

RESEARCH REPORT

Behavioral Science Research:

An Evaluation of the Historical roots, Evolution and Future Development in Thailand

By Dr. Kanu Priya Mohan

Behavioral Science Research Institute (BSRI), Srinakharinwirot University, Bangkok, Thailand.

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Introduction

This research project aimed to investigate the historical roots and the development of the discipline of Behavioral Science (BS) and its application, Behavioral Science Research (BSR), in the context of Thailand. This research adopted a qualitative approach to examine the growth of BS and BSR, their contributions, and also share the future growth possibilities. The context and focus of study in Thailand was the Behavioral Science Research Institute (BSRI), which was established in 1955 as the International Institute for Child Study (IICS) as a joint venture between the Thai government and UNESCO.

Most of the information recorded about BSR in Thailand has been in Thai language (which is the native language of Thai researchers and academicians). It is anticipated that the findings of this research, published in English, could be valuable and informative to a wider milieu of behavioral scientists around the world.

Research Questions

The main questions guiding this qualitative research were to find out what was the historical foundation of behavioral science and its research; what were the contributions and how did the field of behavioral science grow; and what can be the future of the discipline and also of the Behavioral Science Research (BSR) in the context of Thailand?

Method

The investigation was based using qualitative research methodology, to gather and analyze data to answer the research objectives. Secondary information sources were reviewed to build the basic information about BSR in Thailand. This was followed by in-depth interviews to collect data from the key informants of this research. The **participants** or the key informants of this research were seven persons who were experts in the field of Behavioral Science Research in Thailand; six had worked as directors of BSRI and the seventh was an eminent behavioral scientist who had also worked at BSRI. The **data** was collected by using in-depth interviews. Data was **analyzed** using synthesis of information (from the documented data reviewed) and content analysis (from the data gathered from interviews).

Results and Discussion

The data was analyzed using qualitative analysis. Syntheses of the findings from the review of literature and interviews were presented in 2 sections as the answers to the research objectives and the experiential insights from the Experts.

Five research objectives were reviewed, 1. What are the roots of BSR in Thailand? ; 2. What is the definition and meaning of BSR?; 3.What are the unique contributions of BSR?; 4.What are the challenges in the development of BSR? ; and, 5. What is the status and future of BSR? The experiential insights from the Experts or the key informants were coded into two themes- 1) Key practices; and 2) Suggestions.

Some of the main findings from this research can be summarized as-

- i. The former directors and the faculty of BSRI have given a very strong foundation to the establishment of this unique institute where behavioral science research (BSR) can be pursued.
- ii. Contributions at the BSRI to establish BSR formally have been through the valuable researches, producing competent graduates, and getting awards at national levels.
- iii. Many of the research projects have contributed towards alleviating behavioral problems and social issues and have a great applied value.

iv. It may be summarized finally that the behavior science research process begins with an interest in human behavior and the research understanding is enhanced by integrating the "person" with his context – "the environment" through a scientific research investigation.

Recommendations and Conclusion

In conclusion it may be summarized that the growth of behavioral sciences in Thailand has deep and rich historical roots. BS has made significant contributions to knowledge, research and their application to alleviate problems linked to behavior at individual and societal levels. The growth of the Behavioral Science Research Institute has substantiated the importance of the behavioral sciences in dealing with many important issues and problems that exist in the world. The benefits that accrue from this research could have a far-reaching possibility to share the significance of BS in dealing with behavioral issues in the contemporary world; and more explicitly since it provides documented information In English language which can be shared widely with academics and professionals in the field of BS.

Keywords: behavioral science research, historical roots, development, Thailand

Acknowledgements

This research endeavor is dedicated to all the academicians and educators, who established the Behavioral Science Research Institute (BSRI) at the Srinakharinwirot University, Bangkok. This research sheds light on how these people nurtured the growth of BSRI with their vision, expertise and commitment.

Personally this journey has been immensely enjoyable, deeply inspiring, as well as a spiritually uplifting experience. This academic quest has guided me to a deeper understanding of how the strong roots of the BSR in Thailand hold a robust tree, which has branched in several directions of academic pursuits and their valuable contributions.

I would like to express my deep gratitude to all my "seven key informants" of this research, who shared their valuable time and memories to help build up the information required. Each experience of the interview was illuminated by their generosity, wisdom, and most of all their love for the BSRI.

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Kanu Priya Mohan

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CHAPTER 1

INTRODUCTION

The current research was an endeavor to systematically examine the evolution and growth of the discipline of Behavioral Science and its application, Behavioral Science Research (BSR), in the context of Thailand. This research aimed to investigate the historical roots of BSR, its development and its contributions, and also share the future growth possibilities and vistas for the BSR in the Thai context. Most of the information recorded about BSR has been in Thai language (which is the native language of Thai researchers and academicians). It is anticipated that the findings of this research, published in English, could be valuable and informative to a wider milieu of behavioral scientists around the world.

The first chapter of this report delineates the rationale guiding this research, the research problem, and the research questions; followed by the scope of research, the significance of the study and ends with the organization of the subsequent chapters in the report.

Background and the Rationale of the Research

There are many reasons underpinning this research and some of these are discussed herewith. The **first** reason guiding this research lies in the significance of the discipline of behavioral science in the current world. Behavioral science as a discipline adopts an interdisciplinary approach to understanding behavior. Many other fields contribute towards the knowledge that is created, such as psychology, sociology, anthropology and education, to name a few. The resulting knowledge is rich, diverse and gives a holistic perspective to understanding any issue. The importance of behavioral science in terms of knowledge creation and its application is perhaps been never more vital than now- when barriers between various disciplines facilitate sharing and building of a holistic understanding of behavioral issues. In his essay titled-*Behavioral Science claims the decade*, Carpenter (2000) had aptly highlighted that "there's a need to sell the behavioral sciences as a national resource." A significant contribution of behavioral science is that its knowledge is being used to merge the gap between scientific theory and its application in the real life practice, especially in the work place (Latham, 2007).

The above rationale is linked to the **second** reason for doing this research, which is to understand the meaning and definition of what is behavioral science and its application in the form of research, in the specific context of Thailand. Thailand has a unique contribution to the world of behavioral science as it is in Bangkok that the first and perhaps the only such organization which was set up in Asia in the 1950's– the Behavioral Science Research Institute (BSRI) at the Srinakharinwirot University, Bangkok. This institute started its autonomous functioning in 1955 as the "International Institute for Child Study", which formed the roots of the BSRI, which emerged formally in 1975 (http://bsri.swu.ac.th/aboutus_eng.htm). Over 60 years the institute has produced many researchers as well as been the host for initiating many prestigious research projects in the field of behavioral sciences.

The **third** reason for this research is that it proposes to highlight the growth of behavioral science research in the unique perspective of Thailand and the contribution of Buddhism to this discipline. The Thai population is around 67 million as reported in 2013 (The World Bank, 2015), and around 94.6% follow Buddhism as their religion, as reported in the census of 2010, (National Statistics Office, 2011).The religious practices of the people have shaped their thinking, attitudes, interests and their behavior. Hence, Buddhism has imbued the growth of

academic disciplines such as psychology (Tapanya, 2010) and also of the behavioral sciences and its research thrust in this country.

Thailand has a special status in all of Asia- a country which was never colonized and has always retained its sovereignty. This is perhaps one of the most important reasons for the language of communication to have always been the native language, "Thai" here. This unique feature of the nation has perhaps contributed to the fact that not many Thai research works are published in English as compared to other nations, especially in Asia. In the current scenario where English is accepted as the "global" means of communication or the "international language" (Yano, 2006), this augments a challenge for the Thai researchers who seek to publish and share their work in the near future. ASEAN, the regional body of 10 south-east Asian countries (http://www.asean.org/asean/asean-member-states), has adopted the goal of economic integration set in 2015 called the ASEAN Economic Cooperation "AEC 2015" (http://www.aseansec.org/5187-10.pdf). This regional policy change is impacting the Thai nation to promote English (The Nation, 2012), and this would definitely encourage the exchange among academicians in the ASEAN region to share their rich, and diverse research work and publications among themselves and also with the rest of the world. Hence the **fourth** reason for conducting this research was that it would be published in the English language, which provides an opportunity to share the information about behavioral science with researchers from ASEAN as well as other nations across the world.

Furthermore this quest is linked to the researcher's personal interest in understanding the growth and relevance of BSR since the researcher did her doctoral program and then went on to work at the Behavioral Science Research Institute (BSRI). In the current academic scenario the BSRI produces post-graduates and doctorates in the field of applied behavioral science research. Many of these researchers have been awarded for their contributions to the field and also towards the society. Thus this research provides a great opportunity to share some of the contributions of these behavioral scientists.

Finally this research aims to highlight the future areas of growth for the behavioral science not only in terms of the applied and research benefits but also in terms of attracting young scholars and professionals to this area.

With all the above rationales guiding the research, the next sections give details about the research problem and scope.

The Research Problem

Behavioral Science Research (BSR) in Thailand has made valuable contributions to the knowledge creation and also its application to alleviate various behavioral issues and problems such as those related to child development, health behavior, behavior at workplace and many others. There is a rich history of these contributions but most of the information available is in Thai language. So how could the wisdom, generated through BSR, be shared with a wider populace? Moreover in a world that is changing at a rapid pace, there are numerous impacts on human behavior. So could a behavioral science researcher play a crucial role in understanding these behavioral concerns? To address these afore mentioned issues, this research was designed to review and share Thailand's BSR contributions in English language, and also understand its role and importance in the future.

The Research Questions

The main questions guiding this research were to find out what was the historical foundation of behavioral science and its research; what were the contributions and how did the field of behavioral science grow; and what can be the future of the discipline and also of the Behavioral Science Research (BSR) in the context of Thailand?

Scope of Research

The scope of the research is described in three main aspects, the content, the method and the definition of the terms.

Content

The main focus of this study was Behavioral Science Research in the specific context of Thailand. Furthermore, the research focuses on the role of the Behavioral Science Research Institute (BSRI) in promoting BSR; review the evolution of the BSR, its valuable contributions and future growth prospects.

Method

This research adopts the qualitative research methodology, using qualitative techniques to generate information to answer the research objectives. Secondary information sources were reviewed to build the basic information about BSR in Thailand. This was followed by in-depth interviews to collect data from the key informants of this research.

The **participants** in the qualitative phase of the research were seven key informants who were experts in the field of Behavioral Science Research in Thailand.

The **data** was collected by review of literature, and then by using in-depth interviews with seven key informants who were experts in behavioral science research.

The data was **analyzed** using synthesis of information (from the documented data reviewed) and content analysis (from the data accrued from interviews).

Duration

The duration of the research was approximately 18 months, from the time of building the research proposal to the time of publishing and presenting the research.

Definition of the Terms

The definitions of the main variables in the proposed research are as follows:

Behavioral Science

The aim of this research is to investigate the meaning of Behavioral Science Research (BSR) from the Thai perspective. There is no commonly accepted meaning of behavioral science, and it's often defined as per the applied usage among the academicians and practitioners. For the basic understanding in this research we can rely on the definition by Klemke, Hollinger and Kline (2006) -

"Behavioral science is the systematic analysis and investigation of human and animal behavior through controlled and naturalistic observation, and disciplined scientific experimentation. It attempts to accomplish legitimate, objective conclusions through rigorous formulations and observation."

There is a wide scope of research done in the behavioral science discipline. There are two main types of research conducted in the Behavioral Sciences- basic or pure and applied (NIH, 2010; Mangal & Mangal, 2013).

Qualitative research

The research methodology for the current study used a qualitative design where in the researcher uses qualitative approach to inquiry, data collection and data analyses (Creswell, 2007). This kind of research involves "an interpretive, naturalistic approach to the world" (Denzin & Lincoln, 2005, p. 3). Put in another simple way, Nkwi, Nyamongo, and Ryan (2001, p. 1) have said this research "uses data that do not indicate ordinal values".

Significance of the Study

The significance of the research can be enumerated in terms of what this research purports to contribute, such as-

- This research would be a pioneering effort to document the historical growth of Behavioral Science Research in Thailand in English language.
- ii. The current status and the future areas of growth in Behavioral Science research would be highlighted.
- iii. It would create a knowledge base for students, researchers, and academicians in the related fields.

Organization of the Report

The contents of this report are organized in the form of 5 chapters. The chapter 2 consists of 'Review of Literature' which sheds light on the main constructs and the context of the research; chapter 3 entails the 'Research Methodology'; the chapter 4 shares the 'Research Findings' from the qualitative investigations; and the last chapter 5 is about the 'Discussion and Conclusion' of the research, which also includes the recommendations.

CHAPTER 2

REVIEW OF LITERATURE

This chapter reviews the literature with reference to the main concepts and the context of this research. First the literature about the definition and emergence of behavioral science in the western world is explored. Then the context of the current research is explained. The rationale for using qualitative method is presented. It is followed by the objectives of the research and the research framework.

The Research Constructs

The current research aimed to highlight the growth of behavioral science in the Thai context using a qualitative research design. Each of the main research constructs are explained in the ensuing section.

Behavioral Sciences

There is no commonly accepted meaning of behavioral science (BS), and is often defined as per the applied usage of the discipline. The concept, emergence and scope of BS is reviewed from the western texts and researches.

Definition and scope

Review of literature reveals that BS has been defined in many diverse ways. However, the definition by Klemke, Hollinger and Kline (2006), can be used for the basic purpose of understanding in this research-

"Behavioral science is the systematic analysis and investigation of human and animal behavior through controlled and naturalistic observation, and disciplined scientific experimentation. It attempts to accomplish legitimate, objective conclusions through rigorous formulations and observation."

Bottom (2009) notes that the behavioral science emerged soon after the world war, with major contributions in the field coming from multidisciplinary approaches in the work context or and developed the field of organizational behavior.

Behavioral science has contributed to various fields such as business management in the western contexts. Bennis (1963) pointed out towards "an emerging action role for the behavioral scientist" in the organizational change movement.

The field of BS is built on the inter-disciplinary contributions from many fields. As early as in 1967 Lundbergand Millman wrote that "the term behavioral science will be used to refer to the disciplines of psychology, sociology, and anthropology, and portions of economics, political science, business and public administration — all using acceptable scientific procedures and focusing upon human behavior."

Klemke, Hollinger, and Kline, (1980) have specified that the behavioral sciences include two broad categories: "neural or information" sciences and "social or relational" sciences. The authors explain that neural sciences deals with "information processing of stimuli from the social environment by cognitive entities in order to engage in decision making, social judgment and social perception for individual functioning and survival of organism in a social environment. These include psychology, cognitive science, psychobiology, neural networks, social cognition, social psychology, semantic networks, ethology and social neuroscience". In the second category, Klemke, Hollinger, and Kline, (1980) explained that the "relational sciences deal with relationships, interaction, communication networks, associations and relational strategies or dynamics between organisms or cognitive entities in a social system. These include fields like sociological social psychology, social networks, dynamic network analysis, agent-based model and micro-simulation."

BS has contributed not only to the knowledge but also to the application of knowledge to mitigate problems and enhance the quality of life for human beings. Review of early literature highlights that BS was used to promote successful organizational change (Bennis, 1963) and the role of behavioral scientists were noted in its applications towards improvement of human organizations (Bennis, 1965).

Behavioral Science Research

The research in the field of behavioral sciences has its special significance in the development of the discipline. Irwin and Suplee (2012) highlight the importance of BS knowledge in its application or research form. They say that BSR is the foundation of practice as "evidence-based programs are fiscal and time investments, and getting a return on investment in improving behavioral and health outcomes is critical".

Bottom (2009) has further explained one applied area of BSR which was to provide the foundation of "research-based model of business education" (or RBM), which was applied in the business schools.

Difference between Behavioral Science and other fields

The social sciences typically include fields like sociology, economics, public health, anthropology, demography and political science.

The significance of BS and BSR

The field of BS has seen a change over the last few decades. Reese, (2001) has noted an interesting feature about the focus of study of behavior science that "many issues seem to have appeared, disappeared, and reappeared in the behavioral sciences during the 20th century". But the importance of BS remains due to its applications and research based knowledge that it creates. As supported by Irwin and Suplee (2012) there is a growing interest, by researchers, policymakers, and practitioners, in evidence-based policy and practice that is created through the research in the BS.

The Research Context

The current research aims to explore and build the definition and meaning of behavioral science from the perspective of Thailand. It also seeks to investigate the growth of the research and applied aspects of this discipline.

The context of understanding behavioral science growth in Thailand can be viewed from various standpoints. There have been different perspectives about the BS and its contributions. It has been noted that applied BS are being taught in the medical schools here, but there is need to develop this area further and have more behavioral scientists teach there. In an interesting take on that perspective of BS in Thailand, Tapanya (as cited in Chur-Hansen et al., 2008) has shared that most of the curriculum related to BS and psychology in medical schools is being taught by offering just one to three courses, and by psychiatrists rather than experts in the field.

Another significant perspective of BS in Thailand comes from viewing it from the contributions of the Behavioral Science Research Institute or the BSRI in Bangkok. This institute was formally set up in 1975 and developed a curriculum to teach behavioral science (BS) at

master and doctoral level. With its two main functions of teaching and research the institute has significant contributions towards the development of the discipline of BS and its research.

The BSRI was a unique endeavor to set up formal institute to delve into research in BS in an organized manner. The BSRI has continued to uphold its position as the only recognized organization identified to pursuit BSR not only in Thailand but also in Asia. Thus, this current study focuses on understanding and sharing the contribution of BS at the BSRI and a qualitative research approach had been deemed suitable for this purpose.

Qualitative Research Approach

A qualitative approach seemed most appropriate to meet the current research project objectives related to understanding the roots, the development and the future growth of the behavioral science research. One of the main reasons guiding the acceptance of this approach is that it allows for an in-depth description of the phenomenon and recognizes the importance of the context, as well as allows the participants to share their perspective (Silverman, 2004).

Another important characteristic of the qualitative research highlighted by Geertz (1983) is that the knowledge and practice are studied through local perspective, which is the basic aim of the current research – to develop the meaning and understanding of behavioral science research from the context of Thailand. Creswell (2007) also supports the view that qualitative research allows the understanding of an issue or a problem from the meaning that individuals or groups ascribe to it. It also allows for themes and patterns to emerge which may not be possible in a more structured quantitative technique.

The qualitative method of interviews was adopted for data collection in the current research. According to Turner, (2010), "interviews provide in-depth information pertaining to

participants' experiences and viewpoints of a particular topic". So the interview method along with literature review was the approach to gathering data for this research.

Applying qualitative methodology to the current research

According to Flick (2009), the essential features of qualitative research are the correct choice of appropriate methods and theories; the recognition and analysis of different perspectives; the researchers' reflections ("reflexivity") on their research as part of the process of knowledge production; and the variety of approaches and methods. The current research applied these features in the investigation, which have been shown in Table 2.1.

Table 2.1.

Qualitative Approach to understanding BSR in Thailand

Characteristics of Qualitative Research	Applied to the current research
1.Appropriate methods and theories \longrightarrow	a. Review the meaning of BS in literature,
	b. Use qualitative method for in-depth
	investigation and data analyses.
2.Perspective of participants	Perspectives from key informants,
	expert/consultants and researcher were noted
3.Reflexivity of the researcher \rightarrow	Researcher kept a diary to note the progress of
	this research
4. Variety of approaches \rightarrow	Approaches to different sources of data were
	used such as document research, in-depth
	interviews and researcher's reflections.

Previous research

The previous researches related to the objectives of this research were investigated. An initial review gave no documented synthesis of the BS research in Thailand that has been

published in English. Hence, this research directed to document the data from at least two phases, a) review the previous researches conducted in Thai language and translate them to English language; and b) conduct interviews to gain in-depth information to answer the research objectives.

The Research Objectives and the Conceptual framework

There were five main objectives that were framed for this current study and a conceptual framework was developed to gain data to fulfil these research objectives.

Objectives of the research

With the main purpose of this research was to document and share the information about Behavioral Science Research (BSR) in Thailand, five objectives that were outlined were-

- 1) What are the roots of BSR in Thailand?
- 2) What is the definition and meaning of BSR?
- 3) What are the unique contributions of BSR?
- 4) What are the main challenges in the development of BSR?
- 5) What is the current status and future growth prospects of BSR?

The Conceptual framework

The current study takes a qualitative approach towards achieving the five objectives delineated for investigating the development of behavioral sciences in Thailand.

With the guiding structure of qualitative investigation, the researcher developed a conceptual framework for the research based on the 5 W's and 1 H model. This model was first mentioned by Rudyard Kipling in 1902 and has been used as a problem solving method, so it's

also called as the "Kipling Method", which helps to explore the problems by challenging to understanding them with these questions (Quan, 2013). Whetten (1989) put these as the components of descriptive enquiry for a theoretical contribution, making four groups- namely 'what', 'how', 'why', and a fourth group of 'who', 'where' and 'when'.

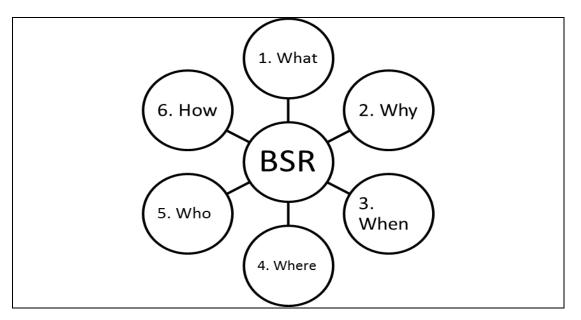


Figure 2.1. The 5W's and 1 H framework of Behavioral Science Research

The "5W's and 1 H" in the model (shown in figure 2.1.) depicts the what, why, who, where, when and how of the behavioral science research in the context of Thailand. To understand the thrust of this research further, the 5 W's and 1 H are described in the table 2.2.

Table 2.2

Question	Category	Explanation
1	What – is BSR?	-Definition & meaning of BSR
		-The fields that contributed to the growth of BSR
2 Why- is it important?		-Why was BSR needed?
		-Importance of BSR in the current times
3 When- did it		-Building the timeline of growth and development of BSR
	emerge?	-Highlighting the various contributions along the timeline
4	Where- can BSR be applied?	-Where this proposed model can be applied/ researched
5	Who- all are	-Who all were involved in the development of BSR?
	involved?	-The people who are involved in BSR and its application
		-Careers and professionals in BSR
6	How- how does BSR contribute?	-How does BSR contribute to knowledge, academics and professions?

Explanation of 5 W'S and 1 H approach for Behavioral Science Research

Note. BSR= Behavioral Science Research

Chapter Conclusion

With the review of relevant literature, the next part of the research report moves on to sharing the research methodology.

CHAPTER 3

RESEARCH METHODOLOGY

In this chapter the research methodology of the study is explained in terms of the research design, study context, the measures and the procedures that were employed.

Research Design

This research was based on a qualitative approach to investigate the research objectives since it allowed in-depth investigation into the description of phenomenon that is the hallmark of a qualitative approach (Silverman, 2004; Creswell, 2007). The "phenomenon" in the current research was the evolution and development of behavioral science research in Thailand. The qualitative approach allowed the understanding of the how the behavioral science knowledge emerged and also how this knowledge was researched and practiced; both aspects that can be constructed from the local perspective using qualitative investigations (Geertz, 1983). A review of literature regarding the behavioral science research was reviewed and analyzed. Next, open ended questionnaires were developed for conducting in-depth interviews with key informants. The data was analyzed using the content analysis technique.

The Research Context

The research was designed to investigate the emergence and development of behavioral sciences in Thailand. This scope was narrowed after the review of literature and the initial interviews with the experts; the researcher then focused on evaluating the BSR from the context of how it evolved at the Behavioral Science Research Institute (BSRI), at Srinakarinwirot University (SWU), in Thailand.

The Research Procedure

The research was conducted in two phases for collecting data about Behavioral Science research in Thailand: secondary information review of reports and literature (in Thai and English), and then qualitative in-depth interviews of key informants were taken. Furthermore, researcher's reflections were also noted.

For review of relevant literature to match the objectives of the research, some key words were defined like "Behavioral Science, Behavioral Science Research, and Thailand". A research assistant helped the researcher to translate the Thai reports and papers. Along with this, information available on websites, online records and researches, the data was analyzed to answer the key objectives and also the content was scanned for any new themes.

In the second phase of the research in-depth interviews were conducted for which the researcher developed an **open-ended questionnaire**. The interview method was selected as it provided in-depth information pertaining to participants' experiences and viewpoints on the chosen issue (Turner, 2010).

The instrument developed for the interview can perhaps be identified as the "standardized open-ended interview", which is structured in terms of the wording of the questions but allows participants to give responses that are open-ended (Gall, Gall, & Borg, 2003). This was shown for expert advice and feedback, and modified. This questionnaire guided the in-depth interviews of the key informants.

After consultation with the experts, the "expert sampling" technique (Given, 2008) was used to prepare a list of **key informants**. This list was generated on the basis of review of the list of the directors who have worked at the BSRI and those who have made significant contributions to the Behavioral Science Research. The criteria of selection would include that the experts have: a) taught BSR, b) have experience as a behavioral science researcher, and c) have published research works.

Data Collection

The data was collected from seven key informants in this research. Procedures outlined in qualitative research methods were adhered to. According to Creswell (2003; 2007) these include (a) the preparation for the interview, (b) the constructing effective research questions, and (c) the actual implementation of the interview(s).

The researcher took care to prepare well for the interviews, using the eight principles outlined by McNamara (2009).

The key informants included 6 persons who have held the position of directors at the BSRI and one more was an eminent researcher in the BSR.

A recorder and researcher notes were used during the interview with the consent of the key informants.

Data Analysis

The data collected was analyzed using qualitative content analysis, which entailed making "sense" from the data by grouping information in codes and themes (Creswell, 2003, 2007). In accordance with interview analysis guidelines by Kvale (2007), these themes or codes were consistent expressions and ideas that "were common among research participants". The steps entailed in the procedure of qualitative content analysis by Mayring (2000) were also followed.

Chapter Conclusion

After clarifying the research methodology, the subsequent part of the research report shares the research findings.

CHAPTER 4

RESULTS AND DISCUSSION

The data from the research was amalgamated from three sources- review of relevant literature in behavioral sciences, a review of Thai researches, and from the interviews of the seven key informants/ experts in the field of Behavioral Science and BSR in Thailand. The data was analyzed using qualitative analysis. Syntheses of the findings have been presented in this chapter.

The findings from the research are presented in 2 sections-

- I. Answers to the research objectives
- II. Experiential insights from the Experts
 - a) Key practices
 - b) Suggestions

Each of the seven experts in the research has been given pseudonyms like E1, E2 and so on till E7. For answering each of the five research objectives, direct quotes and information from the experts have been shared. This sequence is followed for the second section of the findings to share the experiential insights also.

I. Answers to the Research Objectives

In this section each of the five research objectives have been answered synthesizing information gathered from the in-depth interviews of the experts, and also from the review of the literature.

1. What are the roots of BSR in Thailand?

The roots of BSR in Thailand are grounded in the emergence of the Behavioral Science Research Institute or the BSRI in Bangkok. The BSRI has had a unique role to play in the development of BS as a discipline in Thailand and over the years has remained the only formal academic institution with a dedicated focus towards the discipline, along with research and applications in BS. Hence, this section traces the historical emergence of the institute as the roots of BS, the main disciplines that contributed to BS, the role of specific individuals and organizations who contributed to the development.

1.1 The historical emergence of BS and BSR- the roots of BSRI

The BSRI has its roots in the work that began in another institute called the International Institute for Child Study (IICS), which was formed as a joint venture between the Thai government and UNESCO in 1955.

E7 traced the history of the institute with the researcher in great details and said, "Let me add some information for you". Before the institute was formally established, "there were six important persons selected by the Ministry of education (Thailand) who were selected to go to Toronto (Canada) to study for one year. They went there to learn everything about the institute. They came back with 'grounded knowledge about to how to start an institute."

The IICS began with "the significant officials of Ministry of education and UNESCO". At that time they had to make a decision "whether to begin the institute in Thailand or in India…but the final decision was in favor of Bangkok" (E7).

The reason for creating this institute was that they realized that the knowledge about the Asian children had been lost and they must make efforts to assimilate this wisdom and synthesize the knowledge about child rearing practices in the Asian region. As **E7** highlighted they wanted to "uphold the knowledge not just by history but based on research." So the main functions of the IICS were to research about the child rearing practices and since the location was in Bangkok, Thai children came first in their research.

E2 explained further that-

"The root of BSR is related to the establishment of the BSRI. At first the knowledge in psychology in Thailand was derived from western theories and research findings. Mom Luang Pin Malakul, an important Thai Educator, considered that the educational administration and teaching methods which were derived from western culture might not be appropriate for other countries which had different cultures. Therefore, when the UNESCO decided to establish research center for child psychology in Asia, Mom Luang Pin Malakul, an administrative committee member of the UNESCO at that time, proposed that the center should be in Thailand. The center was finally established in Thailand and named International Institute for Child Study. The first director of the institute was Dr. Line. Research programs during the beginning period of the International Institute for Child Study were related to socialization in children in many aspects applying qualitative research techniques".

After the establishment of the IICS, the research and teaching work carried on till 1974-5 and then the **IICS changed to being formally called the BSRI.** This transition took place in 1975.

According to **E2**:

"The center (IICS) was first an autonomous organization located in the College of Education, in Soi Prasanmit from 1955 to 1974. In 1974 the center joined hands with the College of Education to offer Master Degree Programs on Developmental Psychology, Educational Psychology and Social Psychology. The research in these areas, which was certainly BSR, was carried out formally at this institute. In 1975 the name of the Institute for Child Study was changed to BSRI when the institute became a department of Srinakharinwirot University (the new name of the College of Education)."

According to Bhanthumnavin (1996), formally BSR began in the 1970's in Thailand. As noted by Bhanthumnavin, (2001) the discipline of psycho-behavioral science research emerged formally in Thailand in 1974, where the focus of this discipline was primarily focused on studying moral behaviors and was supported by the National Research Council of Thailand. In 1988, the National Research Council of Thailand and Thai behavioral system had encouraged psycho-behaviorists to work out a master plan for a research project to develop Thai people, following the 8th and 9th National Economic and Social development plan of Thailand (Bhanthumnavin, 2001).

E1 mentioned that though BSRI had roots in research about child development, it later enhanced to the scope to include all human behavior. The persons who joined the institute have to be "good in both sides- the content and the research methodology".

1.2 The salient persons and their role

The roots of the formal BSR were in the center- IICS, and many persons actually contributed towards the growth of the research and teaching work related to the BSR. Some of these persons became a part of the IICS and later the BSRI, while there were many external collaborators too who contributed from outside.

1.2.1. From within the institute

Each director of the institute from the IICS to its formal emergence as BSRI left an

indelible mark on the development of research and focus. The Table 4.1 shows the information

about each director with their significant contribution highlighted by the expert E7.

Table 4.1

Directors of the Institute

	Director	Year	Significant contributions
1	Prof Dr. William Line	1955	The roots of BSRI/ "He was from UNESCO"
2	Prof Dr. Ernest E. Boesch	1955-1959	First director- International Institute for child study/ Research, Psychological instruments for child development "He was a well-known German psychologist. He guided the 6 persons who trained in Toronto to begin the work at this institute. He directed the teams to develop psychological tests and instruments to collect information about Thai children".
3	Prof. Dr. Hugh Philip	1960-1963	Widened the scope of the institute to the educational function. He was an Australian with a background in Educational Psychology. His motto was "there is no problem in this world…every problem can be solved".
4	Prof Dr. Lamaimas Soradatta	1964-1969	First Thai director of the IICS "Her background was in Social Psychologyand she still carried on the important work of Dr. Philip"
5	Prof Dr. Chancha Suvannathat	1969-1983	In 1975: "BSRI" was formally named and she was its Director Only research was done as the teaching was shifted to other faculties. She emphasized that "the environment must be taken into accountfor child development- focus on socialization in the family but must not forget the function of educational and social institutions".
6	Dr. Penkhae Prachonpachanuk	1984-1988	1984-Teaching began with Master degree program
7	Prof. Dr. Chancha Suvannathat	1988-1991	Many awarded researches from BSRI
8	Assoc. Prof Dr. Pachongchit Intasuwan	1992-2000	1994- PhD program in applied BSR. Background in Educational measurement
9	Assoc Prof. Dr. Dusadee Yoelao	2000-2004	Background in Educational Research
10	Asst. Prof. Dr. Wiladlak Chuawanlee	2004-2008	Background in Educational psychology
11	Assoc. Prof. Dr. Oraphin Choochom	2008-2012	Background in Psychology
12	Assoc. Prof. Dr. Dusadee Yoelao	2012-	Current director

Other experts also mentioned the significant contributions to the BSR and the BSRI by the former director and others. **E5** mentioned that for the BSRI in its new phase in the 1980's and early 1990's there were two main contributors- "Prof Dr. Chancha had a lot of strong connections outside the university and Prof. Dr. Duangduen Bhanthumnavin was very strong in academics and involved in the activities at BSRI." This is also supported by E2, and E4.

1.2.2. External collaborations

To begin with the institute was set up with the help of UNESCO and Ministry of education, Thailand as the "International Institute for child study". Prof Dr. William Line was sent from the UNESCO to help in this phase and the support from Ministry of education was from a distinguished educator and Minister- Mom Luang Pin Malakul.

Many of the interactions with outside world helped in preparing the curriculum of the BSRI. According to E7 some of the outside experts who helped were "Dr. Ian Smith, and Dr. Glen Rutherford both from Australia."

E1, E5, E6 and E7 mentioned that from 2000 onwards BSRI continued to have exchange from experts from other countries and some of these have been -

- Prof. Dr. Wan Rafaei Addul Rahman (from Department of Psychology International Islamic University Malaysia, Malaysia)
- Prof. John Keats and Prof. Daphne Keats (The University of Newcastle, Australia)
- Prof. Stuart C. Carr (Department of Psychology, Massey University, New Zealand)
- Prof.Takashi Naito (Ochanomizu Univeristy, Japan)

• Prof. Ann Macaskill (Sheffield Hallam University, UK)

1.3 The Main disciplines that contributed to BS

In the view of Suvannathat (1983), behavioral science has contributions from three major disciplines - sociology, psychology and anthropology.

E1 highlighted that:

"The main disciplines that contributed towards behavioral science were- education, psychology, educational psychology, sociology and also a focus on research methodology."

E2 explained that:

"If we discussed this question by focusing on the disciplines of behavioral sciences we would find that there were many related disciplines, such as psychology, sociology, and political science. If some disciplines, such as political science and economics, studied human behavior, they could be considered as behavioral sciences too."

2. What is the definition and meaning of BSR?

The second research objective aims to develop the understanding of BSR about understanding what is the definition and the meaning of BSR.

According to the expert E2:

"The word behavioral sciences were first introduced by Ford Foundation in a program supported by the foundation. The program focused on human behaviors and related social problems. The research in the program should be carried out by applying scientific method with reliable measures. Multidisciplinary approach was encouraged because only one discipline may not cover all aspects of the problems. Although it is not clear that behavioral science research in Thailand carried out in different educational institutes holds the same focuses of those of the Foundation's, it is evident that the BSRI nowadays emphasizes similar former standpoints. Research in behavioral sciences at the time of the International Institute for Child Study (former name of BSRI) is mostly concerning child development and child-rearing practices. The research methodology at that time is mostly qualitative, utilizing ethnographic field techniques. Later quantitative approach was the mainstream. Experimental research in a laboratory was arranged in the BSRI. An evidence of the experimental research in BSRI is two rooms with one-way mirrors for observing children's behaviors. Nowadays the BSRI applied both qualitative and quantitative approaches. The reasons of using any methodology are not only related to the appropriateness of research problems but also to both the expertise of staff at that time and the popularity of the methodology at an international level."

According to Suvannathat (1983), the study of behavioral science can be identified from two main dimensions: 1) The study investigates human behaviors, and 2) a scientific methodology is implemented to investigate these human behaviors.

Bhanthumnavin, (2001) has stated that there are 4 characteristics of behavioral science research in Thailand which define its academic content and methodology, and that which must be adhered to by the researchers in the field-

- i. Assessment and research methodology must be strictly based on scientific methodology.
- ii. BSR must develop effective measurements to assess behaviors.
- iii. Review of literature should be based on careful and critical analyses of both Thai and international research.
- iv. Research results from correlational comparative studies and experimental studies can both be applied for future research.

3. What are the unique contributions of BSR?

This section is divided into 5 parts to answer the following questions-

- i. Why is BSR important?
- ii. What is the contribution of BSR to research?
- iii. What is the contribution of BSR to curriculum development?
- iv. Significant researches
- v. What are the unique contributions of Buddhism to the BS?

3.1 The Importance of BSR

3.2 The contribution of BS to research and knowledge

There have been several contributions of BS to developing knowledge and also applying it through research and interventions. According to Chuawanlee (1994), a behavioral science approach to understanding human problems is needed as BS realizes that behavior is influenced by many agents (family, community and society) and because these agents are organized in several ways it makes it difficult to understand with only one approach.

According to E2, the unique contributions of BSR in Thailand are:

 a) Multidisciplinary approach. Research in any area is usually based on theories and related literature in that area but a multidisciplinary approach applies more than one disciplines.
In BSR of BSRI usually involves variables from psychology and sociology.

b) BSR welcomes both qualitative and quantitative approaches while in some discipline one approach is more eminent than another approach. For example, a quantitative research is more eminent in psychology.

c) BSR is interested in both internal factors and external factors. Internal factors are human characteristics, such as personality, cognitive and affective aspects while external factors are environmental variables, such as social support from friends, organizational climate. Moreover, BSR also study the interaction between the two factors affecting human behavior.

d) BSR emphasized using strong and advanced research and statistical methods.

The vast repertoire of research at the BSRI began at the time when the institute was established as the International Institute for child study. A record of all the research work has been made and published in the form of report showing the research abstracts from 1957 to 1992 (Please see appendix A). The published research done by the faculty and students at the BSRI have been made accessible online too (http://bsris.swu.ac.th/research_public_eng.asp). Some of the other published works included the "Handbook of Asian Child Development and Child rearing practices" (appendix B) and other significant researches (appendix C).

Another aspect has been highlighted by **E1**- initiating cross cultural research work has been important for the growth of the BS. Some of the cross cultural projects initiated at the BSRI have been in the area of quality of life of the university employees and developing the concept of patient safety (more information is available online http://bsris.swu.ac.th/cculture/index.html)

3.3 The contribution of BSR to curriculum development

The contribution to the curriculum development in Thailand marks a significant contribution of the BSRI. According to **E4-** "at first the curriculum at BSRI was developed with a focus on child socialization. Later when the PhD program was developed, the focus was changed to work socialization".

Intasuwan (1994) had pointed out that BSRI was incorporated with one of the main goals to incorporate Curriculum and Instruction: both at masters and in doctoral programs in applied behavioral science research.

The three major contributions are explained in 3 parts that follow.

3.3.1. Developing a distinct curriculum in behavioral sciences (BS)

The BSRI resumed its teaching function in 1984 by offering the master degree program in Applied Behavioral Sciences.

E3- "the curriculum development was a collaborative effort". According to E4, about 1983 the separate curriculum for pursuing master degree in behavioral sciences was developed. Later on PhD program was developed.

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3.3.2. Developing the PhD program for Applied Behavioral Sciences in 1994.

The doctoral degree program at BSRI was offered from 1994. It had three different subprograms, Master/doctoral program, PhD by course work (which includes regular classes and then the thesis), and PhD by research (which allows researchers to conduct only research work and not attend regular courses).

3.3.3. Developing an international curriculum for Applied Behavioral Sciences

The international curriculum for doctoral degree program has been developed at the BSRI. Though the international curriculum is still in its formal preparatory process, it allowed the BSRI to accept international students' to do their doctoral research.

E1- shared her perspectives about developing the **international curriculum** for the BSRI and applied BSR. This was developed through a lot of network and cooperation with people from other countries.

3.4 Significant Researches

A number of significant researches and projects have been conducted at the BSRI. The website of the BSRI reports 163 researches (http://bsris.swu.ac.th/research_public.asp) in various areas and with different issues related to behavioral sciences. Many of the researches were given national awards as well.

Suvannathat (1994) had written that application of behavioral science research results is more comprehensive and appropriate as they are based on investigations from a multidisciplinary perspective. The results of such research can be used to solve problems arising from human behaviors and social issues. E3- "Many joint projects of research were initiated at BSRI. The first one was also collaboration between the team at BSRI and other faculties."

E4 mentioned about the significant development of the "moral tree model" in 1993 (Banthumnavin, 1995). It is still used in research work. It was based on the "interactionism model" (Magnusson and Elder, 1977).

E4 went on to share that one of the research projects that was awarded by the National Research Council of Thailand (2004) was an analysis of the indicators of the martial quality in Thai families (Vanindananda, Yoelao, Chuawanlee, Phisallaphong and Srinjindarat, 2002).

3.5 The unique blend of Buddhism to BSR in Thailand

A unique aspect of BSR in Thailand is that it is imbued by the cultural and religious practices of the Thai people. Most of the Thai people are Buddhist and hence Buddhism has influenced the research in BS.

E1 shared her experience of going further into Buddhist studies after her retirement from the institute. She said it is rather important to study the Buddhist principles not only for the "teachers but also for the institute... You learn to observe yourself. You develop yourself through awareness of your mind." Another important teaching is about "compassion, which you should learn when you become a teacher".

E5 shared that the BSRI developed a special curriculum for understanding the application of Buddhism "Buddhism and Human Behavior Development." This was developed with a lot of research and also consultation with an eminent Thai Buddhist monk.

E4 shared that they had developed a research project to understand the Buddhist practices in parenting.

4. What are the main challenges in the development of BSR?

This section takes a look at the finding out the main challenges in the development of BSR at the BSRI. These have been divided into two parts- the challenges for BSR and that for the researchers.

4.1 Challenges for the development of BSR

There have been challenges faced by the academicians in the BS such as the process of developing knowledge, creating theories, and then adequate research designs to test the theoretical knowledge as well as develop reliable instruments to measure the variables in the research models.

According to **E2** the main challenges in the development of the discipline of BS and the BSR are:

1. "The construction of theory. There are lots of models and findings resulting from research of both professors and students in BSRI; however, there is no one strong theory constructed from these findings. The professors and also the students of BSRI usually utilize the Moral Theory (ทฤษฏิดันไม่จริยธรรม) constructed by Prof. Dr. Duangduen Bhanthumnavin. It is great to apply this theory but other theories can also be created. For my opinion, only one theory in Thailand may not be enough to answer all human and social questions or problems.

2. The models offered by the professors and the students should be in the same main tracks so that they can gather knowledge to construct a good theory. Nowadays they are always interested in different theories and mostly new ideas or new variables suggested by western scholars.

3. The creation of theories which based on Thai culture. The Thai culture is intertwined with Buddhism; therefore new theories in BSR should be connected to Buddhism to some extent.

However, the examination of Buddhism should be deep enough to create good and reliable research.

4. One of the big challenges of BSR is to apply a thorough and appropriate research methods and instruments to study and measure internal variables (person variables) and Buddhist variables because these variables are really difficult to measure. The instruments should be widely accepted by both BS researchers and the lay persons (ones not in the same area of study)."

4.2 Challenges for the researchers engaged in BSR

There have been various challenges that a researcher has to face while pursuing their investigations in the BS. Various experts shared their viewpoints regarding this issue.

E1 highlighted several problems that a researcher in BS faces-

- a) "BSR is wide in scope and we have to study many different subjects like psychology, education, research methodology, statistics and people may not like to study all".
- b) It is rather good in another way that people have different interests in BS...especially when you work together or you need to work on a larger project to take a look at a problem with a wider angle".

E1 also shared her experiences about problems faced by student researcher in BS-

- a) "BS is too large and students who are working find it difficult to find time to study and finish the course in time".
- b) "Personal engagement varies".

c) "Advisor's high involvement is needed"... "It is a problem to keep the students going on".

E5- "a degree in BSR is not very attractive in the market. If you need a new faculty you must have a graduate from that discipline".

E3- "students have problem in doing research as they work and cannot finish research in time. However they have enough knowledge after their course work".

5. What is the current status and future growth prospects of BSR?

The last research objective deals with the issues related to the current status of BSR and to the future growth perspectives based on the suggestions of the key informants and also the review of literature.

5.1 The Current status of BSR

E5 explained some issues related to the status of BSR:

- "People don't know about BSR but know about HR (human resources) or applied psychology."
- "Number of students has gone down from before."
- "But still BSRI is in the same position when we look at the university."

5.2 The Future growth prospects

The experts shared some of their suggestions for the future growth of BSR and these have been coded into three separate parts.

1.2.1. Future growth of BSR

E7- "Collaboration and cooperation are very important".

E6-"Our program at BSRI is very good-course work with practicum but many universities now offer the PhD program".

1.2.2. Perspectives for Academicians

E5 recommended that -"Anyone who wants to work at BSRI should be strong in research. Teaching is also important- it is how you are going to transfer your expertize...not just by telling the students by also your research".

E6-"BSRI faculty must aim for international standards in research.

E7- " there is only one branch of applied BSR in Asia...though there may be other BSR...so we have to turn to the strength of the BSRI- that is 'applied' aspect to assist the society at large".

1.2.3. Outlook for researchers and students in the BS

E1- "About research, especially experimental research, we try to develop other people but we have to develop ourselves first".

E3- "every subject at BSRI must teach a student to develop their critical thinking- ask the "why" of social issues."

E3- "Language is a problem for Thai students in the AEC. Students need to develop their English language skills".

E5-"anyone who wants to study at BSRI should be strong in research".

E6-"I would like our institute to be the leaders in academics and research".

E7- "We have to think of other areas of BSR like anthropology but still with the social context in mind. AEC is coming soon...so we can start a research in the ASEAN context. We can share the knowledge with other countries about children and family socialization".

Section Conclusion

Thus, the section covered the answers to the 5 main research questions that were framed for the study, with support from the interviews of the seven experts.

II. Experiential Insights from the Experts

This is the second main part of the research findings. These valuable insights from the experts or the key informants of this research have been divided into two parts- key practices and suggestions, which are further explained in details.

1. Key Practices

There are "key practices" which have been identified by the experts and coded into six categories for syntheses and understanding. These 6 categories have been identified as those practices which are helpful in promoting the growth of BSR and also the BSRI.

1.1 Orientation of New Faculty

It is important to develop and orient the faculty for their responsibilities at work which include both teaching and research. Some of the related suggestions by the experts for this are mentioned.

E7- "Socialize the new faculty well".

E3- "New faculty must work with older faculty. They should join together for exchange and knowledge sharing".

E4-"The most important is to have a right mentor as it helps in socialization process for the new faculty".

1.2 Focus on both the quality of teaching and Research

Another practice that keeps the development of research at BSRI forward has been to focus in reaching the highest quality of teaching and research.

E4-"Right way to move forward is to research and to teach- update knowledge and teach".

E5- There should be professional training for teachers in BS to enable them to transfer their expertise and their research to the students".

E7- "Teaching and research functions should both be kept together"

1.3 Inter-disciplinary and Cross Cultural Research Work

The experts shared that the research in behavioral sciences that gives impetus to its significance and relevance is that BSR is inter-disciplinary and hence more projects must be designed with this perspective. The experts also recommended cross cultural research work in BS that can help in sharing and developing BSR.

E1- emphasized that we must conduct cross cultural research work. We can work to "create a large project and create sub-projects according to the individual interests". This can help us "to work together and learn from each other". A cross cultural research has a "long term benefit for the institute and not just at that time". If we work on a project "we can solve a

problem using different approaches ("buranakarn") and in the end we can say that we have learnt".

E3- "BSRI can initiate a big project for multi-disciplinary involvement where people can choose their own interests to create sub-projects".

1.4 International Post-Graduate Research Colloquium (IPRC)

A unique practice at BSRI was initiated by co-hosting the IPRC since 2004 along with the Department of Psychology, International Islamic University Malaysia, Malaysia. The IPRC provides a platform for young researchers to share their research and even proposals with each other. Other universities in both Thailand and Malaysia also participate in the event.

E1- "continue the traditions of cross cultural exchanges through the IPRC".

1.5 Cross Cultural exchange –invite international experts

E1- "invite international professors for better student development"

E5- "we should focus on getting experts to BSRI and also have cross cultural research... Students benefit and realize this only when they graduate".

1.6 Publish Journals

The BSRI publishes three research journals to provide an opportunity to researchers in BS and related disciplines to publish original academic work.

E3- "BSRI publishes the research journals to share the valuable findings in BSR...we should continue this".

There are three journals that are published at the BSRI; two in Thai and one in English (IJBS). All are peer reviewed and open access journals that can be accessed at the websites (http://bsris.swu.ac.th/journal/index.html). The three journals are-

- i. International Journal of Behavioral Science (IJBS- English language)
- ii. Journal of Behavioral Science (JBS- Thai language)
- iii. Journal of Behavioral Science for Development (JBSD- Thai language)

All of these have been indexed in the Thai Citation Index, and the IJBS is also available on the EBSCO data base.

2. Suggestions

The researcher also explored further to understand what each expert recommended as the suggestions for the future of the BSR and BSRI. The answers were analyzed and coded into 9 themes which are explained along with the expert's opinions to match these.

2.1 Professional self- development

E2- "Professors keep on studying or researching the topic of their interests... Both wide and deep understanding in knowledge or theories expected to use in students' research should be encouraged".

E2- "A multidisciplinary approach is strongly promoted in BSR...The expertise of staff members in each discipline should be seriously encouraged. Moreover, new staff members also should be recruited".

E6-"I would like our institute to be the leaders in academics and research... I wish our students and faculty would have excellence in research. A system of structured training for research must be set up at the institute".

2.2 Invite experts from outside to share their work at BSRI

E7-"During my time I try to connect with other persons/ organizations who could use our research"

E7- "Stimulate BSR with seminars and workshops so that the outside faculty can have an interaction with our faculty".

2.3 Develop our own self first!

E7-"If we try to understand the others we have to first understand ourselves. We have the inner strength first so that we can cope with the outer demands".

2.4 Develop and work on multi-disciplinary and cross cultural research projects

E1- "If you can create a cross cultural research that would be very good. You would have to work hard but afterwards you would learn a lot". In Thailand you could "create a large project that involves other faculties from other universities...in this case also one learns from others ad also about different cultures".

E2- "multidisciplinary approach is strongly promoted in BSR, and an expertise in each discipline is needed".

2.5 Foster warm student-teacher relationships

E2- "The stringent of academic work of students should still be carried on, certainly, with warm student-professor interaction".

2.6 Share Buddhist philosophy and teachings

E1- "It is important to share the teachings of Buddhism and about the principles of 'compassion', and knowing oneself'. She suggested that BSRI should invite some experts to share the knowledge about Buddhism when they recruit new teachers.

2.7 Market BSR and BSRI effectively

E5- "we should do something to show our strength as well as that of behavioral science research".

E6-"We should broadcast /share the research knowledge that we accumulate at BSRI...we can use the social media well".

2.8 Collaborate with other faculties to offer new courses

E6-"BS is very useful...BSRI could collaborate with other faculties to offer a new curriculum like that of Applied Psychology".

2.9 Open the International Curriculum at BSRI

E6-"We need to push for the international curriculum at BSRI".

Section conclusion

Thus, this concluded the section to show that there were 5 "best practices" and 9 themes that emerged as the "suggestions" from the experts in this research.

Chapter Conclusion

The research findings have been shared in two main sections to synthesize and conclude the information collected from the research. The first section shared the findings gathered to answers to the research objectives. The second section shared the experiential insights from the experts or the key informants of this research.

CHAPTER 5 Discussion and Conclusion

This research was conducted to systematically explore and document the information related to the historical roots, the growth and also the future development of Behavioral Science Research (BSR) in Thailand. A qualitative design of research was framed to achieve the research objectives. The qualitative data analysis helped in building information based on inductive techniques that allowed for new patterns and themes to emerge, which is the hallmark of qualitative research (Creswell, 2007). The technique of qualitative content analysis by Mayring (2000) guided the research analyses to give rich and informative results and conclusions.

This chapter summarizes the findings of the research and gives recommendations and conclusion based on the research findings, which are presented in 4 sections-

- I. Key findings
- II. Researcher's reflections
- III. Recommendations
- IV. Value of this research
- V. Conclusions

I. Key Findings

Aimed to understand the historical development of behavioral science research (BSR) in Thailand, the research focused on its roots through the establishment of the Behavioral Science Research Institute (BSRI). The key findings from this research are summarized and presented in three categories as-

1. The roots of behavioral science research (BSR) at BSRI

- 2. The current status of BSR
- 3. The future of BSR

1. The roots of behavioral science research (BSR) at BSRI

Impetus to behavioral science research (BSR) in a formal way began when the BSRI was established. However the roots of BSRI are traced in its inception as the International **Institute** for Child Study (IICS) which was established as a joint venture between the Thai government and UNESCO in 1955. Some of the main learnings from this research can be summarized as-

- i. The former directors and the faculty of BSRI have given a very strong foundation to the establishment of a distinguished and unique institute where behavioral science research (BSR) can be pursued.
- ii. Some of the valuable contributions done at the BSRI to establish BSR formally have been through the valuable researches, producing competent graduates, and getting awards at national levels.
- iii. A lot of academic knowledge has been created in terms of academic research papers and reports that are available on the database of the BSRI. Most of this is in Thai language.
- iv. Many of the research projects have contributed towards alleviating behavioral problems and social issues and have a great applied value.
- v. A unique aspect of BSR in Thailand is that it is imbued by the cultural and religious practices of the Thai people and hence it is influenced by Buddhism.

2. The current status of BSR

From the review of the research findings there can be some conclusions drawn about the status of behavioral science research in Thai context-

- i. The behavioral science research (BSR) has a lot of significance in the current times as it provides a holistic way to understand the behavioral problems from its interdisciplinary perspectives.
- ii. The BSRI is a well-established and reputed institute which is still leading the behavioral scientists in Thailand.
- iii. The BSRI offers strong curricula in master and doctoral levels studies in applied BSR which provides the behavioral scientists to apply their research to mitigate problems or answer concerns.
- iv. The faculty at the BSRI is garnered to deliver high quality of teaching as well as engage in research in the behavioral sciences.
- v. The BSRI has many good practices that have helped develop the BSR and these include
 - a) Orientation of the new faculty towards research
 - b) Focus on both the quality of teaching and research at the institute
 - c) Inter-disciplinary and Cross Cultural Research Work is recommended.
 - d) International Post-Graduate Research Colloquium is held annually with partners in universities in Malaysia
 - e) Cross Cultural exchange -invite international experts to share their knowledge
 - f) Publish Journals- three journals are published by the BSRI (two in Thai and one in English language).

3. The future of BSR

The future suggestions for the development of BSR were amalgamated from the in-depth interviews with the experts and also by the review of growing literature about the BSR. The growth of BSR is also concerned with the development of the programs offered at the BSRI.

The summary of the recommendations that emerged are tabulated herewith-

- i. Nowadays competition is strong for the Ph.D. program that we offer, so we could-
 - Develop competencies in graduates so that they can find employment
 - Market the BSRI programs well to create awareness and share the success of the contributions by researchers in the BS discipline.
- ii. Develop the international program and the international collaboration
 - Focus on attracting students from the ASEAN region
 - Continue the good practices of
 - Hosting the International Post-Graduate Research Colloquium (IPRC),
 - Engaging in cross cultural research projects
 - Publishing the English journal (IJBS)
 - Invite foreign experts for seminars/workshops/ researches.

iii. Focus on working to produce the best quality of research and teaching as that is "the way forward".

The key findings from this research are summarized and presented in figure 5.1 to show the three main dimensions of behavioral science research in Thailand– the past (roots), current and future.

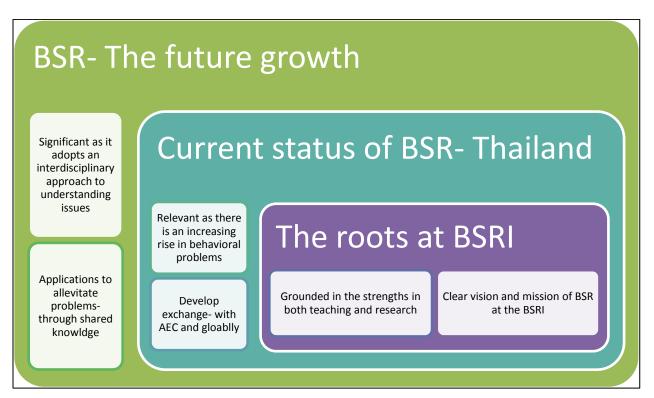


Figure 5.1. Summarizing the three dimensions of Behavioral Science Research in Thailand

II. Researcher's Reflections: What I have learnt personally!

This research was a personal journey of learning and development as it took me along diverse paths to different destinations that perhaps I didn't know I was going to visit when I first began this study.

An essential part of a qualitative research is researcher's reflexivity (Argyris and Schon, 1974; Lincoln & Guba, 1985). In this research, from the beginning the researcher kept a reflection journal and kept updating it as the research progressed. As Malterud, (2001) has cautioned, "A researcher's background and position will affect what they choose to

investigate..." and hence I took care to uphold researcher's reflexivity. As a result of these reflections I can summarize what I have gained through this research in three respects-

1. Academic insights

Some of the academic learning from this research for the researchers has been-

- i. Behavioral science in Thailand emerged from contributions from various disciplines; the main being psychology, education and educational psychology.
- ii. Interestingly behavioral science research has moved from multi-disciplinary to interdisciplinary approach.
- iii. Research based knowledge at the BSRI has been an important component of the courses developed for teaching the various curriculum
- iv. Each curriculum at the BSRI has been developed with expert inputs from internal and external experts.
- v. Research and teaching are interlinked to produce the best academic outputs

2. Value of Personal interactions

The researcher noted in the reflection diary about how the interactions with the experts had an impact on her personally -

- All the experts were very kind and generous to share their knowledge *"I am touched by the immense knowledge, kindness and generosity of the key informants!"*
- ii) Each expert had a rich and vast research contribution towards the BSR-*"I am humbled by the learning and insights I could gain from the experts during each interview"*

iii) The interviews could just provide some glimpses into the work done by each expert for the discipline of behavioral sciences and the institute BSRI.

iv) I developed a deep sense of duty while I talked to them-

"There is a great responsibility to take the institute forward... for the younger faculty."

3. Professional Appreciation

As a professional in the field of behavioral science the researcher summarizes-

i) Behavioral science researchers must research deeply into their area of interest

ii) Research knowledge from an interdisciplinary perspective helps to understand an issue or a problem better and deeply

iii) For continuous professional development one has to integrate one's own research with one's own teaching

In conclusion, the researcher would like to share this reflection – "We must never lose sight of the roots on which we stand and the vision for the future must be grounded to our basic values."

III. Recommendations

This research provided answers to the five main objectives that were framed before the study and also provided rich information about the behavioral science discipline and research that had not been envisioned before.

In a very insightful piece of work, Suvannathat (1994/2) had written to explain the important role of behavioral scientists in managing the environment around them and helping

towards sustainable development of mankind. The author explained that the human behavior must be understood from the ecological system view and three important systems that interactthe personality system, the social system and the environment system. So we may conclude that behavioral science has great importance in today's world as it provides a holistic perspective in dealing with the numerous and complex behavioral problems.

In a review, Chuawanlee (2007) wrote about developing a new curriculum for the Behavioral Science Research degrees in Thailand in the new millennium that should match with the scope of development and change. Thus, the BSRI in particular should continually review and develop the curriculum of BS to match the demands of the changing times.

There is also need to promote the significance of the BS and BSR. The author suggests based on the research interviews and findings that a way to promote BSR is through international collaboration between countries. Some of the potential benefits of these collaborations are-

- 1. Enable researchers to develop their own cultural perspective of an issue and then examine it from a cross cultural perspective to understand if it's an isolated occurrence or not.
- 2. Enable multi-disciplinary understanding of the various disciplines of BSR to share the insights of a problem and also its solution. This can be due to the expansion in scope for understanding the issue.
- 3. The joint research activity could contribute towards the development of theory, methods, education, training and even policy and practice.

All of the above efforts could even help to garner global network of support to deal with local and global problems, for instance as suggested by Mohan & Peungposop (2014) in their

review about how behavioral science perspective could build resistance in the face of global disasters due to environmental changes.

Some of the recommendations that emerged from the interviews of the experts in this research are presented briefly-

- a) Strength of BSR is in its applied dimensions (E7).
- b) Keep teaching function together with the research function (E7).
- c) Share information about our research with other faculties in ASEAN (E7).

d) E5- "People need to be conscious of BS...we should be able to think about the future of BSRI".

- e) Focus on both research and teaching
- f) Courses should be designed to develop competent graduates- who can get employed!
- g) Promote both Thai and international perspectives for looking at problems.
- h) Collaborate outside for research- CCR
- i) Publish research
 - a. All three journals must be of the best quality
 - b. Publish in English

Summarizing the recommendations of the current research, multi-level recommendations for the development of behavioral science research are made and shown in the figure 5.2. There are three levels at which these recommendations are made- for the faculty and staff; the students and the institute (BSRI).

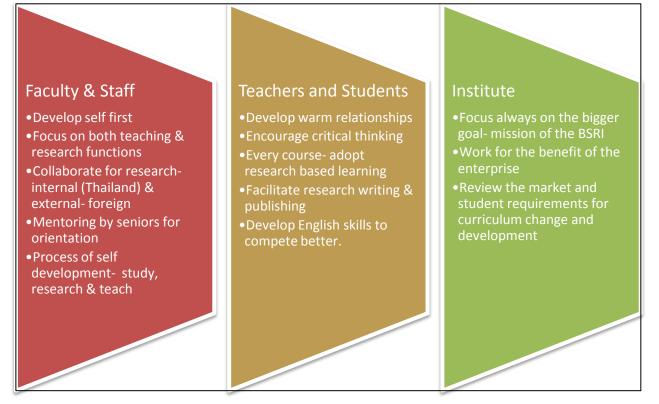


Figure 5.2 Multi-level recommendations for the BSR

IV. Value of this Research Project

As this report concludes it is imperative to remind the readers about the intended value of this research with which the researcher had undertaken this systematic research based approach. The key value of this project was to **create an information source in English** (the "international language") about the discipline of behavioral science and trace its growth in the Thai context.

Another importance of this project was to highlight the **research and applied aspects** of behavioral science, and by sharing these, endeavor to attract future researchers, and academicians to study behavior from the diverse perspectives of the behavioral sciences.

The value of the project is not limited knowledge and its application, but there was aslo the intention to create awareness among the future behavioral scientists that this discipline provides a more "holistic" approach to understanding behavior and related issues or problems.

In future, the Behavioral Science Research Institute (BSRI) aims to offer an "international program" in its curriculum. The researcher aims to publish the findings from this research and hope that these could be helpful in promoting the discipline and the institute BSRI for the students from the ASEAN region. The "internationalization" of the curriculum at BSRI could support its future growth along with the development of the university.

V. Conclusion

In conclusion it may be summarized that the growth of behavioral sciences in Thailand has deep and rich historical roots. The growth of the Behavioral Science Research Institute has proved time and again the importance of the behavioral sciences in dealing with many important issues and problems at multi-levels in our existence. The benefits that accrue from this research could have a broad scope and more explicitly since it provides documented knowledge about the development of BSR in the specific context of Thailand.

Taking a wider perspective, this research aims to provide research based information that could help to advance behavioral sciences in the ASEAN region and also globally by sharing their diverse knowledge and cultures which have impacted the growth of behavioral science all over the world.

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APPENDIX

List of Appendices

- A. BSRI research Abstracts 1957-1992
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