	.927

\* Significant at the 0.05 level

From Table 4, judging from the test values (t-test), it can be derived that, overall, the variable sex did not affect the students' behavior on food security management.

Table 5: Comparison between of male and female students on self-sufficiency economy practice

Self-sufficiency economy practice topics	Male		Female		t-value	p-value
	$\bar{x}$	SD	$\bar{x}$	SD		
Moderation	3.57	0.61	3.33	0.61	3.759	.000**
Reasonableness	3.80	0.59	3.59	0.61	3.473	.001**
Risk management/ Self-immunity	3.67	0.58	3.53	0.60	2.436	.015*
Knowledge condition	3.55	0.75	3.46	0.74	1.197	.232
Virtue / Integrity condition	3.94	0.62	3.96	0.63	-.227	.820
Total	3.71	0.48	3.57	0.51	2.737	.006**

\* Significant at the 0.05 level, \* \* Significant at the 0.01 level

From Table 5, results from the test values (t-test) showed that, overall, the variable sex affects the students' self-sufficiency economy practice. However, knowledge condition, and virtue / integrity condition topics showed no difference of self-sufficiency economy practice of male and female students. While, the variable sex affected the students' practice on moderation, reasonableness and risk management / self-immunity with the difference of statistically significance level of 0.01, 0.01, and 0.05 respectively.

## Discussion and Conclusions

The finding indicated that the students' behavior on food security management was at "good" level. However, it should be noted, that food availability and food access were at moderate level. Praneetham and Leekancha (2015) mentioned that food insecurity will affect health and quality of life during the ageing process and impact on ongoing old-age. Youth need to access adequate nutrition, clean delicious food and free from chemicals and toxins at all time. In order to preventing childhood obesity, youth should change their consumption behavior by avoiding fast food and consuming more safety and nutritious food (Wilson, et al. 2008; Tumpracha, et al. 2012a).

The study revealed that students' self-sufficiency economy practice was at "good" level. However, it should be noted, that moderation and knowledge condition were at moderate level. This related to survey of Phaungsri (2007) revealed that the King Bhumibol's sufficient economy philosophy helps people understand the concept of enough, reasonable, and self immunity and can apply to their daily life. Praneetham and Leekancha (2015) stated in their research result that the King Bhumibol is inspirational role model for Thai people and his projects also motivate them on food security management.

The study found that the variable sex did not affect the students' behavior on food security management; this result is pertinent to the study of Praneetham and Leekancha (2015). While the variable sex affected the students' self-sufficiency economy practice. Teungfung and Kerdlapee (2013) mentioned that the King Bhumibol's sufficiency economy philosophy, attitude, and motivation influence the students' consumption behavior. Therefore, the Royal sufficiency economy philosophy should be encouraged for better knowledge, understanding and awareness. Sufficient principle should be promoted to be applied in everyday life, which can lead to a high level of concern for food security and application (Phaungsri, 2007, Praneetham and Thathong, 2012a, Praneetham and Leekancha, 2015).

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