Media Consumption and Self-care Behavior among the Elderly in Sisa Chorakhe Noi Sub-district Administration, Samutprakarn Province

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Abstract
The objective of this study is to explore the relationship between the elderly's media consumption behavior and their self-care behavior. The study employed survey questionnaire as its methodology. A sample comprising 295 seniors aged 60 or over was selected based on stratified random sampling. Data collection was conducted during October 12-19, 2016. The collected data were grouped according to personal factors and analyzed using Mann-Whitney U and Kruskals-Wallis Tests. Results of group differential study show that self-care behavior differs across groups of seniors of distinct education levels (p-value = 0.000). Spearman's rank correlation was used to explore the relationship between the elderly's media consumption behavior and their self-care behavior, which was found to be positively correlated (r = +0.626, p-value = 0.000). Findings of this study provide a better understanding on the relationship between the elderly's media consumption behavior and their self-care behavior, which could be used for the development of media and media channels on self-care for the elderly.

Keywords: personal factors, media consumption behavior, self-care behavior, Thailand

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Introduction

The number of aging population around the world has been increasing dramatically to a level that can be easily considered aging society. The proportion of aging population in Thailand reached 11.9 percent in 2010, surpassing "aging society" threshold, and is expected to more than double in size, with the proportion of senior citizens expected to reach 25 percent, in 2030. Particularly, the proportion of the elderly aged over 75 to all senior citizens will rise from the current 22 percent to a 26-percent level, an increase of 18 percent, in 2020 (Thaniwatananont, 2016, p. 3).

The developing situations concerning the elderly have a wide-ranging impact on the public health, the economy and the society as a whole. In response, the government has put the preparedness of individuals to achieve quality aging as one of the key strategies in its Second National Plan on the Elderly (effective 2002 - 2021). Self-care is considered to play an important role in later-life transitioning. Although aging is a major cause of physical deterioration among the elderly, it has a less impact on achieving a happy life, as physical aging is easier to cure than a mental one. For the elderly, "mental aging" could ruin a happy life however robust their physical strength is. The elderly are, therefore, advised to always maintain their mental well-being (Learning Materials Committee on Adulthood and Elderly Development, 2015, pp. 8-14).

An effective public health communication is considered to be indispensable to enhancing information exchange capability in this information age. To compete for the common share of interest against traditional commercials for goods and services, media production concerning public health must take into account target audience, diverse communication channels, customized message contents that attract attention, stimulate awareness and impact long-term memory (Phromponlamuang, 2012). Research on media exposure and accessibility among the elderly found that TV and personal communication were major channels for gaining access to knowledge, boosting morale and entertainment, whereas mobile phone, with its perceived versatility, was used to converse with their children, grandchildren and relatives (Khleechaya, 2012). An interview with an official to Sisa Chorakhe Noi sub-district administration revealed that the elderly were exposed to actionable health-related information through reading, media exposure to a variety of information sources, periodical self-monitoring, annual health examination, and socialization through the membership of clubs and associations (Y. Phoomrueang, personal communication, September 3, 2016). A study that sheds light on the relationship between health-related media consumption among the elderly residing in Sisa Chorakhe Noi sub-district administration and their self-care behavior would certainly benefit future media policies that take the elderly locals as its target audience.

Research Objectives

1. To study self-care behavior among the elderly in Sisa Chorakhe Noi sub-district administration.

2. To understand whether self-care behavior among the said group of elderly differ across demographic variables.

3. To explore the relationship between media consumption behavior and self-care behavior among the said group of elderly.

Research Hypotheses

1.   Self-care behavior among the elderly differs across gender.
2.   Self-care behavior differs across marital status.
3.   Self-care behavior differs across education levels.
4.   Self-care behavior differs across income levels.
5.   Self-care behavior differs across living conditions.
6.   Media consumption behavior correlates with self-care behavior.

Research Methodology

Population of interest is defined as a total of 1,122 senior citizens aged 60 or over residing in Sisa Chorakhe Noi sub-district administration. Assuming the acceptable sampling error of 5 percent, Taro Yamane's simplified sample size calculation yielded a sample size of 295. Stratified random sampling was employed to divide the population of interest into villages; simple random sampling from each village was then conducted through a draw—from a list of the elderly registered in Sisa Chorakhe Noi sub-district administration—in a number proportional to the village's size when compared to the population. In the event that the sampled subject was found to be incapable of completing the survey questionnaire, a redraw with respect to that particular village was conducted to replace him/her.

Table 1: Sample size determined for each village in Sisa Chorakhe Noi sub-district administration

Village No.	The Elderly Population			Sample Size		
	Male	Female	Total	Male	Female	Total
1	114	192	306	30	50	80
2	25	38	63	7	10	17
3	83	52	135	22	14	36
4	33	34	67	9	9	18
5	26	47	73	7	12	19
6	19	30	49	5	8	13
7	46	51	97	12	13	25
8	17	31	48	4	8	12
9	22	33	55	6	9	15
10	61	73	134	16	19	35
11	13	21	34	3	6	9
12	27	34	61	7	9	16
Total	486	636	1,122	128	167	295

Research Instrument

The research instrument employed in this study was survey questionnaire. The questionnaire consisted of three parts: Part 1 dealt with personal factors, i.e. gender, marital status, education, income and living condition; Part 2 involved media consumption behavior among the elderly—in particular, selective exposure, selective attention, perception and interpretation, and internalization aspects of media consumption; Part 3 concerned the four aspects of self-care, i.e. physical, mental, social and spiritual. The questionnaire items employed five-point rating scales with such anchors as "1 = least important," "5 = most important," etc. A total of 30 pretest questionnaires were administered in order to verify the survey instrument's reliability through the analysis of Cronbach's Alpha coefficient. A Cronbach's Alpha coefficient of 0.7 was obtained from the pretest result, suggesting that the measures were reasonably acceptable.

Statistical Analyses

This study employed inferential statistics approach, represented by Exploratory Factor Analysis, with the following analytical objectives:

2.1 To test whether the male sample differs from the female one with respect to self-care at a significance level of 0.05 using Mann-Whitney U test;

2.2 To test whether three or more groups formed according to marital status, education levels, income levels and living conditions differ with respect to self-care at a significance level of 0.05 using Kruskal-Wallis Test (Wanichbancha, 2011, p. 181), and to further conduct pairwise comparisons using Least Significant Difference (LSD) method;

2.3 To establish the relationships between personal factors, media consumption behavior and self-care behavior at a significance level of 0.05 using Spearman's rank correlation.

Results

The questionnaires were administered to 295 sampled seniors. The questionnaires were completed and all returned to the researchers. A preliminary investigation into the questionnaire's reliability yielded a Cronbach's Alpha coefficient of 0.708. The following detail five parts of data analyses and results.

Part 1: Personal factors of the sampled elderly in Sisa Chorakhe Noi sub-district administration

Table 4-1: A summary of the sample's personal factors (n = 295)

Personal Factor Item	Number (persons)	Percentage
Gender		
Male	128	43.4
Female	167	56.6
Marital status		
Single	37	12.5
Married	210	71.2
Divorced	23	7.8
Separate	6	2.0
Others (widowed)	19	6.4
Education		
Primary school	209	70.8
High school	66	22.4
College/university	14	4.7
Others (vocational school)	6	2.0
Monthly income		
≤10,000	225	76.3
10,001-20,000	63	21.4
20,001-30,000	4	1.4
≥30,001	3	1.0
$\overline{X}$ = 8,337 baht , S.D. = 0.535 , Max = 40,000 baht, Min = 500 baht		
Living condition		
Living Alone	34	11.5
Living with family	251	87.8
Others (living with non-family members)	2	0.7

Table 4-1 summarizes the sample's information on personal factors as follow

Gender: Among those sampled, females accounted for 56.6 percent, males 43.4 percent, respectively;

Marital status: The majority of those sampled, 71.2 percent, was married, with seniors classified as single, divorced, widowed and separate accounting for 12.5, 7.8, 6.4 and 2.0 percent, respectively;

Education: The majority of those sampled, 70.8 percent, finished primary school, followed by high school (22.4 percent), college/university (4.7 percent) and vocational school (2.0 percent), respectively;

Monthly income: The majority of seniors sampled, 76.3percent, reported a monthly income of 10,000 baht or less, with those falling into the 10,001 - 20,000 baht income category accounting for 21.4percent;

Living condition: The overwhelming majority, an equivalent of 87.8 percent, reported living with their family, whereas those living alone accounted for 11.5 percent of the elderly surveyed.

Part 2: Media consumption behavior—composed of selective exposure, selective attention, perception and interpretation, and internalization aspects—among the elderly in Sisa Chorakhe Noi sub-district administration

Table 4-2: A summary of media consumption behavior among the elderly in Sisa Chorakhe Noi sub-district administration (n = 295)

Media Consumption Behavior	Percentage of Respondents			X	S.D.	Interpret As
	High	Moderate	Low			
1. Selective Exposure	149 (50.5)	109 (36.6)	37 (12.5)	2.41	0.49	High
2. Selective Attention	179 (60.7)	90 (30.5)	26 (8.8)	2.49	0.47	High
3. Perception and Interpretation	193 (65.4)	84 (28.5)	18 (6.1)	2.59	0.46	High
4. Internalization	178 (60.3)	100 (33.9)	17 (5.8)	2.55	0.44	High
Overall Media Consumption Behavior				2.51	0.36	High

Table 4-2 reveals that, with an overall average of 2.51, the sampled elderly were highly active in their media consumption behavior. More specifically, they were highly active in all the four aspects of media consumption, marking a score of 2.41, 2.49, 2.59 and 2.55 for selective exposure, selective attention, perception and interpretation, and internalization aspect, respectively.

Part 3: The physical, mental, social and spiritual aspects of self-care

Table 4-3: A summary of self-care behavior among the elderly in Sisa Chorakhe Noi sub-district administration (n = 295)

Self-Care Behavior	Percentage of Respondents			$\bar{X}$	S.D.	Interpret As
	High	**Moderate**	**Low**			
1. Physical Aspect	244 (82.7)	49 (16.6)	2 (0.7)	2.59	0.31	มากHigh
2. Mental Aspect	221 (74.9)	60 (21.0)	12 (4.1)	2.57	0.43	มากHigh
3. Social Aspect	249 (84.4)	41 (13.9)	5 (1.7)	2.65	0.35	มากHigh
4. Spiritual Aspect	244 (82.7)	48 (16.3)	3 (1.0)	2.65	0.35	มากHigh
Overall Self-Care Behavior				2.61	0.28	High

Table 4-3 indicates that, with an overall average of 2.61, the sampled elderly were highly active in their self-care behavior. More specifically, they were highly active in all the four aspects of self-care, marking a score of 2.59, 2.57, 2.65 and 2.65 for physical, mental, social and spiritual aspect, respectively. Interestingly, our by-item analysis indicates that exercise received the least average score of 2.27.

Part 4: Analysis of whether groups formed according to gender, marital status, education levels, income levels and living conditions differ with respect to self-care

Table 4-4: Differences in self-care behavior among the elderly in Sisa Chorakhe Noi sub-district administration when grouped according to gender (n=295)

*p-value < 0.05

Personal Factor Item	Self-Care Behavior			Mann-Whitney U	Z	P-value
	n	**x̄**	**S.D.**			
Gender				9,918.5	-1.06	0.288
Male	129	2.63	0.285			
Female	167	2.59	0.283			

** Based on Mann-Whitney U Test

Table 4-4 shows that self-care behavior did not differ across gender groups at 0.05 significance level.

Table 4-5: Differences in self-care behavior among the elderly in Sisa Chorakhe Noi sub-district administration when grouped into different categories of marital status, education level, income level and living condition (n=295)

Personal factor item	Self-Care Behavior among the Elderly			Chi-Square	P-value
	n	x̄	S.D.		
Marital Status				5.467	0.243
Single	37	2.54	0.34		
Married	210	2.63	0.28		
Divorced	23	2.57	0.25		
Separate	6	2.49	0.27		
Others	19	2.62	0.18		
Education Level				19.007	0.000*
Primary School	209	2.65	0.25		
High School	66	2.55	0.30		
College/University	14	2.36	0.35		
Others	6	2.40	0.23		
Income Level				0.498	0.919
< 7,000	148	2.59	0.26		
7,001 – 14,000	94	2.63	0.28		
14,001 – 21,001	46	2.62	0.29		
> 21,001	7	2.53	0.47		
Living Condition				0.495	
Living Alone	34	2.58	0.30		0.781
Living with Family	259	2.61	0.28		
Others	2	2.72	0.24		

*p-value < 0.05
** Based on Kruskal-Wallis Test

Table 4-5 shows that groups of the elderly in Sisa Chorakhe Noi sub-district administration formed according to marital status, income levels and living conditions did not differ with respect to self-care behavior; however, those with different education levels exhibited statistically different ($p < 0.05$) behavior with respect to self-care.

The researchers, therefore, sought to gain insight into these elderly groups classified on the basis of education by further conducting pairwise comparisons using Least Significant Difference (LSD) method.

Table 4-6: Pairwise comparison on the elderly groups classified based on education level using Least Significant Difference (LSD) method

Education Level	Self-Care Behavior Mean (S.D.)	Pairwise comparison		
		High School	College/University	Others (Vocational School)
Primary School	2.654 (0.259)	0.100*	0.290*	0.254*
High School	2.554 (0.305)	-	0.190*	0.154
College/University	2.364 (0.352)	-	-	-0.357
Others (Vocational School)	2.400 (0.234)	-	-	-

*p-value < 0.05

Table 4-6 indicates that the elderly with primary school education had statistically different self-care behavior than those who completed high school, college/university and vocational school, whereas the elderly with high school education behaved differently than those who had a college/university degree. In all cases, the differences were statistically significant at 0.05 significance level. With respect to self-care behavior, those with primary school education scored the highest (average score 2.654), while those holding a college/university degree scored the lowest (average score 2.364).

Part 5: The relationship between media consumption behavior—composed of selective exposure, selective attention, perception, and internalization aspects—and self-care behavior among the elderly in Sisa Chorakhe Noi sub-district administration.

Table 4-7: The relationship between media consumption behavior and self-care behavior among the elderly in Sisa Chorakhe Noi sub-district administration (n = 295)

Media Consumption Behavior	Self-Care Behavior		
	Correlation Coefficient (r)	P-Value	Degree of Correlation
1. Selective Exposure	0.755**	0.000*	High
2. Selective Attention	0.805**	0.000*	High
3. Perception and Interpretation	0.707**	0.000*	High
4. Internalization	0.661**	0.000*	Moderate
Overall	0.626**	0.000*	Moderate

*p-value < 0.05
** p-value < 0.01

As summarized in Table 4-7, the relationship between media consumption behavior and self-care behavior among the elderly can be described as moderate. Specifically:

- selective exposure was highly correlated with self-care behavior at 0.05 significance level (r = 0.755, p-value < 0.001);

- selective attention was highly correlated with self-care behavior at 0.05 significance level (r = 0.805, p-value < 0.001);

- perception and interpretation was highly correlated with self-care behavior at 0.05 significance level (r = 0.707, p-value < 0.001);

- internalization was moderately correlated with self-care behavior at 0.05 significance level (r = 0.661, p-value < 0.001).

Discussion

Hypothesis 1: Self-care behavior among the elderly differs across gender

The results show that self-care behavior did not differ between male and female elderly groups, rejecting Hypothesis 1. The elderly males and females may not have presented stark differences in terms of lifestyle; this could also apply to the realm of self-care behavior. The results are consistent with a study by Siriwongpakhon (2013), which explored the relationship between media exposure behavior and self-dependence among the elderly in Bangkok. Siriwongpakhon (2013, p. 46) found no significant difference in self-dependence across gender. Furthermore, no gender difference was observed with respect to physical, mental, social and economic aspects of self-dependence.

Hypothesis 2: Self-care behavior differs across marital status

The results show that self-care behavior did not differ among different marital status groups, rejecting Hypothesis 2. As a matter of fact, seniors in Sisa Chorakhe Noi sub-district administration routinely engage themselves in socialization with their peers through group activities, group meals or exercises, providing an opportunity to converse among themselves on subjects that matter to them—including self-care. Granted, the elderly living in couple tend to engage in more health talks, compared to those who never married, divorced, widowed or separate; but the fact that these seniors, regardless of their marital status, avail themselves of social interaction with their peers and others provides ample opportunity for talking health, in effect nullifying any major difference that might have been caused by distinct marital conditions. The results of this study are consistent with a study by Chantham (2011), which explored self-care behavior among the elderly in Tambon Kluai Kwang, Huai Thap Than District, Si Sa Ket Province. Chantham (2011) found no significant difference in self-care behavior among groups of the elderly classified based on marital status.

Hypothesis 3: Self-care behavior differs across education levels

The results show that self-care behavior differs across groups of seniors of distinct education levels, supporting Hypothesis 3. Those seniors with primary school education demonstrated the most conservative self-care behavior, whereas those with a college/university degree presented the least. The results are in line with a study by Suthanya (2007), which investigated the relationship between self-care behavior and satisfaction in life among the elderly subjects sampled in Rommaninat Park, Bangkok. Suthanya (2007) found a significant difference in self-care behavior among groups of the elderly classified based on education level.

Hypothesis 4: Self-care behavior differs across income levels

The results show that self-care behavior did not differ across different income groups, rejecting Hypothesis 4. As the majority of studied subjects is concentrated in the monthly income category of 10,000 baht or less, either in the form of elderly pension or pocket money supported by their children/grandchildren, income level therefore compromised its own differentiating effect on self-care behavior. The results are in accordance with a study by Phoomviset (2015), which shed light on self-care behavior among the elderly in Nonthaburi Province. In Phoomviset's (2015) study, no significant difference in self-care behavior was found among groups of the elderly having different income levels.

Hypothesis 5: Self-care behavior differs across living conditions

ผลการศึกษาพบว่าสภาพการพักอาศัยที่แตกต่างกัน
มีพฤติกรรมการดูแลสุขภาพตนเองไม่แตกต่างกัน ไม่สอดคล้องกับสมมติฐานข้อที่
5 The results indicate that self-care behavior did not differ according to different living conditions, rejecting Hypothesis 5. Potentially, food, exercise and mental well-being have more to do with self-care behavior than the fact that the elderly live by themselves or with their family. The results are consistent with the study by Siriwongpakhon (2013), which explored the relationship between media exposure behavior and self-dependence among the elderly in Bangkok. Siriwongpakhon (2013, p. 55) found no significant difference in self-dependence across living conditions.

Hypothesis 6: Media consumption behavior correlates with self-care behavior

The results show that, overall, media consumption behavior—which consists of selective exposure, selective attention, perception and interpretation, and internalization aspects—moderately correlated with self-care behavior, supporting Hypothesis 6. The most correlated aspect was selective attention ($r = 0.805$), while the least was internalization ($r = 0.661$). The elderly could have been exposed to a variety of such health-related information sources as public communication, personal communication or periodical newsletter, paid close attention to the information exposed, interpret such information and formed a perception as a result. However, the perception formed or the resulting interpretation may not necessarily have been put into practice in their everyday life, as reflected in internalization being the least correlated aspect among the four. The results are consistent with the study by Siriwongpakhon (2013), which explored the relationship between media exposure behavior and self-dependence among the elderly in Bangkok. Siriwongpakhon (2013,

p. 63) found media exposure tendency—the elderly's tendency to be open to news and information about their peers from such a variety of sources as TV, radio, printed media, the Internet, newsletter or personal communication—to be positively correlated with self-dependence.

Suggestions

Our by-item analysis indicates that exercise was given less weight than other self-care items. To the benefit of the elderly's self-caring efforts, health promoting activities and knowledge disseminating venues focusing on the-elderly-oriented exercises, such as walking, running, Tai Chi or Pétanque, should be regularly held as a means through which the elderly can associate themselves and exchange information.

References

Chantham, S. (2011). *Self-care behavior among the elderly*. (Thesis). Mahidol University, Bangkok.

Khleechaya, P. (2012). *The need for information, media utilization and media exposure among the elderly*. Retrieved September 18, 2016 from http://library.cmu.ac.th

Learning Materials Committee on Adulthood and Elderly Development. (2015). Nonthaburi: Sukhothai Thammathirat Open University

Phoomrueang, Y. (2016, September 3). Personal communication.

Phoomviset, P. (2015). *Self-care behavior among the elderly*. (Thesis). Rajapruk University, Nonthaburi.

Phromponlamuang, K. (2012). *Health communication*. Retrieved October 12, 2016 from https://www.gotoknow.org/posts/476869

Siriwongpakhon, S. (2013). *A study of media exposure behavior to relation with elderly of self-reliance in Bangkok Metropolis*. (Thesis). Rajamangala University of Technology Phra Nakhon, Bangkok.

Suthanya, S. (2007). *Self-Care and Life Satifaction of The Elderly in Rommaninat Park Bangkok. (Thesis). Srinakharinwirot University, Bangkok.*

Thaniwatananont, P. (2016). *Symptoms-based healthcare for the elderly: towards the excellence of nursing*. Songkhla: Charnmuang Publishing.

Wanichbancha, K. (2011). *Advanced Statistical An alysis*. Bangkok: Mister Copy.