

“3S Project”: A Community-Based Social Marketing Campaign for Promoting Sustainable Consumption Behavior Among Youth

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ABSTRACT

This study aims to evaluate a community-based social marketing (CBSM) campaign for promoting sustainable consumption behavior (SCB) among Thai youth. As a result, the “3S Project” was a CBSM campaign innovation to promote SCB among Thai youth which was created and piloted with a small segment of university students. The project was evaluated using quasi-experimental research in the form of a non-equivalent control group, designed for checking the effectiveness. Multivariate analysis of variance (MANOVA) at .05 statistically significant level was employed in this analysis. After intervention, it found that the “3S Project” innovation was effective. The mean scores of the experimental group were higher than the mean scores of the control group significantly in all five indicators, including the attitude towards behavior, the subjective norm, the perceived behavioral control, the intention to perform SCB, and sustainable consumption behavior (SCB). These results were recognized as new findings in the field of social marketing communication. They extend the existing body of knowledge in this field of study because using CBSM for sustainable behavior change in Thailand is still considered as being in its initial stage. Therefore, the results of this research project will be strongly beneficial for social marketing practitioners, communication campaign planners, and any organizations related to promote SCB among youth on all levels (international level, national level, and even local level) in utilizing this CBSM campaign innovation for promoting SCB among the Thai youth, both effectively and efficiently.

Keywords: *Community-based social marketing (CBSM), sustainable consumption behavior (SCB), quasi-experimental research, youth, Thailand*

INTRODUCTION

Over the past decade, the concept of ‘sustainable consumption behavior’ (SCB) has received more attention among academicians and practitioners in marketing, marketing communication, brand management, consumer behavior, and other related fields in Thailand. In theory, it was considered as a significantly important approach to mobilize the country into a sustainable development country according to the Agenda 21 action plan of the United Nations (Dahlstrom, 2011; Murr, 2008). Agenda 21 is a voluntary action plan of the United Nations with regard to sustainable development. It is a product of the Earth Summit (United Nations Conference on the Environment and Development) that was held between 3 to 14 June in Rio de Janeiro, Brazil, in 1992. It should be noted that the number “21” in the title of Agenda 21 refers to the 21st Century. Ten years later, the Johannesburg Summit, held from 26 August to 4 September 2002 in South Africa, had defined a full concrete operational approach to build up the instrument to quicken the execution of the Agenda 21. These operational approaches covered the formulation of policies promoting sustainable production and consumption. This Agenda emphasized that the significant reasons for weakening of the worldwide environment condition are the unsustainable behaviors of utilization and creation, continuously increasing needs, and extravagant ways of life (Blanc, 2010). So as to accomplish the objectives set out in Agenda 21, it is important to

change the present utilization towards different strategies and methods which will advance greater sustainability. This is particularly true in chapter 4 of Agenda 21, where it emphasizes that all countries should strive to promote sustainable consumption patterns and developing countries should actively seek to achieve sustainable consumption patterns in their development process while avoiding other unsustainable patterns in consumption. Besides this, all countries should reinforce the values that support sustainable consumption. Therefore, the governments, private-sector organizations and educational institutions on every level, from the elementary level to graduate level, should promote far more positive attitudes towards an overall sustainable consumption. This can be undertaken through education, public awareness programs, social marketing communication campaigns for consumption behavioral change, and other means, such as positive advertising of products and services that utilize environmental technologies or encourage sustainable consumption patterns (United Nations Division for Sustainable Development, 2016). So as to change the view of the national development to be consistent with the sustainable development and to modify consumption behavior among the population in each country into sustainability, the Agenda 21 has been adopted in Thailand since 1992. Until 2003, the Office of the National Economic and Social Development Board (NESDB) of Thailand has built up the strategies to promote the sustainable consumption among Thai consumers.

In an international context, sustainable consumption was often defined by the United Nations Department of Economic and Social Affairs as the use of goods and services which meet the needs of present and future generations in ways that are economically, socially, and environmentally sustainable (United Nations Department of Economic and Social Affairs, 2016). From this definition, it clearly shows that sustainable consumption behavior consists of three components: the economic dimension, social dimension, and environmental dimension. In Thailand, sustainable consumption was defined by the Office of the National Economic and Social Development Board (NESDB) as the consumption in a way that meets needs in the present and also considers the impact on the economic, social, and environmental aspects for future generations. Just like in the international context, this definition also shows the balance of consumption in the same three aspects: the economic, social, and environmental dimensions. From the second strategy of promoting sustainable consumption in Thailand, as was mentioned above, it was found that using the social marketing concept to promote sustainable consumption among Thai consumers was needed, especially for the young consumers. The reason why this group is important is mainly because young consumers are getting ready to become adulthood and potential buyers soon. If they change their consumption behavior at an earlier age into choosing sustainability, then they will become a sustainable consumer in their adult age much easier, because they will be very familiar, or even habitual, with that approach. As a result, young consumers were considered as being a suitable target population for the promotion of sustainable consumption behavior, more than any other age group. An effectively new approach to behavior change into sustainability is Community-Based Social Marketing (CBSM). The approach of CBSM has recently received much greater attention among social marketing academicians and practitioners across the world as it is becoming recognized as being an attractive alternative to a conventional social marketing campaign, which was often called an information-intensive campaign. Using conventional social marketing programs which were based on an information-intensive campaign, can be effective in creating public awareness, enhancing knowledge, or modifying attitudes but they are limited in their ability

to behavior change (Celik, 2016; Cole & Fieselman, 2013; Kennedy, 2010; McKenzie-Mohr, 1996). Unlike the conventional social marketing approach, the Community-Based Social Marketing (CBSM) approach is the integration of two social sciences between the knowledge of psychology and the knowledge of conventional social marketing to bring about behavior change for a more sustained success by using various tools of behavioral change. This concept was originated in 1996 by Dr. Doug McKenzie-Mohr, an environmental psychologist teaching at the Department of Psychology at St. Thomas University in Canada. This concept has become widespread in several countries, especially in Canada, Australia, and the United States of America and it was followed with results being published in several research papers from social marketing academicians and practitioners who successfully used this concept in promoting sustainable behaviors in their local community (Celik, 2016; Cole & Fieselman, 2013; Kennedy, 2010; McKenzie-Mohr, Nemiroff, Beers, & Desmarais, 1995; McKenzie-Mohr & Smith, 1999; McKenzie-Mohr, 2000a, 2000b, 2008, 2011; Schultz, 2005). However, in Thailand, this approach is still rather new and using CBSM for sustainable behavior change in Thailand is still considered as being in its initial stages.

As a result, the “3S Project” as a CBSM campaign innovation to promote SCB among the Thai youth was created by the author of this paper and piloted with a small segment of university students in Bangkok, Thailand. The “3S Project” was comprehensively developed according to the Community-Based Social Marketing (CBSM) approach as proposed by Doug McKenzie-Mohr (McKenzie-Mohr, 1996; McKenzie-Mohr & Smith, 1999; McKenzie-Mohr, 2011). The key message of the “3S Project” is the three processes that are used to promote SCB among Thai youth. These processes consist of the three ‘S’ values of: Saving, Selecting, and Sharing. The first one, saving, i.e. the economic dimension, means that the youth should save money around 10% before they start spending. The second one, selecting, i.e. the environmental dimension, means that the youth should select to buy environmentally friendly products. Lastly, sharing, i.e. the social dimension, means that the youth should donate any used products to the poor or a charity or philanthropic organizations. The effectiveness of CBSM Campaigns for sustainable behavior change in an international context is clearly evident in several previous research studies (Celik, 2016; Cole & Fieselman, 2013; Kennedy, 2010; McKenzie-Mohr, Nemiroff, Beers, & Desmarais, 1995; McKenzie-Mohr & Smith, 1999; McKenzie-Mohr, 2000a, 2000b, 2008, 2011; Schultz, 2005). However, it is still a major question to be resolved in Thailand. Therefore, this study was conducted in order to evaluate a Community-Based Social Marketing (CBSM) Campaign (“3S Project”) to promote sustainable consumption behavior among the Thai youth.

LITERATURE REVIEW

Community-Based Social Marketing (CBSM)

Community-Based Social Marketing (CBSM) has recently received greater attention among social marketing academicians and practitioners across the world as it has been accepted as an attractive alternative to the conventional social marketing campaign, which was often called an information-intensive campaign. The conventional social marketing campaign often depends on the attitude-behavior perspective which assumes that most changes in behavior are brought about by increasing knowledge and by altering attitudes towards that behavior. Therefore, the conventional social marketing campaign program is based on this perspective, in attempting to alter behavior by providing information through various media, both online and offline, to affect the targeted population. However, enhancing knowledge and altering

attitudes by using information-based campaigns may not affect at all, or may have only a little effect upon any major behavior change (McKenzie-Mohr, 1996; 2000a; 2000b; 2011). Besides this observation, using conventional social marketing programs which were based on an information-intensive campaign can be effective in creating public awareness, enhancing knowledge, or modifying attitudes, but they are rather limited in their ability to create any genuine behavior change (Celik, 2016; Cole & Fieselman, 2013; Kennedy, 2010). Unlike the conventional social marketing approach, the Community-Based Social Marketing (CBSM) approach focuses on the integration of two social sciences between the knowledge of psychology and the knowledge of conventional social marketing, in order to bring about behavior change for a more sustained success. This is done by using various tools of behavior change such as Commitment, Social Norms, Social Diffusion, Prompt, Convenience, Incentives, and Communication. Another interesting differentiation of CBSM from conventional social marketing is the ability to be able to uncover the barriers to a selected behavior and utilizing various tools of behavior change, as mentioned above, in order to overcome these barriers. CBSM recognizes that identifying barriers is an important step in creating an effective social marketing campaign in promoting sustainable behaviors (Tabanico, 2007). McKenzie-Mohr introduced CBSM in his book: *“Promoting a Sustainable Future: An introduction to Community-Based Social Marketing”* by encouraging readers to understand the concept of Community-Based Social Marketing (CBSM) through promoting sustainable behavior (McKenzie-Mohr, 1996). Following that, he wrote many academic articles and papers to introduce this concept in various international academic journals (McKenzie-Mohr, 2000a; 2000b; 2008). After the initial introduction, this concept has become widespread in several countries, especially in Canada, Australia, and the United States of America and it was also followed by several research papers from social marketing academicians and practitioners who successfully used this concept by promoting sustainable behaviors in their own local communities (Celik, 2016; Cole & Fieselman, 2013; Kennedy, 2010; Schultz, 2005).

The further evidence and positive results of using CBSM were compiled in a specific website: “www.cbsm.com” which is an important resource for those who are working to foster sustainable behaviors in five significant aspects: 1) conservation; 2) energy efficiency; 3) transportation; 4) waste reduction; and 5) water efficiency. The website includes the complete contents of the book describing the process of CBSM as well as searchable databases of relevant articles, case studies, and various strategies. Further to this, it also includes discussion forums for users to share information and asking questions as well. In practice, the Community-Based Social Marketing (CBSM) approach involves five specific steps to create behavior change: 1) selecting behaviors to be promoted; 2) identifying the barriers and benefits associated with the selected behavior; 3) designing a strategy that utilizes psychological tools of behavior change; 4) piloting the strategy with a small segment of a community; and finally, 5) implementing broadly within a community.

Theory of Planned Behavior

In reviewing the variety of literature on sustainable consumption behavior (SCB), the author found that variables in the theory of planned behavior can effectively predict sustainable consumption behavior (Luchs & Mooradian, 2012; McCabe, Corona, & Weaver, 2013; Scholl et al., 2010; Staniškis, Arbačiauskas, & Varžinskas, 2012; Thøgersen & Schrader, 2012). The theory of planned behavior is a theory developed to explain variables affecting actual

behavior. It was developed by Ajzen (1988). He developed this conceptual framework from theory of reasoned action (TRA) by Fishbein & Ajzen (1975). According to the theory of reasoned action (TRA), actual behavior was affected by intention to perform a behavior (INT) which was the individual's perceived level of intent to practice a behavior. At the same time, the intention to perform a behavior was also affected by two factors: the attitude towards the behavior (ATT) and the subjective norm (SN). The attitude towards the behavior is an individual's feeling towards that behavior while the subjective norms are the beliefs that his or her friends think the individual ought to perform and how significant their notions are to his or her behavior. The effectiveness of the theory of reasoned action (TRA) is high for explaining a behavior which is less complicated. However, in some behaviors which are likely to be more complicated or difficult to practice, it is still a question. Therefore, to answer this question, Ajzen (1988) added another significant variable affecting actual behavior in the framework of TRA. It was called as perceived behavioral control (PBC). According to the theory of planned behavior, perceived behavioral control is the individual's perceived self-efficacy to perform a behavior. It was based from past experiences together with present competencies to determine the perceived self-efficacy to perform a behavior. As a result, this further theoretical framework is very beneficial in explaining a complicated behavior or situations which the person feels difficult to control the behavior, as shown in Figure 1. Therefore, five variables in this theory (attitude towards the behavior, subjective norm, perceived behavioral control, intention, and actual behavior) were used as the effectiveness indicator of the CBSM Campaign ("3S Project") in this study.

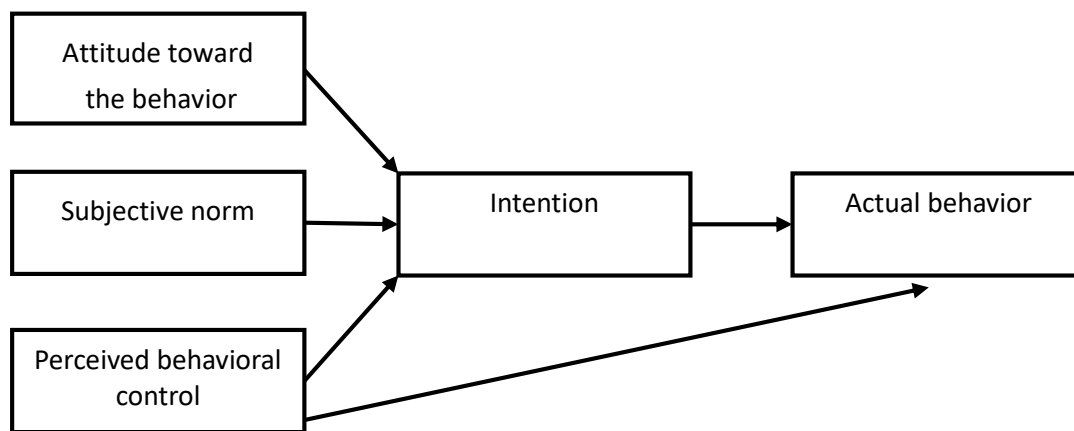


Figure 1: Theory of Planned Behavior

METHODOLOGY

To evaluate the effectiveness of the "3S Project", a quasi-experimental research in the form of a non-equivalent control group design was used in this study, as shown in Figure 2. The "3S Project" as a community-based social marketing (CBSM) campaign innovation to promote sustainable consumption behavior among Thai youth, which was created and then piloted in a 15-week period with a small class of 36 university students in the Faculty of Humanities of Kasetsart University (KU) in Bangkok. The time of intervention was in the second semester of the 2016 academic year. Therefore, this group was classified as an experimental group. Simultaneously, a control group was set up consisting of another small class of 44 university students in the Faculty of Industrial Education at King Mongkut's

Institute of Technology Ladkrabang (KMITL) in Bangkok, Thailand. All the subjects who were involved gave their informed consent for inclusion before they participated in the study. The study was conducted in accordance with the 1964 Declaration of Helsinki, and the protocol was approved by the research committee in the Department of Communication Arts and Information Science, Faculty of Humanities, Kasetsart University (No. 0513/10503/088). A self-administered questionnaire both pre-intervention (O1 and O2) and post-intervention (O3 and O4) were both used in this study to record the effectiveness evaluation. The effectiveness indicators were based on the theory of planned behavior (TPB). They consisted of five variables: 1) the attitude towards the behavior; 2) the subjective norm; 3) the perceived behavioral control; 4) the intention; and 5) actual behavior.

Groups	Pre Intervention	Intervention	Post Intervention
Experimental Group	O1	X	O3
Control Group	O2	-	O4

Note: O = Observed Scores
 X = Treatment

Figure 2: Non-Equivalent Control Group Design

For operational definition and measurement, the attitude towards the sustainable consumption behavior is an individual's feeling towards sustainable consumption behavior. It was measured using the 5-point semantic differential scale with nine items. The subjective norms are the beliefs that his or her friends think the individual ought to perform and how significant their notions are to his or her sustainable behavior. Perceived behavioral control is the perceived self-efficacy to perform sustainable consumption behavior. The intention is the perceived level of intent to show sustainable consumption behavior. Subjective norms, perceived behavioral control, and intention were measured by the 5-point Likert scale with nine items. Lastly, sustainable consumption behavior is defined as the consumption in a way that meets needs in the present and also considers the impact on the economic, social, and environmental aspects for future generations. In conclusion, it is the consumption behavior which has a balance among three dimensions. In this study, this variable was also measured by the 5-point Likert scale with nine items in three behaviors: 1) saving behavior (economic dimension); 2) selecting to buy environmentally friendly products (environmental dimension); and 3) sharing with poor people or philanthropic organizations (social dimension). Most of the questions in these five variables were adapted from studies that were undertaken previously (Ferdous, 2010; Heiskanen & Pantzar, 1997; Hobson, 2004; Jones, Hillier, & Comfort, 2011; Tanner & Kast, 2003; Pape, Rau, Fahy, & Davies, 2011; McCabe, Corona, & Weaver, 2013; Wang, Liu, & Qi, 2014; Wolff & Schönherr, 2011; Zhao & Schroeder, 2010). After intervention, the author hypothesized that the mean scores of these five variables among the experimental group should be significantly higher than the mean scores of these five variables among the control group. Therefore, multivariate analysis of variance (MANOVA) at the .05 statistically significant level was employed after intervention.

The “3S Project” was comprehensively developed according to the Community-Based Social Marketing (CBSM) approach proposed by McKenzie-Mohr (McKenzie-Mohr, 1996, 2000a, 2011). The key communication message of the “3S Project” campaign focused on the three stages leading to the sustainable consumption behavior among Thai youth. These stages consisted of saving, selecting, and sharing, as is shown in Figure 3. First, saving (the economic dimension) means that the youth should save money around 10% before they

start spending. Second, selecting (the environmental dimension) means that the youth should select to buy environmentally friendly products. Environmental labels will be a good sign to show the environmental friendliness of each product. Besides this, using a cloth bag instead of a plastic bag and using recycled paper can be included in sustainable consumption in this environmental dimension. Lastly, sharing (the social dimension) means that the youth should donate any used products to poor people or charities or philanthropic organizations. Furthermore, the author developed a unique brand logo for this campaign to create better awareness and it was made deliberately catchy, so it would be easy to recall among the young consumers, which is shown in Figure 4.

In the “3S Project” campaign, the author designed tools of behavior changes, based on the focus group discussion among university students to uncover the perceived barriers and the perceived benefits of the desired behaviors and their competing behaviors. This is the strength of CBSM that applies knowledge of psychology into designing a variety of effective tools for promoting any genuine behavior change (McKenzie-Mohr, 2011). After the barriers and the benefits had been identified, a CBSM strategy will be developed to overcome those barriers and to encourage those benefits. The seven tools of behavior change included: Commitment, Social Norms, Social Diffusion, Prompt, Convenience, Incentives, and Communication. It had been already noted that these tools will be more effective when they are used in combination with one another. Tools of behavior change were created in accordance with the CBSM approach and are briefly summarized in Table 1. They were infused in a regular class of students. The intervention plan in the period of 15 weeks is shown in Table 2. Besides this, an example of using personal media in this campaign and the place of sharing the used products to a philanthropic organization in a social responsibility activity are shown in Figure 5 and Figure 6.

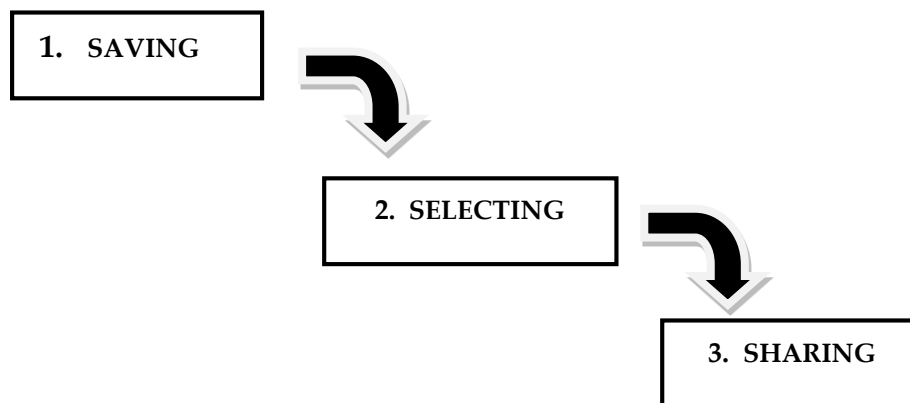


Figure 3: A key communication message of “3S Project” campaign

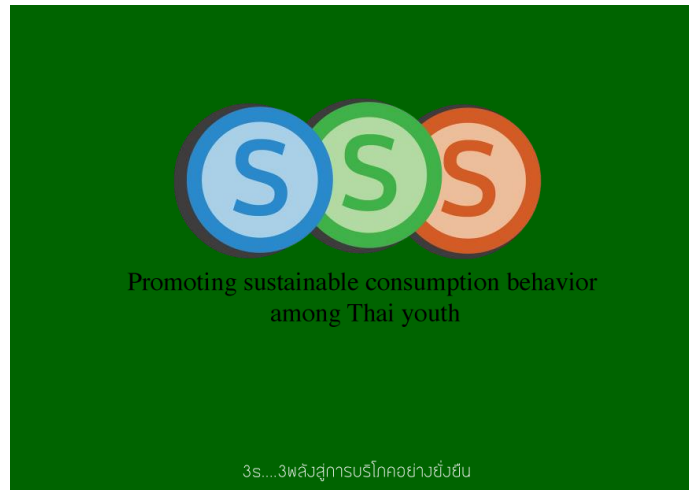


Figure 4: A brand logo of “3S Project” Community-Based Social Marketing campaign



Figure 5: An example of using personal media in the campaign



Figure 6: The place of sharing the used products to a philanthropic organization in social responsibility activity

Table 1: Tools of Behavior Change in this study

Strategies of Behavior Change in theCBSM Approach	Tools of Behavior Change in this study
1) Commitment	1.1) Certificates 1.2) Social Responsibility Activity in Class (Donation) 1.3) Final Project about SCB issues
2) Social Norms	2.1) Personal Media such as a lecturer, seniority, or celebrity
3) Social Diffusion	3.1) Personal Media such as a lecturer, seniority, or celebrity 3.2) Training Activity in Class 3.3) Online Media such as Facebook, LINE, E-poster
4) Prompt	4.1) Online Media such as Facebook, LINE, E-poster
5) Convenience	5.1) Social Responsibility Activity in Class (Donation)
6) Incentives	6.1) Scores from Social Responsibility Activity in Class (Donation) 6.2) Scores from the Final Project about SCB issues
7) Communication	7.1) Video Clip 7.2) Students' Manual in SCB (Sustainable Consumption Behavior) 7.3) Training Activity in Class

Notes: One tool of behavior change can be included in different strategies.

Table 2: Intervention Plan in the period of 15 weeks

Week	Tools of Behavior Change
1	Class Introduction Pre-Intervention Data Collection (O1)
2	Final Project Notification Setting Online Media in Class (Facebook Group and LINE Group)
3	Students' Manual in SCB (Sustainable Consumption Behavior)
4	Training Activity in Class(Saving)
5	Training Activity in Class(Selecting)
6	Training Activity in Class(Sharing)
7	Training Activity in Class(Tips for the Final Project about SCB issues)
8	Releasing a video clip in Facebook Group and LINE Group
9	Releasing an E-poster in Facebook Group and LINE Group
10	Releasing an E-poster in Facebook Group and LINE Group
11	Releasing an E-poster in Facebook Group and LINE Group
12	Social Responsibility Activity in Class (Donation) Personal Media such as a lecturer, seniority, or celebrity
13	Social Responsibility Activity in Class (Donation) Personal Media such as a lecturer, seniority, or celebrity
14	Social Responsibility Activity in Class (Donation) Personal Media such as a lecturer, seniority, or celebrity
15	Presenting the Final Project about SCB issues Presenting Participation Certificates Post-intervention Data Collection (O3)

RESULTS

In this part, the research findings are presented in two parts: 4.1) the characteristics of the subjects in both the experimental group and the control group; and 4.2) evaluating the effectiveness of a community-based social marketing (CBSM) campaign for promoting sustainable consumption behavior (SCB) among the Thai youth (“3S Project”) by comparing the mean scores of five indicators between the experimental group and the control group after intervention.

Characteristics of the Subjects in Both The Experimental Group and the Control Group

For the experimental group, the subjects consisted of 36 undergraduate students. Most subjects were female (66.7%) and studying in the second year of their degree (83.3%). The average age was 20.03 years, (SD = 0.736). The average income per month was THB 7,116.67 (SD = 3,113.33). For the control group, the subjects consisted of 44 undergraduate students. Most subjects were female (63.6%) and studying in the third year of their degree (90.91%). The average age was 21.02 years, (SD = 0.876). The average income per month was THB 7,586.36 (SD = 4,112.01).

Evaluating The Effectiveness of a Community-Based Social Marketing (CBSM) Campaign to Promote Sustainable Consumption Behavior (SCB) Among Thai Youth

In evaluating the effectiveness of a community-based social marketing (CBSM) campaign (“3S Project”) in this study, the multivariate analysis of variance (MANOVA) was computed in the analysis. This statistics model was suitable and is often used in a quasi-experimental research in the form of a non-equivalent control group design for checking the effectiveness of the treatment on various dependent variables (Cottrell & McKenzie, 2005; Hair, Anderson, & Tatham, 1992). Before the MANOVA analysis was undertaken, the author had checked the differences of the mean scores in the pre-intervention period among the five indicators between the experimental group and the control group by using the independent t-test. The findings showed that, before intervention, there were no differences among the five indicators between the experimental group and the control group, as shown in Table 3.

Table 3: Checking the differences of 5 indicators between experimental group and control group before intervention

Indicators	Group	N	Mean	SD	t	df	Sig.
1)ATT	E	36	4.53	.56	0.348	78	.762
	C	44	4.51	.61			
2) SN	E	36	3.17	.69	0.665	78	.508
	C	44	3.08	.63			
3) PBC	E	36	3.88	.52	0.626	78	.556
	C	44	3.84	.57			
4) INT	E	36	3.69	.60	1.343	78	.062
	C	44	3.56	.65			
5) SCB	E	36	2.64	.56	1.644	78	.104
	C	44	2.44	.54			

Note: ATT= attitude towards CB, SN= subjective norm(friends), PBC= perceived behavioral control
 INT= intention to perform SCB, SCB = sustainable consumption behavior, E=Experiment Group
 C =Control Group

These results provided the assurance that the experimental group and the control group were alike in the five indicators before intervention. Therefore, the MANOVA analysis after intervention can be used without using covariance. After intervention, the multivariate analysis of variance (MANOVA) at .05 level of statistical significance was used in comparing the mean scores among the five indicators. The results found that multivariate tests in all statistics including Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root were significant at .01 level of statistical significance, as is shown in Table 4. These results showed that a treatment can make a noticeable difference between the experimental group and the control group in at least one dependent variable. Therefore, when the differences among the five indicators were analyzed in a later step, it found that there were differences in all of the five indicators between the experimental group and the control group at .05 level of statistical significance, as shown in Table 5. Furthermore, the mean scores of all of the five indicators among the experimental group were significantly higher than the mean scores of these five indicators among the control group. As a result, it can be concluded that a community-based social marketing (CBSM) campaign for promoting sustainable consumption behavior (SCB) among Thai youth, or the "3S Project" per se, was effective in helping to increase the overall attitude towards SCB, the subjective norm (friends), the perceived behavioral control, the intention to perform SCB, and SCB, quite significantly.

Table 4: Multivariate test of MANOVA analysis after intervention

Multivariate Tests	Value	F	Hypothesis df	Error df	Sig.
Pillai's Trace	.614	23.548	5.000	74.000	.000**
Wilks' Lambda	.386	23.548	5.000	74.000	.000**
Hotelling's Trace	1.591	23.548	5.000	74.000	.000**
Roy's Largest Root	1.591	23.548	5.000	74.000	.000**

** $p < .01$

CONCLUSION AND DISCUSSION

This study aimed to evaluate a community-based social marketing (CBSM) campaign for promoting sustainable consumption behavior (SCB) amongst the Thai youth ("3S Project"). This campaign was evaluated using quasi-experimental research in the form of a non-equivalent control group designed for checking the effectiveness. Multivariate analysis of variance (MANOVA) was computed in the results analysis. After intervention, the analysis found that the "3S Project" innovation was effective. The mean scores of the experimental group were higher than the mean scores of the control group significantly in all of the five indicators. These indicators included the attitude towards behavior, the subjective norm, the perceived behavioral control, the intention to perform SCB, and the sustainable consumption behavior (SCB). These results supported the effectiveness of the concept of a community-based social marketing (CBSM), as proposed by Doug McKenzie-Mohr, (McKenzie-Mohr, Nemiroff, Beers, & Desmarais, 1995; McKenzie-Mohr & Smith, 1999; McKenzie-Mohr, 1996, 2000a, 2000b, 2008, 2011). Besides this, these results were also consistent with the results of several previous studies (Celik, 2016; Cole & Fieselman, 2013; Kennedy, 2010; McKenzie-Mohr, Nemiroff, Beers, & Desmarais, 1995; Tabanico, 2007) all of which had applied a community-based social marketing (CBSM) approach in sustainable behavior changes successfully. As all the research projects were specifically located in a university or a campus setting, this approach was rather supported and utilized evidently. For example, in Cole and Fieselman's study, they designed CBSM campaign to alter

sustainable behavior in paper reduction, commingled recycling, and purchasing environmentally friendly products with faculty and staff teams at the Pacific University Oregon in the USA (Cole & Fieselman, 2013). The CBSM strategies used in their study were prompts, communication, incentives, commitment, convenience, norms and social diffusion. The name of the campaign was entitled “Greening Pacific!” This campaign investigated key perceived barriers to paper reduction, recycling and purchasing environmentally friendly products and then several CBSM tools were developed. The tools of behavior change included recycling and paper reduction prompts, a sustainable office pledge, initiating a ‘green team’ and training staff leaders, and recycling box distribution. After intervention, an increase in campus-wide purchasing of recycled content paper and EPP was found. Post-survey results found that 74 percent of the staff and faculty had changed their behavior because of the CBSM campaign (Cole & Fieselman, 2013). Therefore, Cole and Fieselman (2013) proposed that green office practices on university campuses can have some significant impacts on purchasing environmentally friendly products, waste reduction, energy and cost savings, and reducing the use of toxic chemicals. They also supported the view that CBSM is a valuable framework for assessing behavior change. The main strength of CBSM is a combination of knowledge in psychology and social marketing to alter behavior change by using various tools of behavior change, including Commitment, Social Norms, Social Diffusion, Prompt, Convenience, Incentives, and Communication (McKenzie-Mohr, 1996, 2000a).

Table 5: Checking the differences of 5 indicators between experimental group and control group after intervention

Indicators	Group	N	Mean	SD	t	df	Sig.
1)ATT	E	36	4.81	.26	5.537	78	.000**
	C	44	4.21	.60			
2) SN	E	36	3.83	.50	5.778	78	.000**
	C	44	3.11	.62			
3) PBC	E	36	4.22	.43	6.723	78	.000**
	C	44	3.44	.57			
4) INT	E	36	4.06	.47	5.346	78	.000**
	C	44	3.36	.65			
5) SCB	E	36	3.57	.54	9.307	78	.000**
	C	44	2.49	.53			

** $p < .01$

Note: ATT= attitude towardSCB
 SN= subjective norm(friends)
 PBC= perceived behavioral control
 INT= intention to performSCB
 SCB = sustainable consumption behavior
 E=Experiment Group
 C =Control Group

In the “3S Project”, the author designed all the tools of behavior change according to McKenzie-Mohr’s recommendations (McKenzie-Mohr, 2011). Using various tools of behavior change will give a better solution in establishing some genuine behavior change. Commitments in this study were providing participation certificates, a social responsibility activity (i.e. the donation of any used products to a philanthropic organization), and a final project about SCB issues in class. They were useful in enhancing motivation when the

targeted audience began to believe that engaging in the different behavior patterns is worthwhile, but they did not become active until they were affected by the indicators of the Social Norms and Incentives. The Social Norms in the “3S Project” were using personal media such as a lecturer, seniority, or celebrity as an endorser in the campaign while the Incentives in this project were the scores from the social responsibility activity and from the final project about SCB issues. Prompts in this study were using online media such as Facebook, LINE, and an E-poster. The prompts will also help to warn the target audiences to engage the behavior changes very well. Besides this, in the “3S Project”, Social Diffusion (personal media, training, and online media) and Communication (a video clip, the students’ manual in sustainable consumption behavior, and training activities in class) were necessary for speeding the adoption of new behaviors. Clearly, these tools helped to diffuse the message or generate active conversation quickly among the target audiences. Furthermore, this campaign was entitled as the “3S Project” to allow the target audience to feel easy in remember ring it. In that situation, the project name awareness among the target audiences would be consistently higher. Finally, Convenience in this project was the social responsibility activity. The author provided a donation box for the used products in front of the department building near a classroom to reduce the time costs and also to make it easier for the participant target audiences to perform their new behaviors. In doing this, it can make the behavior far more convenient, which may even become habitual. Besides this, another interesting differentiation between the CBSM and the conventional social marketing is the ability of CBSM to be able to uncover the barriers to a selected behavior and utilizing those various tools of behavior change in order to overcome those barriers (McKenzie-Mohr, 1996, 2000a, 2011). These strengths make a community-based social marketing (CBSM) approach differ in a very positive way, when compared to a conventional social marketing technique. Accordingly, using conventional social marketing programs, which were either based on an information-intensive campaign or relied heavily on the media platforms, can be effective in creating public awareness, enhancing the knowledge, modifying attitudes, or the understanding of various issues related to sustainability, but it is also limited in the overall ability to generate any genuine active behavior change (Celik, 2016; Cole & Fieselman, 2013; Kennedy, 2010; McKenzie-Mohr, 2011).

For these implications, the author synthesized the results of this study and proposes the logic model to promote SCB among youths, as shown in Figure 7. From Figure 7, the university (Input) is the initial point of campaigns to promote SCB among university students through a community-based social marketing (CBSM) campaign: “3S Project” (Process). Later on, university students are exposed to sustainability-promoting messages and received promotion through various tools of behavior change, including Commitment, Social Norms, Social Diffusion, Prompt, Convenience, Incentives, and Communication (Output). Outcome in the short term is represented by changes in ATT, SN, and PBC. After that, in the intermediate term, the outcome is the increased intention to perform SCB. Lastly, in the long term, SCB among university students will be increased. Later on, at some stage in the future, sustainable consumption behaviors among working-aged consumers should, therefore, definitely increase (Belz & Peattie, 2012; Chansarn, 2013; Emery, 2012; Peattie, 1995; Carrigan, Moraes, & Leek, 2011; Danciu, 2013). This is likely to lead to a sustainable consumption society and eventually to a sustainable development country, respectively (Fuchs & Lorek, 2005; Hoque, 2014; Kanayo, Nancy, & Jumare, 2012; Minton et al., 2012; Muster, 2011). This model is consistent with the notions that were previously indicated by

academicians in past studies (Pogutz & Micale, 2011; Schrader, 2011; Seyfang, 2007) to support the perspective that all countries should strive to promote sustainable consumption patterns in their countries, especially targeting young consumers who will be a potential adult long-term consumer in the near future. Therefore, promoting sustainable consumption behavior (SCB) among the youth should be considered as a national policy to all countries for creating a sustainable consumption society as a whole.

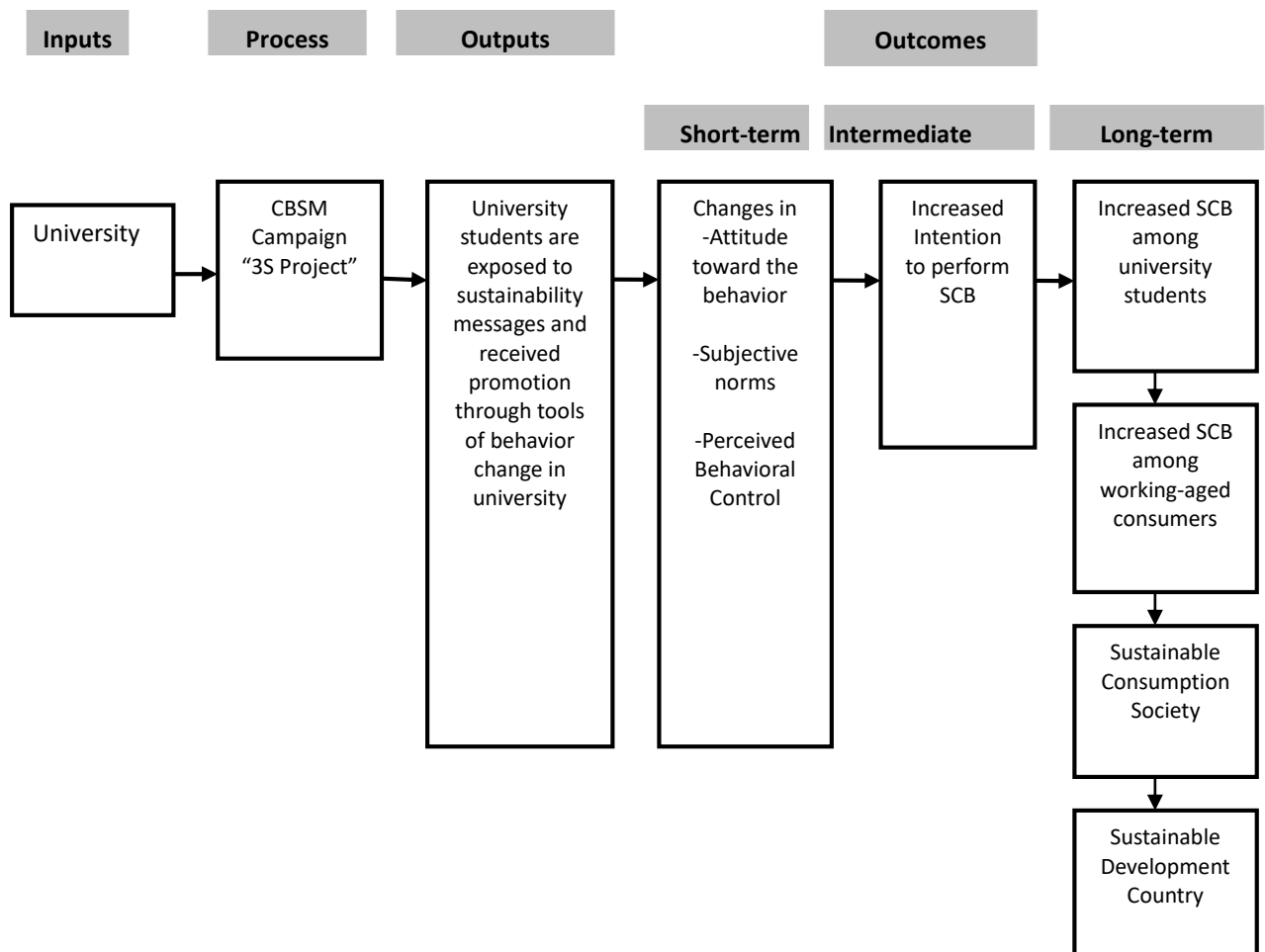


Figure 7: The logic model to promote sustainable consumption behaviors among youth

However, this study had at least two main limitations that need to be recognized. Firstly, this study focused on the pilot step study, within which there was only one university participating in the campaign. Therefore, it may need to apply this approach into more various universities in Thailand to expand the results. If this approach was employed on a much broader scale implementation, then the impact of sustainable behavior change among Thai youth will be much higher. Another limitation to note was the self-reported questionnaire in evaluating the effectiveness of the campaign. This may make the respondents under-report their behaviours, possibly because of any potential shame or guilt in their lack of any existing sustainable practices. However, the anonymity hopefully would have reduced the likelihood of such biased responses to have occurred. Despite these limitations, the main strength of this study was extending the existing body of knowledge of

social marketing communication more broadly, especially within Thailand. Although the concept of social marketing was used in communication campaigns in Thailand some time ago, especially in health promotion, most of the campaigns were often based on a conventional social marketing approach, which was an information-intensive or attitude-behavior approach campaign. Utilizing a community-based social marketing (CBSM) approach, pioneered by McKenzie-Mohr, through tools of behaviour change in campaign planning to foster sustainable behavior change among the youth of the Thai population is still in the initial stages. Therefore, this study is an innovative, or cutting-edge, work that provides a lot of benefits for social marketers, communication campaign planners, higher education institution administrators, and any organizations for promoting sustainable consumption behavior (SCB) among the youth at all levels, both in Thailand and in the wider international level. For future research directions, the author may suggest two possible paths to follow. First, the effectiveness of each tool of behavior change in CBSM strategies, including Commitment, Social Norms, Social Diffusion, Prompt, Convenience, Incentives, and Communication should be further investigated. Second, a longitudinal study to examine a retention effect will have much more benefits for social marketing practitioners in planning to promote sustainable consumption behavior (SCB) among the youth on all levels.

BIODATA

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