

Leisure Time Allocation in Accordance with the Sufficiency Economy Philosophy of Adolescents in Bangkok

Jitsopin Meerakate^{1,*}, Thanwa Jitsanguan²
and Suwanna Thuvachote³

ABSTRACT

The main purpose of this research was to study the compatibility of leisure time allocation and the Sufficiency Economy Philosophy. It aimed to focus on youth's leisure time allocation: 1) for pursuits without interrupting their daily activities, 2) being compatible with social conditions, and 3) preventing them from having a risky life-style. The target group was 500 secondary school students (Mathayomsuksa 3) sampled from 7 selected schools in Bangkok. Data were collected by questionnaires and analyzed by descriptive statistics.

The research findings indicated that the majority of the respondents (84%) rated the compatibility of leisure time allocation and the Sufficiency Philosophy Economy as fairly high to high, whereas a few (16%) rated it as fairly low. According to the analysis of the three core aspects of the philosophy—namely, Moderation, Reasonableness and Self-immunity—it was found that for the Reasonableness aspect, the majority of the respondents (94.6%) allocated leisure time as fairly high. For the aspect of Self-immunity, most respondents (80.8%) allocated leisure time from fairly high to high. Less than half of the respondents (32%) indicated leisure time allocation with regards to the Moderation aspect being fairly low to low.

The findings of this study indicated that insufficient Moderation was significant since the respondents spent more time on leisure activities than on major activities, which were supposed to be done. As a result, this significant issue should be brought to the attention of not only the family on a micro-level but also the government on a macro-level. This issue was considered of high impact because leisure time allocation can affect the long-term physical, emotional, and social development of youths. Inappropriate time allocation is an unavoidable factor which affects the potential of human resources in the future.

Keywords: leisure, Sufficiency Economy Philosophy, adolescents

¹ Faculty of Management Science, Kasetsart University Si Racha, Chon Buri 20230, Thailand.

² Department of Agricultural and Resource Economics, Faculty of Economics, Kasetsart University, Bangkok 10900, Thailand.

³ Department of Cooperatives, Faculty of Economics, Kasetsart University, Bangkok 10900, Thailand.

* Corresponding author, e-mail: khunbelle@gmail.com

บทคัดย่อ

การวิจัยครั้งนี้มีจุดมุ่งหมายเพื่อศึกษาการจัดสรรการใช้เวลาว่างของเยาวชนที่สอดคล้องกับปรัชญาเศรษฐกิจพอเพียง โดยเน้นการใช้เวลาว่างในกิจกรรมต่าง ๆ ที่ไม่เบี่ยงเบนต่อกิจกรรมหลักในชีวิตทั่วไป และเนื่องในสังคมรวมทั้งเป็นแนวทางการดำเนินชีวิตที่ไม่เป็นพฤติกรรมเสี่ยงของกลุ่มตัวอย่าง ซึ่งเป็นนักเรียนระดับชั้นมัธยมศึกษาปีที่ 3 ของโรงเรียนจำนวน 7 แห่ง ในกรุงเทพมหานคร จำนวนทั้งสิ้น 500 คน

ผลการศึกษาพบว่ากลุ่มตัวอย่างร้อยละ 84 ใช้เวลาว่างที่สอดคล้องกับปรัชญาเศรษฐกิจพอเพียงในภาพรวม อยู่ในระดับที่ค่อนข้างสูงถึงระดับสูง และมีเพียงร้อยละ 16 เท่านั้นที่อยู่ในระดับค่อนข้างต่ำ เมื่อวิเคราะห์ใน 3 องค์ประกอบหลักของปรัชญา คือ ความพอประมาณ ความมีเหตุผล และการมีภูมิคุ้มกัน ที่ดี พบว่ากลุ่มตัวอย่างร้อยละ 94.6 มีการใช้เวลาว่างด้วยความมีเหตุผลในระดับค่อนข้างสูง ขณะที่ร้อยละ 80.8 มีการใช้เวลาว่างด้วยการมีภูมิคุ้มกันในระดับค่อนข้างสูงถึงระดับสูง อย่างไรก็ตามร้อยละ 32 มีการใช้เวลาว่างด้วยความพอประมาณในระดับค่อนข้างต่ำถึงระดับต่ำ

การจัดสรรการใช้เวลาว่างของกลุ่มวัยรุ่นตัวอย่างในครั้งนี้ โดยเฉพาะในประเด็น ความไม่พอประมาณ ซึ่งแสดงถึงการจัดสรรใช้ช่วงเวลาที่มากเกินไป เพื่อทำกิจกรรมเวลาว่างและไปลดช่วงเวลาของกิจกรรมหลักให้น้อยลง จึงควรได้รับความสนใจจากครอบครัวในระดับจุลภาคและภาครัฐที่รับผิดชอบในระดับมหาภาค เพราะพุทธิกรรมการใช้เวลาว่างดังกล่าวจะสามารถส่งผลกระทบในระยะยาวต่อพัฒนาการด้านร่างกาย จิตใจ รวมทั้งยังเป็นปัจจัยที่มีผลต่อการพัฒนาศักยภาพของทรัพยากรบุคคลในอนาคตอย่างหลีกเลี่ยงไม่ได้

คำสำคัญ: การใช้เวลาว่าง ปรัชญาเศรษฐกิจพอเพียง วัยรุ่น

INTRODUCTION

Adolescents are important in shaping the future of the human resources of society and the country as a whole. If adolescents develop ideas, knowledge, and abilities in a positive stream, they will become adults whose knowledge and abilities will benefit themselves and society. As a result, it is believed that society and the country will tend to flourish in the future. Adolescents' ideas, knowledge, and abilities are integrated with concepts and behavior from an early age. In addition, a number of research and academic dialogues indicate that family, educational institutions, and society are not the only factors that influence adolescents with the latter's very own personal behavior being important. Likewise adolescents' time allocation has an effect on their future concepts (Shanahan & Flaherty, 2001, pp. 385–386).

The question of whether adolescents spend their leisure time appropriately does not have clear answers yet. It is acceptable for adolescents to earn money by having part time jobs so they do not have to ask for any extra allowance from their parents. However, it is unacceptable for adolescents to earn money from doing indecent jobs like prostitution, for example. It is also considered unwise to spend money on gambling, playing on computers, and buying luxury items. Consequently, what could be considered a suitable way for adolescents to spend their leisure time in order to benefit Thai society?

His Majesty King Bhumibol Adulyadej on the subject of the Sufficiency Economy Philosophy mentioned that the overall definition of this philosophy can be applied as a principle of lifestyle and as the policy for the country's administration (Krongkaew, 2003). This philosophy is, in fact, applied in various aspects except in agriculture where its application has some limitations.

In the current study, the Sufficiency Economy Philosophy has been applied to adolescents' allocation of their leisure time to identify suitable ways this time can be spent. This study dealt with the issue of

adolescents' appropriate use of time (such as the time spent on leisure activities compared with the time on the main activities in their daily life), self-consciousness, self control, and the avoidance of risky behavior so as to construct Self-immunity. The suggestions in this study will serve as guidelines for parents, teachers, and policy makers (administrators) in considering and supporting adolescents' use of leisure time in accordance with the principles of Moderation, Reasonableness, and Self-immunity, thereby leading to the quality development of human resources in the future.

RESEARCH FRAMEWORK

The Sufficiency Economy Philosophy

The Sufficiency Economy is a philosophy that indicates a way of living that can be practiced by people from all levels—the family, community, and government—including the development and administration of the country, especially economic development, in order to cope with the rapid changes occurring through globalization.

Sufficiency means Moderation, Reasonableness and the necessity of Self-immunity which are affected not only by internal but also external changes (Jitsanguan, 2008). This needs knowledge, prudence and care in order to apply step-by-step planning and proceeding by means of the philosophy. Meanwhile, the sentimental awareness of government officials, theorists, and business people of all levels will be raised in terms of virtue, honesty, and expertise to better equip their lives with patience, intelligence, and care, to cope with the rapid changes caused by the social, environmental, and cultural factors of the external world.

The Sufficiency Economy Philosophy consists of three aspects (Office of the National Economic and Social Development Board, 2005; Jitsanguan, 2008).

1. Moderation. This means being optimal in all thoughts and behavior, for example, doing everything to a level that is not too little or not too

much without interrupting one's self and others, through the production and consumption of everything at a moderate level.

2. Reasonableness. This is concerned with making sensible decisions at a sufficient level by carefully considering the related cause and effect of any action.

3. Self-immunity. This deals with self-preparation or readiness for the impact and for various changes by considering the possibility of different situations which may happen in the near and distant future.

There are two sufficient conditions concerning the decision making and proceeding of activities:

1. Knowledge is composed of well-informed knowledge and prudence which are related to careful planning and practice.

2. Integrity consists of the awareness of virtue, honesty, patience, perseverance, and intelligence of lifestyle, without greediness or miserliness.

The Sufficiency Economy Philosophy concerning the relationship of the three qualifications and the two conditions is summarized in Figure 1 below.

Jitsanguan (2008) mentioned that in Thailand, there is a significant, concrete connection between the Sufficiency Economy Philosophy and Thai society. This is known as the construction of the “Strong Community” procedure. The “Strong Community” refers to a community whose members have public awareness, virtue, generosity, and kindheartedness. All members participate in the community development plan which is based on their own potential as well as the autonomous community in order to achieve the goals of balance, stability, and sustainability. If the community is strong, increases in the quantity and quality of the individual at the micro level will lead to growth at the macro level. In contrast, a community will not develop without its own inner strength.

This study is based on the Sufficiency Economy Philosophy which includes Moderation, Reasonableness, and Self-immunity. These three

variables, which are regarded as the main aspects of the Sufficiency Economy Philosophy, are applicable to the definition of leisure time of the National Statistical Office (2001) which states that leisure time is the amount of time left when three types of time—necessary time (activities for basic physiological needs), contracted time (activities for work and education) and committed time (activities for committing oneself because of previous behaviors)—have been taken out of everyday life. Leisure time also includes activities for recreation or activities during free time.

As a result, the study of leisure time allocation in accordance with the Sufficiency Economy Philosophy is defined as the use of leisure time in doing activities moderately without interrupting the time for doing major activities such as taking care of one's health and being responsible for one's duties. In addition, leisure time should be reasonably used in doing useful activities which are compatible with the social condition. Furthermore, the use of leisure time in doing activities with Self-immunity should not involve any risky behavior or place oneself in a risky situation and the activities should be done willingly and not under compulsion.

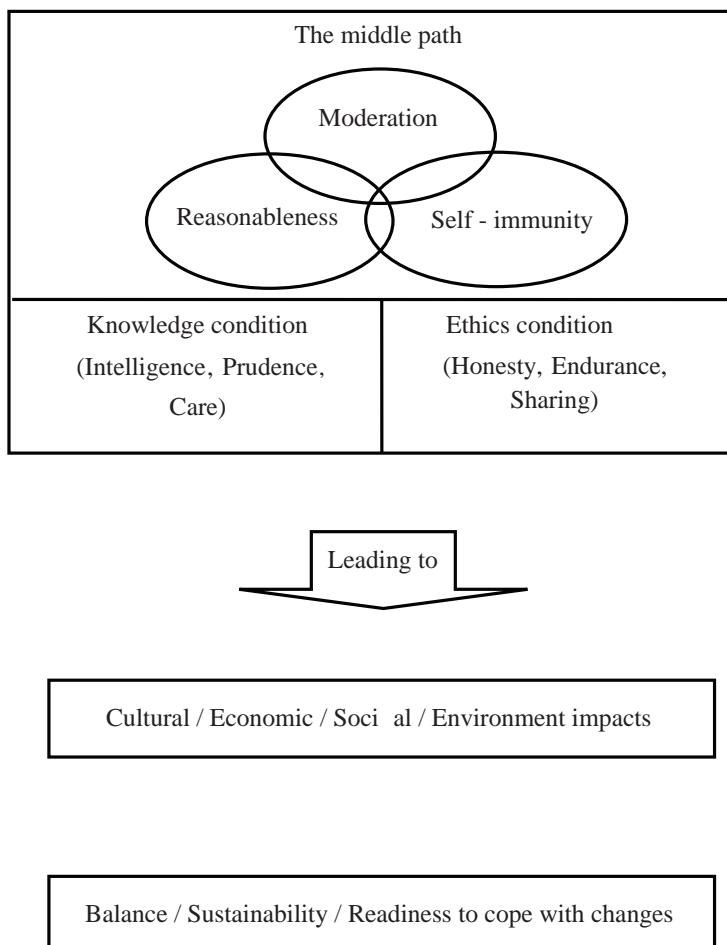


Figure 1 Summary of the Sufficiency Economy Philosophy

Source: Office of the National Economic and Social Development Board, 2005

This principle is briefly presented as a research framework in Figure 2.

Definition of terms

Spending leisure time allocation in accordance with the Sufficiency Economy Philosophy means the use of leisure time doing activities with Moderation, Reasonableness, and Self-immunity.

Spending leisure time with Moderation is defined as the intelligent and moderate use of resources. In addition, leisure time is exploited without interrupting the time for a personal daily routine, study, and household chores.

Spending leisure time with Reasonableness is the sensible use of resources; spending leisure time usefully not only for one's self but also for compatibility with social conditions.

Spending leisure time with Self-immunity refers to the use of resources with the consideration of the present and the future effects by leading a good and careful life as well as avoiding risky behavior or putting one's self in risky situations.

RESEARCH METHODOLOGY

The target population consisted of adolescents, both male and female, studying in Bangkok whose ages ranged from 13 to 15 years old. They were studying in Mathayomsuksa 3 at 40 high schools in Educational Area 1, Bangkok. Data were collected during the first semester from May to July 2009. The sample population was selected using a multi-stage sampling procedure. First, Bangkok was stratified based on Educational Area Office 1, and then seven schools were randomly selected in this area. The number of students in each school was selected on the basis of probability proportional to prediction, that is, schools with a high number of students were selected. The instrument used in this study was a questionnaire with two parts: Part 1 consisted of questions that dealt with each subject's personal information; and Part 2 consisted of questions regarding leisure time allocation in accordance with the Sufficiency Economy Philosophy.

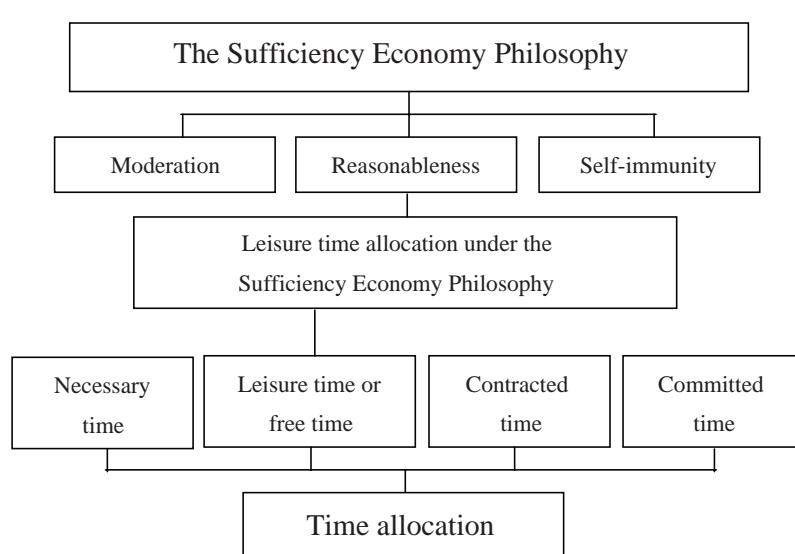


Figure 2 Research framework

The questionnaires were constructed with a reliability coefficient of 0.9387, in accordance with the construction of measurement process. In total, 500 questionnaires were distributed to the sample students in different schools during May to July 2009. After collection of completed questionnaires, the sample data and variables were analyzed using descriptive statistics.

RESULTS AND DISCUSSION

General background of the sample subjects

The sample subjects were students with 50.4 percent being female and 49.6 percent being male. There were three groups of students based on their grades: moderate, high, and low. The students of the moderate group had a grade point average from 2.51 to 3.50 (46.8%), the students of the high group had a grade point average from 3.51 to 4.00 (27.4%) and the students of the low group had a grade point average from 1.00 to 2.50 (25.8%).

Family income was also divided into three categories—moderate, high, and low. The moderate group had an income from 10,000 to 50,000 baht (57.8%); the high group had an income more than 50,000 baht (22.8%); and the low group had an income of less than 10,000 baht (19.4%).

Parents' education was categorized into three levels—low, moderate, and high. Parents who had attained below primary or primary education were given a low educational level; those who had secondary education or vocational education were classified as having a moderate educational level, and parents who had graduated with a Bachelor degree or higher were classified at the high educational level.

The percentage in each class of the parents' educational level were approximately equally distributed. This finding revealed that the number of parents whose educational levels were low, moderate, and high formed a normal distribution (Table 1).

Adolescents' behaviors in accordance with the Sufficiency Economy Philosophy

The instrument of the study which was developed by applying the Sufficiency Economy Philosophy and the concept of leisure time allocation was the evaluation form which measured the compatibility of leisure time allocation and the Sufficiency Economy Philosophy. The Sufficiency Economy Philosophy has been clearly described. The evaluation form was tested for reliability and the sample subjects' behavior concerning the compatibility of leisure time allocation and the Sufficiency Economy Philosophy.

The findings of the study indicated that the majority of the sample subjects (84%) showed a fairly high level of leisure time allocation in accordance with the Sufficiency Economy Philosophy ($\bar{X} = 3.13$, $SD = 0.659$). However, very few of the sample subjects (16%) showed a fairly low level of leisure time allocation in accordance with the Sufficiency Economy Philosophy. In fact, most of the sample subjects indicated their behavior as fairly high according to Sufficiency Economy Philosophy, whereas no sample subjects presented their behavior as low.

The application of the principle of the Sufficiency Economy Philosophy and adolescents' leisure time allocation can be divided into three aspects: Moderation, Reasonableness and Self-immunity. The results indicated that the majority of the sample subjects (94.6%) who spent leisure time with Reasonableness was at fairly high to high levels. Also, most respondents (80.8%) spent leisure time with Self-immunity at fairly high to high levels. On the contrary, 32.0 percent spent leisure time with Moderation at fairly low and low levels. This aspect was compatible with the Sufficiency Economy Philosophy at fairly high or high levels at only 68.0 percent and is regarded as rather low when compared with other aspects (Table 2).

The results showed that 32.0 percent (160 subjects) spent leisure time with Moderation at low (0.4%) and fairly low (31.6%) levels. This indicated

that times involving major activities such as having meals, sleeping, and studying were interrupted. Almost 64 percent of the respondents stated that leisure time interrupted their time having meals at fairly high to high levels, whereas 46.4 percent stated that spending leisure time interrupted their time sleeping at fairly high to high levels. And 52.8 percent stated that spending leisure time interrupted their time studying at fairly high to high levels.

Table 3 presents other factors of leisure time that are incompatible with the Sufficiency Economy Philosophy. The activities of leisure time with Moderation interrupted time for meals, sleeping, and

studying, whereas the activities of leisure time with Reasonableness were incompatible with the needs of the family. The activities of leisure time with Self-immunity did not support the sample subjects exercising nor developing their spirituality.

The results of the study showed that 473 sample subjects (94.6%) spent leisure time with Reasonableness at fairly high to high levels, while 27 sample subjects (5.4%) used leisure time at a fairly low level. Concerning other factors, it was found that most of the sample subjects (85%) spent leisure time with Reasonableness by activities which were useful to themselves, by considering safety, and

Table 1 Number and percentage of the sample subjects with different backgrounds

(n=500)

Background	n	%
Sex		
Male	248	49.6
Female	252	50.4
Grade point average		
1.00–2.50	129	25.8
2.51–3.50	234	46.8
3.51–4.00	137	27.4
Family's income (baht)		
Less than 10,000	97	19.4
10,000–50,000	289	57.8
more than 50,000	114	22.8
Father's education level		
below primary	6	1.2
primary education	133	26.6
secondary education	119	23.8
vocational education	82	16.4
Bachelor degree	110	22.0
above Bachelor degree	50	10.0
Mother's education level		
below primary	3	0.6
primary education	166	33.2
secondary education	101	20.2
vocational education	74	14.8
Bachelor degree	116	23.2
above Bachelor degree	40	8.0

by being compatible with the needs of the family at fairly high to high levels. However, according to the compatibility of spending leisure time and the needs of the family, less than half of the subjects (39.2%) stated that they spent leisure time which was incompatible with the needs of the family at fairly high and high levels.

Ninety six sample subjects (19.2%) showed fairly low to low levels in spending leisure time with Self-immunity, while 404 sample subjects (80.8%) used leisure time at fairly high to high levels. Concerning other factors, it was found that 42.2 percent did not create Self-immunity for exercising and 57.2 percent did not create Self-immunity for

Table 2 Responses on leisure time allocation in accordance with the Sufficiency Economy Philosophy (n=500)

Aspect of leisure time allocation in accordance with the Sufficiency Economy Philosophy	Level of Compatibility			
	Low	Fairly low	Fairly high	High
Spending leisure time with Moderation	2 (0.4)	158 (31.6)	284 (56.8)	56 (11.2)
Spending leisure time with Reasonableness	0 (0.0)	27 (5.4)	230 (46.0)	243 (48.6)
Spending leisure time with Self- immunity	9 (1.8)	87 (17.4)	214 (42.8)	190 (38.0)
Total of leisure time allocation in accordance with the Sufficiency Economy Philosophy	0 (0.0)	80 (16.0)	275 (55.0)	145 (29.0)

Criteria: $\bar{X}=1.00-1.75=$ low, $1.76-2.50=$ fairly low, $2.51-3.25=$ fairly high, $3.26-4.00=$ high

Table 3 Responses on leisure time allocation not in accordance with the Sufficiency Economy Philosophy (n=500)

Other factors of leisure time allocation in accordance with the Sufficiency Economy Philosophy	Level of Incompatibility			
	Low	Fairly low	Fairly high	High
Interrupting time for eating	105 (21.0)	76 (15.2)	150 (30.0)	169 (33.8)
Interrupting time for sleeping	151 (30.2)	117 (23.4)	120 (24.0)	112 (22.4)
Interrupting time for studying	54 (10.8)	182 (36.4)	243 (48.6)	21 (4.2)
Incompatible with needs of the family	180 (36.0)	124 (24.8)	151 (30.2)	45 (9.0)
No time for exercising	151 (30.2)	138 (27.6)	109 (21.8)	102 (20.4)
Lack of spiritual development	75 (15.0)	139 (27.8)	111 (22.2)	175 (35.0)

spirituality such as by meditating and praying at fairly high to high levels. Nevertheless, only 30 sample subjects showed risky behavior at a low level.

The results of the study confirmed that the sample subjects spent leisure time which interrupted time for having meals. This was consistent with Yamborisut, Kittidiloknkul, Chittchang, Rojroongwasinkul, & Tontisirin (1993), where the adolescents were found to imitate the eating habits of their friends as well as from advertising. The study showed that adolescents ate all sorts of food and did not have regular meals. In addition, adolescents spent leisure time in activities they liked such that it interrupted their sleeping time and made them go to sleep later, thus getting up later. The research also reported the results of having insufficient sleep, such as, a negative effect on growth and health, and a lack of capably coping with studies. Adolescents also started smoking, had high blood pressure and tension, had a tendency to commit suicide, and were prone to accidents.

The study of Benjaponpithak (2007), pointed out examples of activities which were inconsistent with the family's needs and insufficient exercise, for instance, playing computer games, watching television, and talking on the telephone. Due to these static activities, adolescents consumed junk snacks which made them gain weight but reduced their growth. Moreover, the results indicated that adolescents lacked time for activities that helped to develop their spiritual aspect such as mediating and praying. The study the change of adolescents' behaviors by meditation: A case study of Watpaknam Phasi Charoen by Kanjant (2008) proved that adolescents who practiced meditation not only developed virtue and ethics but also improved their behavior.

CONCLUSION AND RECOMMENDATION

The purpose of this study was to investigate leisure time allocation in accordance with the Sufficiency Economy Philosophy. The majority of

the sample subjects (84%) spent leisure time in accordance with the Sufficiency Economy Philosophy at fairly high and high levels, whereas only a few sample subjects (16%) spent leisure time in accordance with the Sufficiency Economy Philosophy at a fairly low level.

With regards to the three aspects of the Sufficiency Economy Philosophy—Moderation, Reasonableness and Self-immunity—the results indicated that the adolescents spent leisure time with Moderation by using resources intelligently (in terms of time and money). This result showed compatibility with the Sufficiency Economy Philosophy at fairly high to high levels. However, the sample subjects stated that their time spent on leisure activities interrupted the time for meals, sleep, and study.

As for spending leisure time with Reasonableness, the results indicated that the adolescents were conscious of the time they spent on leisure activities. The activities neither produced stress from high competition nor become a danger to themselves and others. The adolescents were able to control their five senses. (In addition, they use leisure time to benefit their physical and mental health or to develop their potential, for example, spending free time to develop their special skills, which included music and sports that were consistent with social conditions in culture, morality, law, religion, and the belief of good and evil.) Most of the aspects concerning leisure time were in accordance with the Sufficiency Economy Philosophy at fairly high to high levels. Nevertheless, the incompatibility of spending leisure time with the family's needs was notable and should be taken into account.

In the aspect of spending leisure time with Self-immunity, the results indicated that the adolescents spent free time with a good life style and avoided risky behavior or risky situations. Such types of behavior were consistent with the Sufficiency Economy Philosophy at fairly high to high levels. However, it was found that the number of adolescents who spent free time exercising regularly (every week) and who had created Self-immunity by praying and meditating was fairly low.

It can be concluded that the sample subjects who were adolescents were able to control themselves especially in the aspects of Reasonableness and Self-immunity. In the aspect of Moderation, adolescents spent leisure time without interrupting main activities such as having meals, sleeping, studying at school, and exercising. The hypothesis testing and adolescent experts pointed out that the activities of the adolescents' leisure time should be adapted with Moderation. Although the finding showed positive results for leisure time allocation in accordance with the Sufficiency Economy Philosophy, there may be some factors of spending leisure time that cause an unexpected impact on the adolescents' physical, mental, emotional, and social development in the long term.

The study on spending leisure time allocation in accordance with the Sufficiency Economy Philosophy applied the concept of spending time. The purpose was to concretely evaluate how Thai adolescents use free time. The focus of the study was on the reasons that were in accordance with adolescents' positive development. Concepts, beliefs, a way of life with Moderation, and avoidance of risky situations are involved in the principle of the Sufficiency Economy Philosophy which His Majesty the King has bestowed on all Thai people. Also, this study has applied the principle of the Sufficiency Economy Philosophy with adolescents' leisure time in order to develop guidelines for adolescents' leisure time allocation to be suitable for other adolescents, families, and Thai society.

1. Spending leisure time with Moderation

1) Parents and family members should be concerned about adolescents' leisure, especially the time for activities such as sleeping and having meals. These should not be interrupted by leisure time activities.

2) In order for adolescents to lead better lives, leisure time should be allocated efficiently so that a framework of public health in Thailand is established.

2. Spending leisure time with Reasonableness

Parents should take part in adolescents' leisure time including activities among the adolescents themselves. In addition, parents should learn about adolescents' interests and needs, in particular adolescents' preference for high technology. Meanwhile, adolescents' behavior should not be controlled, as this can cause them to rebel against their parents and to not cooperate.

3. Spending leisure time with Self-immunity

Members of the family should take part in exercising and in utilizing leisure time to develop the mind such as by meditating and practicing religious ceremonies, meeting for self-development, or participating in seminars which are useful for a conscious and intelligent life style.

Recommendations for further study

There are possibly additional issues concerning the study of leisure time allocation of selected subjects as follows:

1) There should be further research conducted with other target groups; moreover, the research should consider different content and subjects in the sample targets. Research should also be conducted in other areas in Thailand and the results should be compared to other studies.

2) Further research should consider other indicators of spending leisure time allocation in accordance with the Sufficiency Economy Philosophy that were not included in the personal information collected in the current study such as the size of the school or the influence of adolescents' friends and teachers.

REFERENCES

Benjaponpitak, A. (2007). *Sleeping Pattern of Adolescents*. Retrieved from http://campus.sanook.com/teen_zone/spice_02347.php?theme_id=1&page=0

Jitsanguan, T. (2008). Sufficiency Economy Philosophy and home economics. *Presented at the First National Seminar on Home Economics*, Department of Agricultural Extension, Ministry of Agriculture and Cooperatives. 1 July–2 August 2008. Miracle Grand Hotel, Bangkok.

Kanjant, N. (2008). *Adolescents behavior changes with meditation: Case study of Watpaknam Phasi Charoen Bangkok* (Unpublished master's thesis). Mahidol University, Bangkok.

Krongkaew, M. (2003). *The Philosophy of Sufficiency Economy*. Kyoto Review. Retrieved from <http://www.reflectedknowledge.com/clients/GSB/sufficiency>

National Statistical Office (2001). *Definition of leisure time*. Retrieved from http://web.nso.go.th/eng/en/stat/timeuse/time_use00.htm

Office of the National Economic and Social Development Board. (2005). *What is Sufficiency Economy?* ISBN 9749545877. Pathum Thani: National Science and Technology Development Agency, NSTDA, Thailand.

Shanahan, M. J., & Flaherty, B. P. (2001). Dynamic patterns of time use in adolescence. *Child Development*, 72, 385–401.

Yamborisut, U., Kittidilokkul, W., Chittchang, U., Rojroongwasinkul, N., & Tontisirin, K. (1993). Factors influencing obesity in school children in Bangkok Metropolitan Area. *Siriraj Medical Journal*, 45(11), 759–769.