



**A COMPARATIVE STUDY ON QUALITY OF LIFE AMONG THAI
BUDDHIST AND THAI MUSLIM ELDERLY
IN RANONG PROVINCE**

MONTREE KONGWATMAI

With compliments
of

บัณฑิตวิทยาลัย ม.มหิดล

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF ARTS
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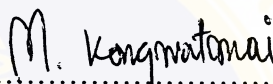
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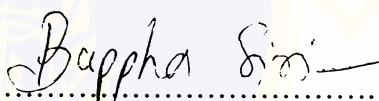
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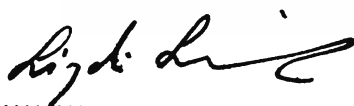
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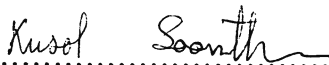
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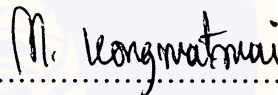
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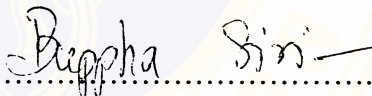
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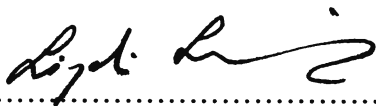
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In Thailand, the growth rate of the aged population has been increasing while the growth rate of the young population has been decreasing. These trends are associated with emerging problems, especially for the elderly, who are faced with a lack of family care. Potentially affecting the quality of their lives. This survey-based research has been designed as a comparative study of the quality of life of the elderly, taking into consideration factors related to look at behavior, morality, family support, health conditions, and the use of health services by Thai Buddhist and Thai Muslim elderly. The research identifies factors influencing the quality of life of the elderly in Ranong Province, using a sample of 403 respondents aged 60-74 years, whom 203 were Buddhist and the other 200 being Muslim. Respondents were chosen by simple random sampling, and the data were collected through face-to-face interviews.

It was found that the Buddhist elderly have a higher quality of life than the Muslim elderly. Members of each religion have beliefs and practices according to their religious principles. Muslim elderly, however, were stricter in their observance than the Buddhist elderly. As regards support from the family in the areas of emotional support, roles and duties, relationships and independence, the Buddhist were given more support than the Muslim respondents. However, levels of physical support did not vary between the two groups. The Buddhist elderly had better health conditions and greater access to public health services than did the Muslim elderly.

Health had the biggest impact on the quality of life of the elderly. This was followed by work roles, emotional support from the family, family support for relationships and independence, and participation in community activities. The set of predictor variables could explain 46 percent of the individual variation in quality of life

When each group was analyzed separately it was found that the quality of life of the Buddhist elderly were most heavily influenced by health, followed by work roles, family support for relationships and independence, and education. Predictor variables explained 50 percent of the variation in quality of life. The most influential independent variable for the quality of life of the Muslim elderly was health, followed by personal practices according to religious principles, and participation in community life. The variables used in the model helped explain 44 percent of the variation in quality of life. The results of the research partially supported the hypotheses of the study.

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เนื่องจากอัตราเพิ่มของประชากรวัยสูงอายุในประเทศไทยสูงขึ้น ขณะเดียวกันอัตราเพิ่มของประชากรในวัยเด็กก็ลดลง ทำให้ผู้สูงอายุประสบปัญหาในเรื่องการดูแลจากครอบครัวส่งผลกระทบต่อคุณภาพชีวิต การวิจัยครั้งนี้เป็นการวิจัยเชิงสำรวจมีวัตถุประสงค์เพื่อศึกษาเปรียบเทียบคุณภาพชีวิตผู้สูงอายุ ปัจจัยด้านจริยธรรมและคุณธรรม การอุปถัมภ์จากครอบครัว สภาพาสุขภาพและการใช้บริการระหว่างผู้สูงอายุชาวไทยพุทธและชาวไทยมุสลิม ตลอดจนวิเคราะห์หาปัจจัยที่มีอิทธิพลต่อคุณภาพชีวิตของผู้สูงอายุ ใช้กลุ่มตัวอย่างที่มีอายุ 60-74 ปี จำนวน 403 ตัวอย่าง เป็นชาวไทยพุทธ 203 ตัวอย่าง ชาวไทยมุสลิม 200 ตัวอย่าง โดยสุ่มตัวอย่างแบบง่าย (simple random sampling) เก็บข้อมูลโดยการสัมภาษณ์

ผลการวิจัยพบว่า ผู้สูงอายุชาวไทยพุทธมีคุณภาพชีวิตดีกว่าผู้สูงอายุชาวไทยมุสลิม การปฏิบัติตนตามหลักธรรมศาสนาผู้สูงอายุชาวไทยมุสลิมเคร่งครัดมากกว่าผู้สูงอายุชาวไทยพุทธ การอุปถัมภ์จากครอบครัวด้านจิตใจ ด้านบทบาทหน้าที่ ด้านความสัมพันธ์พึงพาระหว่างกันผู้สูงอายุชาวไทยพุทธได้รับการอุปถัมภ์จากครอบครัวดีกว่าผู้สูงอายุชาวไทยมุสลิม สำหรับการอุปถัมภ์จากครอบครัวด้านร่างกายปรากฏว่าไม่แตกต่างกัน ส่วนสภาวะสุขภาพและการใช้บริการสาธารณสุขในชุมชนปรากฏว่าผู้สูงอายุชาวไทยพุทธมีสภาวะสุขภาพอนามัยดีกว่าและเข้าถึงบริการสาธารณสุขในชุมชนได้ดีกว่าผู้สูงอายุชาวไทยมุสลิม

ปัจจัยที่มีอิทธิพลต่อคุณภาพชีวิตผู้สูงอายุโดยรวมทั้งสองกลุ่มสูงสุดคือ สภาวะสุขภาพอนามัย รองลงมาคือบทบาทหน้าที่การทำงานเพื่อการเลี้ยงชีพ การอุปถัมภ์จากครอบครัวด้านจิตใจ การอุปถัมภ์จากครอบครัวด้านความสัมพันธ์พึงพาระหว่างกันและการมีส่วนร่วมในชุมชนตามลำดับ โดยชุดตัวแปรพยากรณ์สามารถอธิบายความผันแปรคุณภาพชีวิตได้ร้อยละ 46

เมื่อแยกวิเคราะห์ในแต่ละกลุ่มพบว่า ปัจจัยที่มีอิทธิพลสูงสุดต่อคุณภาพชีวิตต่อผู้สูงอายุชาวไทยพุทธ คือ สภาวะสุขภาพอนามัย รองลงมาคือบทบาทการทำงานเพื่อการเลี้ยงชีพ การอุปถัมภ์จากครอบครัวด้านความสัมพันธ์พึงพาระหว่างกันและการศึกษา โดยชุดตัวแปรพยากรณ์สามารถอธิบายความผันแปรคุณภาพชีวิตได้ร้อยละ 50 สำหรับตัวแปรที่มีอิทธิพลสูงสุดต่อคุณภาพชีวิตต่อผู้สูงอายุชาวไทยมุสลิม คือ สภาวะสุขภาพอนามัย รองลงมาคือการศึกษา และการมีส่วนร่วมในชุมชนตามลำดับ ซึ่งชุดตัวแปรพยากรณ์สามารถอธิบายความผันแปรคุณภาพชีวิตได้ร้อยละ 44 ซึ่งผลการศึกษานี้เป็นไปตามสมมุติฐานที่ตั้งไว้ในบางส่วน

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Chapter 1

Introduction

1.1 Background and Rationale

The rapid progress of science and technology effects most people in all regions of Thailand. Particularly the medical and public health development has helped people to be able to control their fertility and for society to limit population growth. Moreover, the extended coverage of medical and public health services has prolonged life expectancy. Therefore population structure has changed from a young population structure to an elderly population structure. The aging of the population will increase in the future, with the UN reporting that the Asian elderly population in 2000 would be as high as 280 million (Teinprapas and Tansiri, 1990:5). The projection of elderly population in Southeast Asia in 2025 is 16.8 percent (Hermalin, 1995:5)

As for Thailand, the population structure of all age groups has been changing. As mentioned above the proportion of young population is decreasing and the proportion of elderly is increasing compared to the working age population. This is due to the onset of economic development and the national population policy that aimed to decrease the population growth rate. At the same time the development of medical and public health service has prolonged life expectancy. In 1998 Thai males had an average life expectancy of 69.9 and Thai female had an average life expectancy of 74.9. The total population was 61.14 million, with the total fertility rate at 1.98, and the total elderly population 5.10 million or 8.4% of the total population (Mahidol Population Gazette, 1998:1). It is expected that the elderly population will be 10.2

percent and 13.9 percent in 2010 and 2020 respectively (Wongboonsin, 1995:77). According to a recent survey it was found that 46% of female elderly lived with their spouse and 54 percent were widows which means the ratio between female elderly whose spouse is still living and whose husband has passed away is 1:1 (Summasut and other, 1994:3)

The effect of fertility decline is to change the population structure with a declining proportion of children in the 0-14 age group but the increasing proportion of elderly (60s up) . Data from the survey of Population Change show that in 1964-1965 the proportion of young population was 45.2 percent and proportion of the elderly was 5.0 percent. In 1997, the proportion of young population declined to 26.9 percent and the proportion of elderly population increased to 8.4 percent. It was found that the dependency ratio of the young population decreased from 90.6 during 1964-1965 to 41.68 in 1997. The dependency ratio of the elderly increased from 10.0 in 1964-1965 to 13.0 in 1997.

In fact, while the elderly population is increasing rapidly the growth rate of the young population is declining. This will effect the future of Thailand as number of population who will be responsible for case of the elderly care will declined continuously.

Society has changed from a traditional to a modernized society concurrent with the process of rapid urbanization. Rural–urban migration for work and education is increasing and is competition for economic survival. The onset of economic development has changed family structure from an extended family comprised of 2 or more generations such as grandparents, parents, children and grandchildren etc. to the single family that encompassed only 2 generations such as parents and children. New

married couples will separate from their parents to build their own household and become a single family. Average size of Thai household has changed from 5.6 to 4.9 (Office of Social and Economic Board 1993:14) and it is expected that in 2000 it will be 3.7 (Poarwongphat, 1993:12). This is due to social and economic factors involved in the decision making of couples to limit their number of children. It is possible that the total fertility rate will decline to 1.5-1.6 in the next two decades. (Guest,1993:51-52). These social and economic changes will directly effect the living standards of elderly.

The physical condition of the elderly or elderly has two characteristics (Busse, 1959 cited in Anuwatyanong 1997:3) the first is primary aging. This characteristic occurs to all humankind. It means the natural degenerating of all long used cells and organs over time. This degeneration shows its' result gradually. For secondary aging, it is meant that degeneration derived from the neglect of health care, over use of the body, taking inappropriate food such as alcohol, smoking, lack of sleep, no exercise etc. Secondary aging will affect the elderly by making it easies for them to get diseases such as high blood pressure, diabetes, chronic heart disease, stroke, malnutrition etc. The findings from the study of Siripanich and others (1989) indicated that Thai elderly aged between 70-74 had a psychological decline 56.6 percent. This finding revealed that quite a number of Thai elderly had a weak physical condition and depended on their children and grandchildren economically, physically and psychologically.

According to an analysis on problems of disabled elderly by the Ministry of Public Health in 1998, it was found that highest prevalence disease is stroke, which resulted in the elderly not being able to walk. Second was blindness and, high blood

pressure, Rheumatic, chronic heart disease, and tuberculosis followed respectively. The budget for elderly of the Ministry of Public Health as revealed from data of the Institution of Tropical Medicine has been increased from 2,054 million baht in 1995, 2,456 million baht in 1996 and 3,058 million baht in 1997. These numbers excluded the budget of NGOs. It is expected that the budget would be increased continually according to the number of elderly in the future.

The family is the main institution, being the center of all activities including giving benefits to the elderly to promote their happiness living. The family is a foundation of human sustainable development especially in the role of elderly care. Family members should set roles in order to respond to the physical and psychological needs of elderly. In terms of functional roles and dependency relations with respect to gratitude according to the religion of each community, the findings of Chayovan and others (1992) state that 96 percent of the elderly still live with their family such as with their spouse, children and other kin. Therefore family and community can be categorized as part of social environment to promote and to support human development (Phodisita, 1997:3)

The Thai Muslim are minority residing in different regions of Thailand. They have been here for a very long time and their presence can be traced back to several decades (Chalayanadecha, 1989:9). According to the National Statistics Organization, Thailand is comprised of 5 percent of Thai Muslim. Most reside in the southern part of Thailand, where about 25 percent of the population are Thai Muslim. Thai society has encountered considerable social change such as new technology, new entertainment, change of rural society to urban society, new economic system etc.

These factors affect Thai social structure, including Thai Muslim and may affect to pattern of elderly care and way of life of elderly in Thai Muslim areas.

Ranong is one of the 14 Southern provinces. It is located next to the Andaman sea and 25 percent of Thai Muslim. The population during 1996-1998, the was 144,871, 149,765, 153,663 respectively with the number of elderly 7,129, 7,992 and 8,430 respectively (Provincial Public Health Office of Ranong, 1998:6)

The district with the highest proportion of Muslim (89 percent) is Suksumran followed by Kaper (37%) Karper, both remote areas (according to the Ministry of Public Health, Suksumran Subdistrict was categorized as a poor and infertile area). According to data of the Public Health Office of Suksumran Subdistrict and Public Health Office of Karper District in 1998, it was found that diseases that caused problems to elderly in the areas were 1. Heart Disease 2. Muscle pain 3. Weakness 4. High Blood Pressure while the causes of deaths among elderly were 1. Heart Failure 2. Age 3. Cancer 4. Tuberculosis respectively.

Moreover it was found that the elderly in Thai Muslim areas encountered with economic problems and faced inappropriate care, health care and sanitary practice from family and relatives. Some did not participate in activities of elderly clubs or realized the importance of health examination. When they got sick they usually sought traditional cure. A comparative study of Lewpreksapan (1996:64) on Health Care Practice between Thai Muslim Elderly and Thai Buddhist Elderly found that health care practices were significantly different.

One explanation is that difference of religious belief and different culture, effect the quality of life of the elderly in these areas. Furthermore the researcher is

aware of different problems, and ways of prevention of the problems experienced by the two groups. The problems of aging need to be solved with holistic by providing health care and disease prevention, medical treatment and rehabilitation with participation of family and community. This study is interested in a comparative study between Thai Buddhist Elderly and Thai Muslim Elderly in Ranong. The District of Kaper and subdistrict Suksamran are selected as study sites, in order to make use of the result to build up a development policy on quality of life of elderly in Ranong according to the goal of the Eight Socio-Economic Development Plan and to serve the intentions of the new constitution of Thailand that will result enhancing the level of quality of life of elderly.

1.2 Objectives

1.2.1 To undertake a comparative study on quality of life between Thai Buddhist and Thai Muslim Elderly in Ranong

1.2.2 To examine support received from family, moral and ethics factors, factors of health and access to health services of Thai Buddhist Elderly and Thai Muslim Elderly in Ranong

1.2.3 To explore the effects of variables on quality of life of Thai Buddhist Elderly and Thai Muslim Elderly in Ranong

Chapter 2

Literature Review

In this research on comparative study on quality of life of Thai Buddhist Elderly and Thai Muslim Elderly in Ranong Province, literatures and studies related to this topic are reviewed under the following sections:

- 2.1 General knowledge on the elderly
- 2.2 Theories related to aging
- 2.3 Conception of quality of life of the elderly
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2.1 General knowledge on the elderly

The word “Elderly” was first defined in Thailand by General Arthasit Sittisunthorn during a seminar among the senior physicians and elderly from various professions on 1st December 1962. The word “Elderly” was used to replace “Aging” or “Aged” and it was accepted widely.

Definition of Elderly

Tuntipalachiwa (1970:24) notes that the elderly or aged are in the final period of life, aged from 61 and over. During this period there is an escalation of physical and psychological deterioration, loss of memory, lack of vigorous, physical decay and slowing of thoughts.

The Age Stratification of Elderly

According to the definition of elderly of UN, it is stated that the elderly was the final stage of life. The UN classifies people at 60 and over as elderly and this age is the standard starting age of elderly that is used worldwide.

The World Health Organization defined the aged as elderly at age 60 to 75 and the old were people at age 75-90 and the very old were people at 90 and over. Intarasuksri, (1977:4) defined people at age 50 and over as elderly.

Therefore it could be said that being elderly is a stage of life that is associated with deterioration of all organic system of human body. A slowing of mobility, thoughts and decision making and the loss of social and economic relations follows due to the physical conditions and declining support. Typically the elderly are counted as the population of 60-65 and over.

2.2 Theories related to the elderly

Janeobrom (1991:32-37) notes that there are 5 specific social theories of elderly as follows:

1. Role Theory

This theory is based on the concept that one takes different social roles through life, such as the role of father or mother, husband or wife. The way of living of each person is determined by the social role they adopt. People live happily in society according to their current role. Age is a significant component that would help determine the role of each person.

2. Activity Theory

The elderly who frequently practice activities gain vigor and are more satisfied with life. They are able to adjust themselves better than the inactive elderly. This theory argued that a happy life is derived from one's life with appropriate social roles or activities such as hobbies, being member of activity groups, clubs, or association etc.

3. Disengagement Theory

The process of aging is characterized by process where most elderly withdraw or isolate themselves from others gradually. This derives from the acknowledgment of their declining abilities. This theory suggests that the elderly normally lessen their activities while adjusting themselves to the changes.

4. Continuity Theory

Nuegarten, et al. 1964 proposed the theory that the elderly seek new social roles to replace the former social roles that they have lost. Moreover they adjust themselves to this new environment continually. The elderly are happy and undertake some activities according to their characteristics and way of life. Elderly who liked

social activities would do more when they were older. But some who liked solitude, never had social roles would isolate themselves when they were older.

5. Age Stratification Theory

This theory focuses on social relations among age groups. This theory considers age as a standard criteria to determine the role, rights and duties that persons enjoy.

These above social theories can be summarized into 2 sets of concept. One concept explains about the roles of elderly that are meant to retain elderly in society such as Role Theory, Activity Theory and Continuity Theory. The other concept as proposed in Disengagement Theory explained the isolation of elderly according to their roles, or the declining of their importance that the elderly isolate themselves from society.

Needs of Elderly

The needs of elderly are mentioned by many, such as (Maslow, A. 1970: 52-64, Nuijan, 1987: 16-17, Supap, 1985: 181, Sawasdisalee, 1979: 22-23)

1. Physical Needs

Physical needs are the basic human needs such as food appropriate to physical condition and age, and suitable houses. For examples, the needs might include a private room, clothing and medical treatment suitable to their physical condition. The elderly have vulnerable bodies so it is the duty of the younger generation to take care of their elderly

2. Economics Needs

The elderly need, job opportunities and some income in order to be able to pay for all their needs. Working is so meaningful to elderly as it is an expression of their capacity to gain acceptance from others. Moreover the elderly need income, insurance or social security.

3. Psychological Needs

Love, warmth, care, respect and gratitude from younger generations are needs of the elderly. These needs increase at the final stages of life. They need time to chat with children or grandchildren, or relatives. Care and encouragement help elderly to feel that they were not being left behind and to live their life happily. Moreover they have needs of psychological security such as religious belief, to calm their minds.

4. Social Needs

Social needs include acceptance and admiration from society and family, and social or community participation. Despite physical infirmity, the elderly are able to dedicate themselves for the good of society.

5. Need to lessen the dependency on others

The elderly need to live as do others. They like to be self-reliant as long as possible and being free in their thoughts.

6. Needs for knowledge and new experiences

This is to adjust themselves properly to the changes of age and environment.

Navachinda and Pirompakdee 1990 studied the Needs and Quality of life of Elderly and summarized the needs of elderly as follows;

1. Physical needs and response to needs

- 1.1 Food: Elderly normally needed vegetable, fruit and refreshment
- 1.2 Residence: Most elderly needed a private place for their rest.
- 1.3 Supplies such as clothes: they needed clothes for daily use and for special occasions.
- 1.4 Caretaker: The elderly needed care taker to take care of their clothing, food, bedding, and health checks.

2. Psychological needs

- 2.1 Intellectual practice: Most elderly still needed new knowledge as well as to share their knowledge to others.
- 2.2 Rest and recreation: Most elderly needed to listen to radio, follow news and religious programs, go for merit making, and needed to see some visitors.
- 2.3 Economic activities: Most elderly needed to work and needed some income
- 2.4 Social activities: Most elderly frequently needed family activities. Secondly they needed activities, mentioned in Activity Theory elderly who undertake activities regularly gain satisfaction and are better adjusted.

In summary, elderly who lived in Thai Muslim areas need basic needs according to the concepts mentioned above. But these elderly have a lot of problems. They need care from the younger generations, from family, community, and government to help address their physical, economic and social problems. This care would help enhance their quality of life.

2.3 Concept of quality of life of elderly

The national development plan that is specified in the Eight Public Health Development Plan 1997-2001 on quality of life of people differed from other former Development Plans. The present development plan is a qualitative development plan that focuses on human being as the center of development. This plan is based on the assumption that development occurs through improvement in quality of life of people. The quality of life of people is a topic of increasing interest of professionals both in the private and government sectors especially by public health, social science and nursing professionals. Attitudes towards quality of life and the measurement for quality of life levels have been explored. It has been found that the concepts varies among professionals with different social/economic and cultural experiences. Quality of life is used in a comparative aspect and the meaning is changeable over time, places and perceptions of people according to their interests, education, tradition and culture. The quality of life should not cover not only material or physical needs but also include psychosocial needs as well.

Definitions of quality of life include: Style of Life i.e, psycho-social characteristics practiced among members of a community, Level of Living which has similar meaning as Standard of living and is meant for the standard assessment of the fulfillment of material and psychological needs; Way of life has a mixed meaning including level of living, pattern of life, standard of living and quality of life. Words used in research on quality of life in quality of life, health condition or well being and life satisfaction (Hanucharunkul, 1988:34, Dalke and Rourke, 1973 cited in Limchiarunreung, 1993:8-9)

2.4 Definition and components of quality of life

Zhan (1992:797) defined quality of life as the degree to which a person's life experiences are satisfying.

Orem (1985: 179) has given the meaning of quality of life as well being that derives from the perceptions of person towards life according to their satisfaction and happiness.

Jaiaree (1990:44) concluded that quality of life included both subjective and objective meanings. Anyone of any sex, status, age, or religion could possess a good quality of life. It should cover all aspects of the well being of people. A similar meaning to quality of life is life satisfaction that includes the responses to the inner self. Singhakamfu (1989:38) argued that quality of life was satisfaction and happiness in life.

According to the meanings summarized above quality of life refers to the condition of people who receive valuable and necessary things for their life. These were include psychological condition and satisfaction since physical and socio-psychological needs were associated with happiness that each person acknowledged and determined by oneself and therefore contributed towards indicators of quality of life. The elderly in Thai Muslim areas should be similar to other elderly in different communities, with a good quality of life meaning happiness, well being, sufficient needs and secure physical and psychological health.

Components related to quality of life

Singchangchai (1996:11-12) concluded her study on components of quality of life during 1971-1995 as follows:

Table 2.1 Summary of components of quality of life studied during 1971-1995

<p>Smith: 1971 8 components</p>	<p>Lui: 1976 9 components</p>	<p>Yoshiaki :1978 6 components</p>	<p>Ministry of Public Health:1982-1987 (8-9 sets of basic needs)</p>
<p>1. Physical environment 2. Socialization 3. Rest & recreation 4. Lack of social discipline 5. Health 6. Education 7. Income 8. Work</p>	<p>1. Physical environment 2. Socialization 3. Rest & recreation 4. Lack of social discipline 5. Health 6. Education 7. Income 8. Work 9. Safety</p>	<p>1. Physical environment 2. Demographic change 3. Cultural 4. Social 5. Health 6. Economic</p>	<p>1. Good food 2. House 3. All Healthy 4. Safe family 5. Good productivity 6. Less children 7. Desire for development 8. Morality 9. Awareness of nature conservation</p>

Table 2.1 (continued) Summary of components of quality of life studied during 1971-1995

United Nations : 1990 7-9 Components	Leelakulthanit and Day : 1991 13 Components	United Nations (ESCAP): 1995 6 Components	Chamratritthirong Et.al. 1995 10 Components
1. Health 2. Education 3. Working life 4. Physical Environment 5. Family life 6. Community life 7. Cultural activity 8. Spiritual activity 9. Political equity	1. Family life 2. Working life 3. Social life 4. Rest & Recreation 5. Health 6. Public Health Services 7. Consumption & Use of Services 8. Possession of property 9. Spirituality 10. Life in Country 11. Self image 12. Government 13. Local Administration	1. Health 2. Education 3. Physical Environment 4. Family life 5. Poverty 6. Working life	1. Current Work 2. Current income 3. Knowledge/ Ability 4. Accessibility to Health services 5. House 6. Recreation 7. Communication 8. Relation with Neighbors 9. Leadership in Community 10. Participation in Community

As can be seen in the summary above the components included in quality of life varied. Most were objective and measured at the macro level. This was a lack of general subjectivity at the individual level. The subjective aspects was the assessment of individual sense of satisfaction on the surrounding environment. This would cover internal and external factors. Therefore, the tested components of quality of life are

the foundation for the quality of life of elderly that would be helpful to their self-development. The elderly would be able to appropriately adjust themselves to their environment in Thai society. This would lead them to happiness and satisfaction.

According to Flanagan (1978, and Berghorn et al. 1981 cited in Apichartbutr 1997:23-25) components that indicated quality of life of elderly are as following:

1. Economic status
2. Health
3. Environment included relationship with others
4. Self reliance
5. Activity participation

Neugarten et al. (1961:138) was another who mentioned quality of life was reflected in the psychological well being of the elderly. This contributes to their well being. The elderly who were satisfied with their life needed to obtain five components as follows:

1. Satisfaction with way of living, this means they are happy to do normal activities with vigor, responding to their environment, initiative and satisfaction with their present condition.

2. Resolution and Fortitude means the acceptability of the meaning of life and to be able to fight any hardship in life without thoughts of trying to change past events and perceive them as life experiences.

3. Congruence between desire and achieved goals means the sense of desire for the success of goals.

4. Self concept relates to the perception of good physical, psychological and social relations. It was a sense that one had done the best and the present time is better than the past, feeling healthy and ready to encounter any coming events and ready to face any change of life.

5. Mood tone refers to the expression of emotion of happiness and satisfaction with the present situation, satisfied to communicate with those who are younger without any sadness or loneliness.

According to the literatures described above, this research uses 7 components for quality of life of Thai Muslim Elderly in Ranong as following:

1. Economic Status

Economic condition was considered a very significant factor for the life of the elderly. In order to respond to the material needs of the elderly what is recognized included good housing, nourishing food, proper medical treatment, enough activities with others etc. If the elderly perceived that they had enough income to cover their expenses, and to ensure their economical security and well being they would be satisfied with their life.

2. Health

Good health is a wish of everyone. People with good health have hope in life. Therefore health is essential for happiness and successes. It could be defined that health is quality of life (Somprayoon, 1984:77). The elderly can contract diseases easier than other age groups, since the efficiency of the elderly body system degenerates continuously. If the elderly feel that they have physical and psychological good health this effects to their satisfaction in life. Therefore self-assessment of health

conditions of elderly may not be congruent with the assessment of their physician. A person who has poor physical health may have high satisfaction with life as they perceive their health as good. Conversely, a person with good health may have low satisfaction with life if they perceive their health as poor.

3. Environment including relationship with others

The interaction between the elderly and those surrounded them is considered important for them, Kaewkungwan (1989:638). It was believed that man had to relate to other directly or indirectly from birth to death. There are many studies that suggest that relationships with counterparts, and the ability to help and consult with one another is one of the factors that keep the elderly happy and satisfied with their life. These good feelings are very important for emotional health and the peaceful mind of elderly. Kaewkungwan (1989:640) believed that the elderly with good relationship with the younger generation have self-confidence. Elderly who are treated with respect, without insult or discrimination also have self-confidence. They are able to sustain their roles in the family happily. Moreover a good perspective towards family and the community, and privacy and peace provide the elderly with satisfaction and happiness. Those elderly who felt that they lived in a good environment with people, society, family and community are likely to have a good their quality of life.

4. Self Reliance

Due to the deterioration of efficiency of their organic systems the elderly have frail body and are vulnerable to diseases. They may not be able to do all activities by themselves. Self-reliance became more difficult. Elderly often are

satisfied if they can undertake activities by themselves and not be a burden to their family. This leads to a higher satisfaction with life. The change from one who can do activities freely to one who has to accept help from others is a difficult. This change can make the elderly feel shame and perceived themselves as a problem and a burden to others.

5. Activity

Elderly who consistently practice activities perceive their lives as worthy, meaningful and beneficial to others. In contrast, elderly without any activity would perceive their lives as boring, hopeless, lonely and may experience a deteriorating mind. Activities provided for the elderly should be arranged according to their interests and their health. Appropriate activities can include the following:

5.1 Formal activities such as merit making, visiting temples, activities in clubs

5.2 Informal activities such as relationship with neighbors, travelling and shopping

5.3 Personal activities such as hobbies, watching TV, reading etc.

Joining activities help physical and psychological adjustment of the elderly to society. Activities promote high satisfaction with life, and a good perspective on themselves. These elderly are successful in living their life. Therefore elderly who like to have happy life should try to keep up their level of activities for as long as possible.

6. Safety and Environment

Safety and environment is the most important component to keep people healthy. An appropriate environment creates a good quality of life. As for the

component of quality of life of Thai population (Basic Needs), safety and environment was considered in housing section that included cleanliness in the house, enough clean water etc. (Ministry of Public Health, 1986:15)

Leoprapai and Sirirassamee (1988:83) found that about 70 percent of rural people still took their drinking water from the pond. Data from the Development Department 1997 found that water in 41 provinces was under criteria of basic needs. Though the government tried to work on safety and environment component in the rural areas, there was still some areas lacking. If the basic needs of rural people are not met with this affects to the quality of life of the elderly

7. Ethics and Morality

The inner beauty of life lead to peaceful heart specially for the elderly would gain joy and happiness. Such inner happiness may be the result of righteous practices. A happy heart is the heart of good man, the heart of giving, love, mercy and good wishes for others. Goodness is generally a common standard accepted worldwide. Goodness is not an act of persecution, hurting, destroying. Goodness created spiritual characteristics that help people to do good and has a sacred thing to hold on in relation to religious teaching of each community.

Ethics are values related to practices according to the belief of each ones theology that focuses on faith in god. Some godless religions emphasize on ways of living in society and environment. Limchairunreung (1993:58) suggested that religious activities would help elderly to release their depression and worry. Religion influenced their beliefs, attitudes, values including motivation and other characteristics that effect the quality of life of the elderly.

2.5 Assessment of quality of life

Stromberg, 1984: cited in Tantisak 1992:45) suggested assessment of quality of life using three characteristics

1. **Objective Scale yielding quantitative data** assessed by other means such as physician or other in health team by scoring on health, income, education or occupation.
2. **Subjective Scale yielding quantitative data** assessed by one's perception of quality of life or life experience by scoring self satisfaction or happiness.
3. **Subjective Scale yielding qualitative data** was assessed by one's answers to the questions on quality of life concerning satisfaction with way of living and health such family social activities or illness.

Navachinda and Piromthamsiri (1989:6-18) found that quality of life could be defined into two dimensions

First, quality of life in the individual sense that could explain how one felt about their quality of life. This definition views quality of life as one's satisfaction with the achievement of needs both physically and psychologically. If the person physical and psychological needs were not met, they would perceive they had a low quality of life. Both physical and psychological needs are components of quality of life. According to Maslow, basic needs may be similar but the other can be different according to differential level of needs. Therefore there is no standard assessment for satisfaction with differential conditions or backgrounds. The first dimension of quality of life changes over time.

Second, quality of life focused on physical and the environmental condition.

This dimension focuses on the characteristic of one's quality of life that is socially accepted. The quality of life would be assessed by others such as good physical and psychological health. The person who lived in harmony with environment should take part in socio-economic development.

The second dimension is different from the first as the first dimension encompasses all disabled people, sick or isolated elderly without any relation to environment. If these people are really satisfied with their conditions or all their current needs are served, they are considered as persons with good quality of life. According to the second dimension these people may not be considered as persons with a good quality of life since they need to have good physical and psychological health and take some part in socio-economic development.

An objective scale would give different results if it is used for societies with different ways of living due to the inflexibility and objectivity of objective scales. But the assessment with an objective scale in a similar social group would result in the sense of quality of life for all in the group. For example, a society of the rich would have the same high or good quality of life that may not really measured the actual satisfaction with life.

As for a subjective scale, it can be used for reducing the reflexivity of the objective scale and would help measure differentials within groups. Arsanajinda (cited in Boonchalaksi and Worasiraamorn, 1994:41) suggested that we should pay more attention to psychological health of elderly more than physical health.

Campbell et al. (1976:117-124) reported that in the study on quality of life of ordinary people, each one would respond to quality of life as satisfaction with life. Therefore satisfaction with life is used as one dimension of assessment of quality of life.

A gerontologist studying the well being of elderly noted different definitions on well being such as happiness, satisfaction with life (Nillert, 1996:45-46). Happiness was defined as the changing of emotion into the joy and the effect of feeling towards different environment and it was a positive boundary more than negative one.

Satisfaction with life was assessed as one's feeling towards the compatibility between needs or aspiration and response or achievement.

Though we might define the quality of life of the elderly as happiness, joy, satisfaction, or admiration, definitions depend on the current community in which they live including the past experiences, and these may vary among groups.

Concerning the measurement of quality of life, some give attention to both subjective and objective scales. Researcher argue that through a long life experience the elderly encounter both physical and psychological deterioration, such as in income, social roles, thoughts and memory. Objective adversity may not be overcome, but subjective deterioration may be prevented.

Therefore the quality of life of the Thai Muslim elderly areas may be considered from both subjective than objective perceptible. In this case the researcher assess the quality of life by subjective indicators such as satisfaction with life

involving happiness with the way of living, perseverance with life, satisfaction with achievement of goals, good physical and psychological health and fine emotional balance.

2.6 Research on factors affecting the quality of life of elderly

A good quality of life is a wish of all humans and is important as a way of living. Quality of life varied according to each persons satisfaction that depends on various factors. In this study, the researcher studies on social & economic factors to undertake comparative study on ethical and morality factors such as support received from family, health factors and accessibility to community services related to quality of life of Thai Buddhist and Thai Muslim Elderly.

Social & Economic Factors

Expected social&economic factors affecting to quality of life of elderly are:

Sex

Sex indexes the differential roles of people in society. In Thai society the male is expected to be the leader of family. The female is expected to be the housewife and respect the leadership of male. Respect from society affects males perception of themselves as having a higher value than females. Moreover, females perceived themselves as having less physical ability than males (Hanlon and Pickett, 1984) cited in Jinuntuya (1993:19). As Yamarat's (1984:74) study on 'Satisfaction of Retired Officer of Ministry of Agriculture and Cooperative' show males had higher satisfaction with life and higher adjustment than females. This finding is consistent

with the finding of Silapakampiset (1984:48) in the study of 'Adjustment of Retired Officer in Muang and Hadyai Districts in Songkla Province'. Jinantuya (1993:80) found that sex was associated with quality of life of elderly with male elderly having a better quality of life than female elderly. In contrast, Nuchsangplee (1989) and Udomsappayakul (1993:72) found that sex had no association with satisfaction with life of the elderly.

Age

The dependency of elderly increased with age. Their dependency made them feel like a burden to family or society and this caused them to have a lower quality of life. Larsion (1978) Tran, Chatter and Writght (1991) cited in Jinantuya (1993:20) found that age is a factor that affects the perception of happiness of the elderly. This finding contrasts to the finding of Apichartabutr (1997). Concerning good psychological health, Yamarat (1984) and Wangsaart (1987) both found that older elderly had better psychological health than did the younger elderly.

Marital Status

Marital status is another variable that affects quality of life of the elderly. Elderly with spouse would not be lonely as they have a close friend to share. Moreover their spouse is a caregiver to console, to encourage and to consult with and this provides warmth and security. Spouses are counterpart and provide understanding and this help them to attain a better quality of life (Robert: 1988 cited in Jiraporn Apichartabutr (1997:36). Moreover the finding of Somboonsit (1992:83) who studied on 'Relation of Living Process and Satisfaction with Life' indicates that marital status is related to satisfaction with life. The married have more satisfaction with life. This

finding was contrast to that of Wangsaard (1987:103) who studied 'Psychological Health of Elderly in Kalasin Province' and found the single elderly had better psychological health than did married elderly. Therefore marital status is another factor affecting quality of life, though the findings of different studies are not consistent.

Educational Attainment

Education is related to the better occupational opportunities. Education also helps one to gain life experiences, knowledge and understanding, and to find the proper solution to problems with their thoughts. Chawarangkul (1995:83) found that education is positively associated with quality of life. His finding is that of Somboonsit (1992:83) who undertook a comparative study of 'Health Care Behavior of Thai Buddhist Elderly and Thai Muslim Elderly in Ranong'. It was found that educated Thai Buddhist Elderly was 76% while educated Thai Muslim was 48% (Lewprueksapan, 1996: 83)

Work

Working for income can take many forms for the elderly, it may include permanent work, special work, temporary work or private business. Working is another factor creating satisfaction with life. Those with an occupation are accepted as valuable member of society who can build economic security for themselves and their family. The elderly who work still felt their ability to live with their family was without being a burden to them. In contrast, the elderly who do not work lose the roles associated with work. It is believed that losing those roles contribute to the a low satisfaction of life of the elderly. Chawarangkul (1995:83) found that occupation had a

positive relation with level of quality of life. This finding was consistent with the finding of Nutsangplee (1989) one 'Comparative study between Health Care Behavior of Thai Buddhist Elderly and Thai Muslim Elderly in Ranong'. It was found that Thai Buddhist elderly had higher income than Thai Muslim elderly. (Lewprueksapan, 1996:41)

The elderly who work consistently should be able to solve problems of their roles since work help them to feel valuable and this feeling contributes to good quality of life.

Ownership of residence

Ownership of place of residences is an indicator of economic security for elderly. The elderly who live in their own house feel secure and happier than living in other persons houses. Sangmanee (1994:10-19) found that ownership of place of residence affected the quality of life of the elderly. This finding is consistent with the finding of Apichartabutr (1997) that ownership of residence of elderly was a variable predicting to quality of life of the elderly.

Living Condition

In Thai society, taking care of the elderly is considered a duty of the family. The family affects satisfaction with life since economic security and emotional encouragement. Elderly need love and caring from the family especially those elderly one who help themselves due to physical problems. Therefore care and respect from spouses and younger family members make them feel valuable. Therefore the social support network is crucial in caring for the psychological condition of the elderly. This support helps enhance their self-confidence, self-esteem and provides balanced

psychological and emotional condition. This leads to self-satisfaction with life. Jinuntuya (1993:22) and Kamnuansilp et al (1993:153) found that the elderly from extended families were happier than those from nuclear family.

Participation in Community

Though elderly often have some physical deficiency, their psychological condition, experiences and intellectual can be very benefit to society. Therefore elderly can still have a significant role through participation with community activities. According to activity theory, it is believed that the elderly who participate more in social activities have more chance to meet their counterparts and this widens their world vision. They have less time being lonely or sad. This contributes to satisfaction with life. Jinuntuya (1993:22) and Siripanich et al (1988:63) found that elderly who were old, healthy and did more than 4 routine activities daily, had more social activities than weak old elderly. Nilert (1996) found that participation with community of elderly effected the quality of life of the elderly in rural areas. Therefore regular participation with community of elderly help them feel valuable to the community and provides them with a good quality of life.

2.7 Morality, ethics, and religious beliefs toward the quality of life of the elderly

The definition of ethics according to Srihaamphai (1988:18) is the principle of trained behavior of people with characteristics of morality and ethics. Ethical values indicate an environment that could lead people to practice goodness and refrain from the bad. They are able to live with righteousness in a peaceful society. They

have the good will to create a good relationship and are aware of their rights and duties according to expected values.

The definition of moral according to Srihaamphai (1988:21-25) is a principle of value that build up a sense of right or wrong. One with inner beauty of goodness would feel overwhelmed with happiness. Good acts are derived from goodness. A righteous person is one who acts with righteous thoughts and mind. They act according to their traditions with good spirit, intention, habits and characteristics.

Definitions of religion come from religion and generally involve communication between man and their God with belief, faith in religion and acceptable principles. There are generally four components of religion as follows.

1. Belief in God or Religious leader
2. Action and dedication of the religious member
3. Ceremony, ritual and religious practice
4. Religious principles and the consistency of preaching.

Every religion has a morality that specifies values, goodness and way of practice. Therefore morality is connected to religion with the perspective that every religion promotes good acts of people.

Relationship between Morality and Religion

Every religion has a basic morality that indicates righteousness and charity that religious leaders have formed into religious teaching. Religion and morality are united in one, so morality is a sustainable value for the continuity of religion. Religion

may decline because of uncertain practices of followers of the religion, but morality is an eternal value that none can demolish.

Religion had its own followers. Morality could be used as a tool to analyze right, wrong, good, bad, and what is appropriate or not. Therefore religion is the principle for social judgement and for establishing social discipline. Religion and morality help generate peace in the world. The relationship of religion and morality can lead people to good spirit and good characteristics. Religion and morality raise people awareness of righteousness. There is punishment and rewards, as we named “heaven” in the mind and “hell” was in the heart. There is moral philosophy in religion and morality that has a similar context but the difference is basic knowledge of sciences.

The findings of the study on ‘Attitude on Morality, Value, Tradition and Culture of Thai Family Affected to Child Care in Bangkok’ (Chupikulchai, 1990:485-487), suggest that most family had sense of morality. They accepted the concepts of sinfulness and goodness. They agreed that what they did to others will return to them. On religious memorial days they thought that they should abstain from bad acts. Most family members still accepted good traditional and cultural practices.

Religious Teachings and Beliefs that affect Thai Buddhist Elderly

In practice, Thai people live in a society with religious teaching. In order to live together in peace, religion plays a significant role in training members of society. As for Buddhism, it is considered that one who practices goodness will be reborn in heaven. One who practices badness will be reborn in hell. The judgement does not

come from God but from human behavior. Therefore action is the thing that determines human fate. According to Buddhist teaching, we could be free from suffering by getting rid of the causes of suffering by using ways to demolish the suffering. Those ways were named Ariyamak or eight sacred middle ways (Adiwattanasit,1982:92-93)

The heart of Buddhism in Dhamma according to Buddha is the acknowledgement that all is uncertain so we should not hold on to the human self or have a belonging to the human self. Nirvana (Nippan) is the ultimate goal in Buddhism that would definitely cut oneself from death or aging (Kabilsingha, 1975:182) Merit or sin is derived from a good act or bad act respectively, with each life receiving merit or sin according to their acts. They could not be free from those acts and their results (Na Bangchang, 1982:79-110). Buddhism teaches that the actual being of human life is comprised with blood, meat, body structure, nerves, and organs. Spirit is always in the body and stays in burning lust.

Janeobrom (1991:43) found that elderly could calm their mind with religion and that would prolong their lives. This finding is consistent with that of Kotchapakdee (1985:43) who said that a peaceful mind derived from religious practice, and thought that it was the cause of longer life and meditation would help prevention of high blood pressure. Therefore physicians should not look at the elderly only in terms of scientific services only but should understand their culture and religion as well. Wasri (1993:8) stated that the elderly who care for religion and practice such acts as such merit making, giving alms, prayers, Dhrama study, or going to the mosques would have calm and peaceful minds and this would positively affect their quality of life. Thana-siri (1991:23) stated that a better quality of life derived



from more good acts, and it was better to get this reward in this life and not to wait for next life. The quality of life depends on the way of proper practice of “mind” or “spirit”. The completeness of quality of life derived from a well-trained mind or heart.

Religious teaching that supports Thai Buddhist Elderly

There is Buddhist teachings on mutual help in society to assist people to live together in peace. Parents or elderly are considered persons whom younger ones should pay gratitude to since they had done a lot for their children. Buddha revealed that in six directions, parents are in front. Buddha also specified that children have to treat parents as follows (Sawangpuen, 1992:13-17):

1. Parents took care of us. We should in turn take care of them. Caring could be specified into two ways such physical care and psychological care.
2. Helping in their business both in secular and religious affairs, especially in religious affairs. Children should arrange some occasions for parents to do merit making or to hear sermons at the temple.
3. Sustaining the family’s name, morality and good acts as long as possible.
4. Act as a good person who deserves inheritance from parents, for example not being a drug addict or bad person.
5. When parents have died, children should pray or do merit making for them. Buddhists believe that people face the results of their acts and although their body decays their soul still faces those results.

As mentioned, Buddhism promotes that children care for their parents to return their gratitude to them. As parents took care of and taught them, children should look after parents well when they are with them as well as when they have died.

Religious teaching and practice that support Thai Muslim elderly

Islam is religion where the followers dedicate themselves to God (Allah). Allah is the creator of all living creatures so all living creature owed their life to Allah.

Islam means peace, obedience, and absolute surrender to Allah. Islam has been known as a great religion for 1,400 years. There are many followers all over the world. Islam is considered a monotheistic religion, meaning that followers worship only one God (Chalayanadecha, 1980: 108-110)

Muslim is used for people who follow the Islamic faith. There are Arabian Muslim, Chinese Muslim, Japanese Muslim and English Muslim etc. (Saowanee Jitmuad, 1981:14-15). The way of life of Muslims generally is closely related to Islamic teaching. Therefore religion affects all behavior. Islamic principles and teaching specify Muslim, with the two main duties as follows (Abdulkadae,1987:5): (1) Duty to serve God; (2) Duty to serve man. Mohammed said “God won’t have mercy for the one who did not have mercy for others” and “Put more water in your soup to share with your neighbors”

Muslims have motivation in this world and have another goal in the next world. These are material and spiritual objectives. Islam encourages people to worship only one God and to dedicate themselves to Him. Followers act according to

regulation of living in order to meet the goal of Islam and Mohammed taught that everything in this world has its ending at the definite time and everything will be destroyed (Mohammad Uhsen, 1991:48)

There are five principles for all that practice the Islamic faith (Jitmuad,1981:97-145):

1. An affirmation

“I made my oath that there is no other God but Allah only”

2. Namaz

Namaz is the worship of Gods kindness with the entire mind and body. One who did not namaz is not a Muslim. Namaz is a way to control behavior. Muslims usually do namaz five times per day.

3. Fasting

Fasting means to abstain from taking food and water, sexual intercourse, and to keep all parts of the body from evil acts from dawn till sunset. All Muslims have to fast for one month, that is the ninth month of Ramadan month.

4. Jakat

Jakart means giving alms for the wellbeing of persons and to lessen the givers greed. This is to teach man not to become too attached to material possessions.

5. Hajj

Hajj means to travel to attain religious merit at Mecca in Saudi Arabia

The finding from research undertaken by Jitmuad (1984:63-64) indicates that Muslims have the expectation that Mosques should teach Al-Quran and religious teaching to youth and children, and arrange namaz five times per day. Therefore it is the duty of everyone, especially men, to go to the mosque everyday especially on Friday. This also contributes to unity. It is an occasion for mutual help, for solidarity and community development. Those things effect the quality of life of the elderly.

Children have duties to their parents according to Islamic teaching (Jitmuad,1981:337-341). Islam provides direction for children to treat parents since it is their duty to do so, and it is also part of their duty to God. The Al-Quran states that:

“Heaven is under the two feet of mother”

“The worst sinfulness is to worship other thing as Allah, kill people, doing bad to parents and being a liar”

“Anyone who has made parents happy actually he/she pleases Allah as well, but anyone who has made parents angry that person also has made Allah angry”.

This is a part of the teachings of Allah and Mohammed and gives direction for children to do good towards their parents who are treated as sacred persons. Moreover the Al-Quran provides the important following lessons:

1. Obedience to parents is next to obedience to Allah
2. We should take care, pay respect, and have mercy on parents especially when they are old.
3. We should do our best to make our parents happy while they are alive.

4. Though parents may do something that makes us unhappy we should explain to them with reason, respect and mercy. We should not blame or respond badly to them.

In summary, Islam praises parents next to God. Children have to do good towards their parents. Any good act directed towards parents is considered an act to God and provides credit to the child.

2.8 Familial support and quality of life of the elderly

According to Thai culture, the elderly are considered as sacred. When children grew up and earn income, they have to take care of parents with gratitude. Taking care of their father and mother is one of their blessings. For Thai Muslim culture, parents are considered to treat children with love, mercy and care, and therefore children need to return this care to their parents. The worst sin is to act badly with their parents.

We may say that the family is the center of all activities and the most significant source of social support for the elderly. Moreover, the family is a source of care that the elderly prefer in order to respond to their physical, psychological, emotional and social needs. As Westley (1998:2) stated, the elderly in Southeast Asia are more likely than elderly in Europe and America to prefer to live with their children and grandchildren.

Intarasuksri (1971:5) suggested the following principles for care of the elderly by children and grandchildren:

1. Preparing food suitable to the condition of the elderly
2. Let the elderly do work according to their desire, such as sweeping the floor, planting, and repairing things, in order to make them feel valuable to the family.
3. Provide some money to the elderly for their own use.
4. Try to arrange some recreation for the elderly, such as preparing books for the elderly who like reading.
5. Take the elderly to join social activities as much as they can, such as visiting places or go to see shows or listening to music.
6. Provide a chance for religious activities for elderly who are faithful to their religion.
7. Provide a chance for elderly to meet with their friends in order not to be lonely
8. Children or grandchildren should make the elderly feel that they are valuable. Family members should love, respect and act politely to the elderly through words and actions.
9. Arrange hobbies for the elderly, such as providing pets for those who love pets.
10. Take care of safety in the house.
11. Arrange the lights within the residence and not leave the floor slippery.
12. Elderly should have hair, nails and mustache cut properly.
13. Providing physical examination every 6 months and medical treatment at times of sickness.

According to the literature, it can be concluded that the role for caring of

elderly by children and grandchildren involves responding to their physical, psychological, emotional, and social needs. These can be summarized as follows:

1. Care that responds to the physical needs of the elderly such as providing food, living space, clothing, supplies, health care, medical treatment, individual hygiene needs, financial support, labor support and travel and communication.
2. Care that responds to psychological and emotional needs such as paying respect, giving honor, praising, support their for hobbies, providing work according to their capacity, taking them to join religious activities, and providing proper recreation and entertainment.
3. Care that responds to the social needs of the elderly, such as support to meet relatives and friends.

Family Structure

Murdock (cited in Kritwattanaporn,1992:59-60) classified the family into three types:

1. Single family or nuclear family, comprised of husband, wife and children.
2. Extended family, which is a nuclear family with relatives, siblings such as grandparents aunt and uncle etc. They may live in the same house or same compound.
3. Polygamous Family is a family comprising two or more nuclear families.

Jitmuad (1981:348-350) states that the permission for a Muslim to have up to four wives is not a significant principle of Islam but it is one of exceptions expressed. To prevent inferiority that will lead to social problems, all children and wives have equality in status, rights and dignity. There is no first or second wife in Muslim society. Whereas Allah said "Marry to women that you satisfied two, three or four and if you saw that you can't manage justice, just marry one woman". Muslim men who know themselves and their religion typically marry only one wife, and economic factors also lead most Muslim men to marry only one wife.

Suksawas (1991:17), in a study in Ayudhdhaya, found that relationships within a family affected elderly care in a positive way. For example where mutual help and sharing was common there was strong care for the elderly. Children still see the importance of the elderly, they accept and consult the elderly whenever they have problems. While most family members involved themselves in caring for the physical, emotional and social condition of the elderly, they helped little in economic matters. Children and grandchildren had little time to share with the elderly since they need to work outside the home. Most problems for elderly were economic and health problems. Nuijan (1987:84-86) found a positive relationship between family involvement in care and elderly care. Children and grandchildren still provided good care to the elderly in physical, social, emotional and psychological aspects. They gave honor and praise to the elderly.

Chayowan and others (1992) found that 96 percent of Thai elderly lived with family such as spouse, children or other relatives. The remainder lived alone. Furthermore, Chayowan (1995: 51) believed that the elderly who reported living alone

in practice were usually living next to their children or at least living in the same village or same community as their children. They are near enough to get daily visits from children.

Siriboon (1992) found that the majority of the youth had cared for elderly. This occurred with through providing living quarters, food, clothing, and visiting. Elderly who were in the over 80 age group was the group that received the highest proportion of care from the youth. Elderly who lived far from the youth often got financial care, while elderly who lived nearby youth often received food, clothing and other goods. This finding was similar to that reported by Chayowan (1990:66). Anuwatanyong (1997) found Thai Muslim elderly received more support in health matters from their social support network than did Thai Buddhist elderly, but the latter were more likely to receive visits from their children living in other provinces.

In conclusion, the most common type of support for the elderly is economic, social, emotional and psychological supports. This support helps create physical and psychological security, keeps balancing in their life that can lead to a good quality of life for the elderly.

2.9 Use of Health Services:

2.9.1 Health Condition

The health condition of the elderly is the physical condition of the elderly according to their own assessment of general current health such as chronic diseases, eating, sleeping, and exercise. The elderly who assess themselves as healthy have a good quality of life. Somprayoon (1982:77) and Ward (1984:29) state that

health is the best predictor for life satisfaction of elderly, especially that which is self assessed. The self-assessment of health does not need to be consistent with the medical assessment. That means person with poor health in objective aspects may have high life satisfaction if they believed they were in good health. Lauer (cited in Jinuntuya, 1993:20) the presence of disease or poor health effected the psychological condition of elderly and they worried about their health. It was an obstacle in their daily activities. They needed to depend on others and worried more about the effect of long periods of treatment than did other age groups. Meenans et al. (1981:544-549) found that the effect of Rheumatism made the elderly lose their jobs, and suffer economic, family and psychological damage. This finding is consistent with the study of Burckhardt (1985:11-16) who found that the serious sickness affected the capacity of elderly to undertake activities and this affected their quality of life. Apichartbutr (1997) found that health had a positive correlation with quality of life of the elderly in slum areas. Also, a study in Ranong found that Thai Buddhist elderly had better health care behavior than did Thai Muslim elderly, and health care behavior affected the quality of life of the elderly (Liewprukpun 1996:64). Therefore the elderly without chronic disease, those in good health in general, eating and sleeping well, and with good health care behavior would effect to quality of life.

2.9.2 Public Health in Community

The public health service in the community is a very important. It affects the quality of life in the community through providing medical treatment, prevention of diseases, health promotion and other public health services. Therefore it is necessary to apply the concept of holistic service of the whole person, comprising

physical, psychological, spiritual, emotional, and social aspects to use in the health service in all aspects and all processes. The service provider has to understand the basic human characteristics, both in normal health and in illness.

There are many public health service issues related to the elderly. These are related to family, environment and staff that take care of the promotion of a good quality of life for elderly. The persons who have an important role are public health officers. Chatchaisuda and others, 2530 (cited in Bunchalaksi and other, 1994) found that most nurses of Thailand had low knowledge of elderly care. The public health service was arranged in different ways in order to solve health problems and to serve the needs of people, especially the elderly, which is considered a risk group. Therefore the acknowledgement to the elderly that they had health care options or could access health services in the community where they live, help elderly to have good health and hence promote life satisfaction.

In the Eighth National Social and Economic Development Plan (1997-2001), poor elderly without relatives or caretakers were treated as vulnerable with the following actions suggested (Chayowan and Knodel, 1995:3-5):

1. To provide social welfare, to increase funds for living for this group of elderly and extend free health care services and provide various public healthcare services to poor elderly in appropriate forms.
2. To support the family to see the importance of the elderly and to take care of them, together with providing correct knowledge and understanding regarding elderly care.

3. To support non-government organizations in participation in various forms of assistance.

It can be considered that the policies and strategies related to the elderly in Thailand have stressed the family as the main institution for elderly care. The Ministry of Public Health provided health services for the elderly through the public health system and medical treatment system under the Ministry without any charge. This service began in 1987. At present the government supports free medical treatment all over the country and most of the elderly are satisfied with the possession of the elderly card that provides them with access to services (Viriyawetjakul, 1997: 55-61).

Chayowan and Knodel (1995:178-179) surveyed the elderly in Thailand and found that purchasing medicine was the first method used for health care and second method was accessing the health care center.

Sirirassamee (1997) found that the elderly were more likely than other age groups to have incorrect behavior on purchasing medicine. Moreover self-treatment was more common. Apichartbutr (1997) found that access to public health services in the community had a positive association with quality of life in slum areas.

Even if good health services are provided, the chance of the elderly recovering from illness or disease in a short time is low for diseases such as high blood pressure, diabetes, and heart problems. These diseases usually contribute to deteriorating physical condition and even disability of handicap. Therefore continual homecare services are necessary. Various countries have realized that the most appropriate elderly services are family care, with support from public health services

in the community, and public health volunteers. Non-government organizations can assist by providing follow-up to provide assistance in areas beyond the capacity of the family.

2.10 Conceptual Framework

According to the review of literature, it can be concluded that the characteristics those elderly with a good quality of life were comprised of having happiness in their way of living, perseverance with life, achievement of success according to their goals, and good physical and psychological health. The indicators of quality of life include economic indicators, health, environmental conditions, self-reliance, activities, security and environment in the house, ethics and morality.

Research has found that socio-economic factors such as sex, age, marital status, education, working for self support, ownership of residence, living conditions, and participation in the community affects quality of life of the elderly.

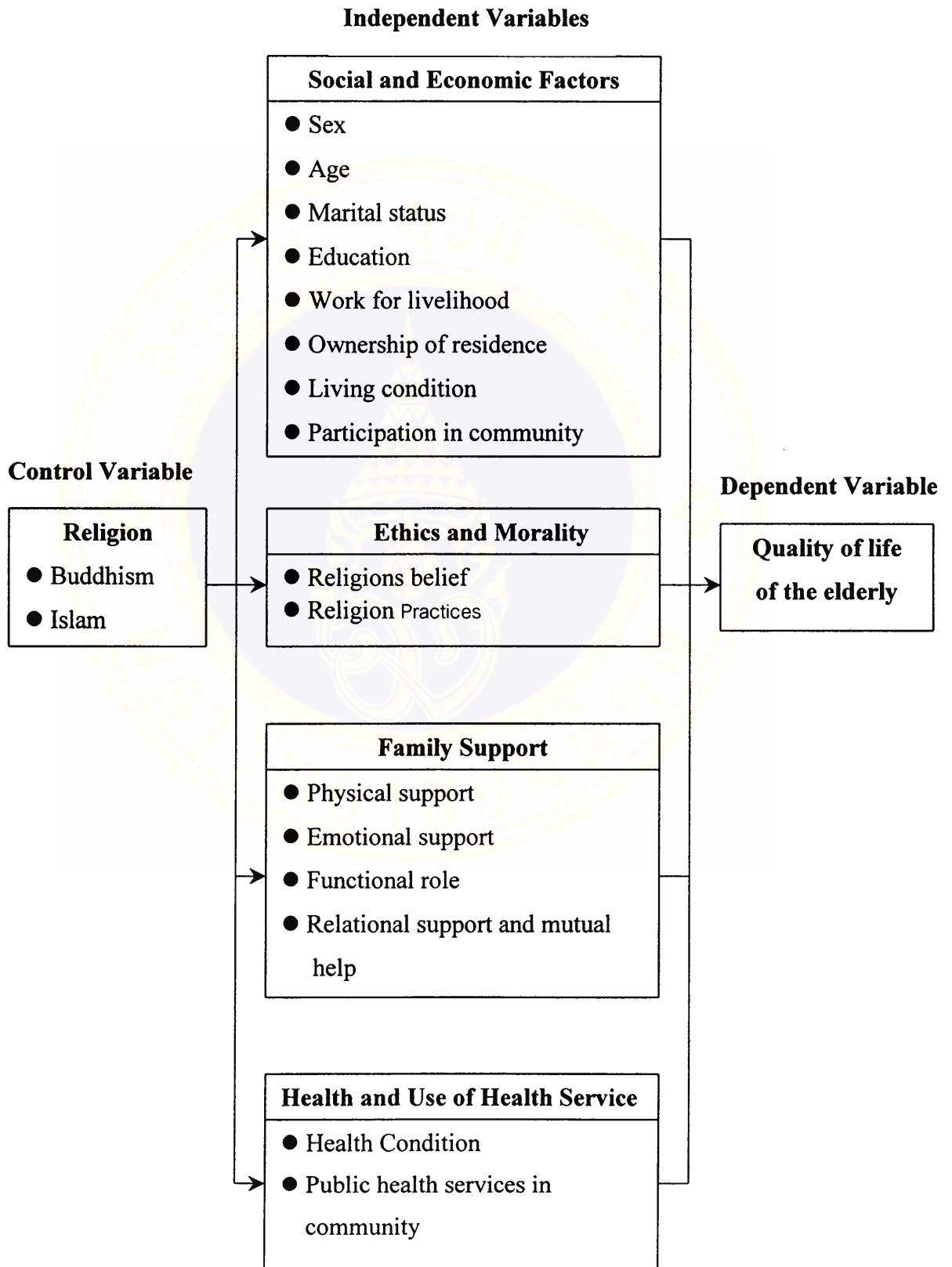
The principles of ethics and morality affect the quality of life through beliefs and practice in religious teachings. This promotes happiness within the heart of elderly, reduces their anxiety, and prolongs their life.

The family is a significant source of social support provides support for the elderly according to Buddhist principles of six directions that considers parents as being in a high direction, and to support parents as one of the living blessing. As for the Muslim family, research has found that support from children affects the satisfaction with life of the elderly.

The findings from SWET (Survey of the Welfare of the Elderly in Thailand) by the Ministry of Public Health indicated that elderly in rural areas were satisfied with services at health centers, making elderly feel confident in using the services that affected their health.

Quality of life in this research means level of satisfaction in way of living of persons who have integral physical, psychological, emotional and social conditions. This quality of life can be measured with the quality of life measurement of Neugaten named the Life Satisfaction Index A (LSIA) that was translated by Kaewkangwan, 2532. The following is the conceptual framework.

Conceptual Framework



Concepts and Hypotheses

According to a comparative study of health care behavior of Thai Muslim and Buddhist elderly in Ranong, Lewpreukpan (1996) found that the income of Buddhists was higher than Muslims. The Buddhist elderly also had higher education than the Muslim elderly. The Buddhists had better health care behavior than the Muslims. The study concluded that health condition could predict quality of life.

Anuwatyanyong, (1997) found that size of the social support network of Muslims elderly was larger than for Buddhist elderly. Moreover, the economic situation was a factor that affected quality of life of the elderly. If the elderly strictly practiced morality and ethics as directed by religion they were calm and peaceful. Both Buddhist and Muslim teachings dictate that children have to pay gratitude to parents, especially in Islam parents are considered as persons who must be respected next to God. The findings of researches indicate that these factors affect to quality of life of the elderly.

2.11 Hypotheses

1. The quality of life of Buddhist elderly is better than for Muslim elderly.
2. Muslim elderly have better support from the family (physical and emotional support, roles and functions, dependent relations) than Buddhist elderly.
3. Muslim elderly have better concepts of ethics and morality than do Buddhist elderly.
4. Buddhist elderly have better health conditions and greater access to public health service in the community than do Muslim elderly.

5. Social and economic factors, ethics and morality, family support and health conditions and use of services effect quality of life of Buddhist elderly, with the most affect from health conditions and use of services.

6. Social and economic factor, ethics and morality factor, family support and health conditions and use of services effect to quality of life of Muslim elderly, with the most affect from health and use of service factors, ethics and morality.

Scope of Study

This is the study of the effect of social and economic factors (sex, age, marital status, education, work for wages, ownership of residence, characteristic of living, community participation), ethics and mortality (religious belief and practice), family support (physical and emotional support, roles and functions, dependent relations) and health and service factors (health condition and public health service in the community) on the quality of life of the Muslim and Buddhist Thais in Ranong. The study population is restricted to those elderly aged 60-74 who live in Suksamran district and Kaper Districts in Ranong, who agreed to be interviewed and were able to answer the questions.

Variables are comprised of:

Independent Variables

Social and economic variables consist of sex, age, marital status, education, work for wages, ownership of residence, characteristic of living and community participation.

Ethics and morality are measured by religious beliefs and practices. Family support comprise physical and psychological support, functional roles, support from relations and mutual help. Health and use of service factors include health conditions and public health service in community. The **dependent variable** is quality of life of the elderly

Definition of variables

Quality of life means the self-assessed level of life satisfaction of elderly, taking into account all aspects of life.

Social and economic factors include characteristics of the individual. Variables include: **Age** measured as age at next birthday; **Marital Status** classified as living with spouse; living alone as single, widowed, divorced or separated; **Education** means number of years of education; **Work for wages** refers to activities that generate income, whether it from a permanent or temporary job, or from a private business. Income is classified as more than 2000 baht per month, work with income lower than 2000 baht per month, and no work. Work security and satisfaction with work are also measured. **Ownership of residence** refers to elderly who own the place where they live. It is measured by asking the elderly at their present house whether they own their house, or are living in the house of their children or relatives.

Participation in the community means the participation of elderly in various activities and in recreational meetings with others in the community. It is measured by membership of organizations, associations or groups, and sense of value and satisfaction towards participation.

Living conditions measures the present living conditions of the elderly, including the structure of the household in which they live.

Ethics and morality refers to principles of moral practice according to religious beliefs. It means following good action and avoiding of evil.

Family support is measured through act of the family that aim to support the elderly in different aspects of their life. This includes physical support through provision of material support, emotional support through expression of love, support of functional roles such as supporting elderly in their hobbies, and mutual help through financial support.

Health and use of health service factors is comprised of health condition and use of public health service in community. **Health condition** refers to the assessment of the elderly towards their general health in daily living. This is measured by acknowledgement of their present condition, including chronic diseases, nutrition, sleeping, exercise and fitness. **Use of health services** means accessibility of the elderly to public health services and the opportunity to access health services including treatment, prevention, and promotion of health and rehabilitation of health provided in community.

Elderly means to persons who were age 60 and over at the day of interview and could communicate well. **Thai Muslim community** refers to a community of Thais where the majority of the population follows Islamic belief.

Chapter 3

Research methodology

This study use survey data to conduct a comparative study of the quality of life of elderly Thai Muslim and Buddhists residents of Ranong. The assistance the elderly receive form their families, factors related to their conduct and moral perspective, and factors related to health conditions and access to health services, are examined in relation to quality of life.

3.1 Population and sampling

The population for the study is elderly aged 60-74 years old, comprising both Buddhists and Muslims, and living in communities of Suksamran Subdistrict and Kaper District of Ranong Province. Since in these area followers of Buddhism and Islam are almost equal in number, all elderly in Suksamran Subdistrict were treated as the target population, while in Kaper District only the elderly in communities located in selected in tambons that had significant proportions of Buddhists and Muslims were counted in the target population.

Sampling for the study was undertaken using a multi-stage sampling design as follows.

Step 1. The minimum sample size required was estimated using Yamane's formula (as referred to in Kijpridaborisut 2531:51).

$$\text{Formula } n = N/(1+ Ne^2)$$

n = size of population group

N = size of total population

e = error of random sampling (0.05)

Since a census of the elderly in the Suksamran Sub-district and Kaper District in the year 1999 indicated that there were 1421 elderly, replacing N in the formula, we obtain:

$$\begin{aligned} n &= 1421/1+1424(0.05)^2 \\ &= 312 \end{aligned}$$

In order to further reduce sampling error from the minimum acceptable, the target sample was further increased to the limit possible with the available resources. The total sample size was 403, with 203 Buddhist and 200 Muslims.

Step 2. Two tambons in Suksamran, namely Tambon Kampuan (5 villages) Tambon Naka (6 villages); and three tambons in Kaper District, namely Tambon Kaper (10 villages) Tambon Banghin (5 villages) and Tambon Muang Klang (4 villages), were included in the study. This resulted in a total of five tambons (30 villages).

Step 3. Cooperation was requested from public health authorities responsible for health stations and community hospitals in the five tambons in order to produce an updated list of the elderly in every village located in the target area. With the updated lists, sample proportions for each village were calculated.

Step 4. Simple random sampling was used to select the required number of elderly in each of the villages. Of the selected elderly, 91 percent were successfully interviewed, with the remaining nine percent method, not able to be located. In order to meet the sample targets, sample replacements were selected for the nine percent who could not be contacted. Replacements were chosen from the villages were original respondents could not be contacted. Details of the distribution of the sample are shown in Table 3.1.

Table 3.1: Target population and sample distribution

Name of District	Name of Tambon	Total number of elderly	Number of Buddhist elderly	Number of Muslim elderly	Number of Buddhists sampled	Number of Muslims Sampled
Kaper	Kaper	318	276	42	77	12
"	Muang Klang	157	46	111	13	32
	Bang Hin	245	172	73	48	21
Suksamran	Kampuan	334	50	284	14	82
"	Naka	367	183	184	51	53
Total		1421	727	694	203	200

Sources of data: Public Health Office of Kaper District (1999); Public Health Office of Suksamran Sub-district (1999)

3.2 Research instrument

Instrument preparation

The instrument used for data collection included questions designed by the researcher and based upon previous questionnaires used by the Apichartbutr (1997:117-118) and Kaewkangwal (1989:3). Most of the main variables used in the analysis were comprised of indexes or scales. These were measured as follows:

Set No.1 Social and economic factors were collected through a series of close-ended questions. Data was collected on sex, age, religion, marital status, level of education, and conditions of place of residence.

Working for livelihood is measured with five items consisting of questions covering the maintenance of working roles, income, work security, sufficiency of income, and satisfaction with work. Scores on the index vary from 0 to 8.

Item 6.1	if cause	score	1	point
	if not cause	score	0	point
Item 6	in combination with point 7			
	If more than 2000 baht	score	1	point
	If less than 2000 baht	score	0	point
Item 8	if enough to save	score	2	point
	if just sufficient	score	1	point
	if insufficient	score	0	point

Item 9	if very secure	score	2	point
	if fairly secure	score	1	point
	if not secure	score	0	point
Item 10	if high	score	2	point
	if medium	score	1	point
	if low, unsatisfied	score	0	point

5-8 points indicate high importance of roles and duties in working for livelihood.

1-4 points indicate medium importance of roles and duties in working for livelihood.

0 points indicate unimportance of roles and duties in working for livelihood.

Ownership of the residence is measured by an index comprised of three items, consisting of questions covering ownership of residence and possession of private space. The index has a range of 0 to 6 points.

Item 11.	If own house	score	2	point
	If living with offspring or relatives	score	1	point
	If renting a house or living in place provided by employer	score	0	point
Item 12.	If private space is clearly marked	score	2	point
	If living with others but private space provided	score	1	point
	If living with others without private space	score	0	point

Item 13.	If currently having more than one residence	score	2	point
	If only has the home where they stay	score	1	point
	If has none	score	0	point

5-6 points indicate high security of ownership of residence.

3-4 points indicate medium security of ownership of residence.

0-2 points indicate low security of ownership of residence.

Participation in the community is measured from four items, consisting of membership of, and participation in, various groups, sense of being useful to others, satisfaction with the community and with their residence. The total score ranges from 0 to 8 points.

Item 14.	If member of more than two groups	score	2	point
	If one group	score	1	point
	If none	score	0	point
Item 15.	If answer every time	score	2	point
	If answer sometimes	score	1	point
	If answer not at all	score	0	point
Item 16.	If answer high	score	2	point
	If answer medium	score	1	point
	If answer low	score	0	point

Item 17.	If answer high	score	2	point
	If answer medium	score	1	point
	If answer low	score	0	point

6-8 points indicate high level of participation in the community.

3-5 points indicate medium level of participation in the community.

0-2 points indicate low level of participation in the community.

Set No.2: Form for interview of moral beliefs and practices.

Based on the review of literature, questions related to religious principle beliefs, conduct in accordance with view of morality, and adherence to religious teachings, were asked. There were 16 points, seven related to beliefs and another nine concerning practice. The questions were asked in Likert scale format, with five levels of choice for each question. The meaning of the different levels are provided below.

Beliefs of the elderly	Scoring	
	Negative	Positive
Extreme disbelief: the statement is not at all consistent with the informant's opinions.	5	1
Disbelief: the statement is largely not consistent with the informant's opinions.	4	2
Undecided: the informant is not sure of their opinion about the statement.	3	3
Belief: the statement is consistent with the informant's opinions.	2	4
Firm belief: the statement is completely consistent with the informant's opinions.	1	5

Practice of elderly	Scoring	
	Negative	Positive
Never: the informant has never practiced the behavior stated.	5	1
Seldom: meaning that the informant seldomly practices the behavior stated .	4	2
Regularly every month: the informant practice the behavior stated every month.	3	3
Regularly every week: the informant practices the behavior stated every week.	2	4
Regularly every day: the informant practices the behavior stated every day.	1	5

Set No.3. Assistance from family

Based on previous research, especially Roy (referred to in Unipant 2539: 160-174) on the reporting by the elderly regarding behavior practiced by the family for assistance and care of the elderly, a module was constructed. This module included questions intended to measure four aspects of family assistance: physical care, emotional care, elderly roles and duties, and relations and dependence.

The module was comprised of 29 questions, eleven of which were about family assistance in the area of physical care, seven about emotional care, five about roles and duties and six about relations and dependence. The questions were asked in a Likert scale format, with each question containing five levels of choice. These are shown below.

Answer	Meaning	Scoring	
		Negative	Positive
Not true at all	Statement not at all consistent with feelings	5	1
Slightly true	Statement is slightly consistent with feelings	4	2
Half is true	Statement is about one-half consistent with feelings	3	3
Mainly true	Statement is mainly consistent with feelings	2	4
Mostly true	Statement is completely consistent with feelings	1	5

Set No.4. Health and public health services in the community

This module was constructed based on a review of questions used in past research and through interviews by the researcher with public health authorities in the study communities. The module 15 and nine questions on health services and the use of health services respectively. The respondents were asked to select one of three responses for each question: “yes” “no” and “don’t know”. Scoring was assigned as follows:

Answer	Meaning	Scoring	
		Negative	Positive
Yes	Statement is consistent with respondent's experience	0	1
No	Statement is not consistent with respondent's experience	1	0
Don't know	Respondents has no experience related to the statement	0	0

Set No. 5. Quality of life of the elderly

This module was employed to measure the quality of life of the elderly. The indicators were developed from the evaluation form of Neugarten et. al. (1961) as translated by KaewKangwal (1989)

This form is used for assessing satisfaction with life, or Life Satisfaction Index A(LSIA), and comprises questions related to attitudes towards oneself, others, society and the world. The original index was adapted for this study with some questions added in order to communicate with the elderly in the area more effectively. The module consists of 19 questions. Each question could be answered on one of five levels of agreement or disagreement: completely disagree, disagree, undecided, agree, and completely agree. The scoring system used is as follows:

Answer	Meaning	Scoring	
		Negative	Positive
completely disagree	the statement is not consistent with opinions, feelings and thoughts in every way	5	1
disagree	the statement is not consistent with opinions.	4	2
undecided	the informant is not sure of his or her opinions, feelings and thoughts about the statement	3	3
agree	the statement is consistent with the respondents opinions, feelings and thoughts.	2	4
completely agree	the statement is consistent with the respondents opinions, feelings, and thoughts in every way.	1	5

3.3 Validity and reliability of data

The validity and the reliability were tested as follows:

1. The internal consistency of variables used to measure concepts (content validity) was checked undertaking a comprehensive review of other research. The results of this review were used to construct the draft instrument for this study. This instrument was then submitted for review to the seven members of the thesis panel and



other qualified persons to examine and make correction on substance and consistency according to the project’s purposes. The names of panel members appear in the annex.

2. Many of the concepts used in the study are measured through indexes using multiple indicators. To test the reliability of the indicators used in constructing the indexes, a pre-test was conducted and results analyzed. Inter-correlations among the indicators were examined and a measure of the overall acceptability of each of the constructed indexes (Cronbachs Alpha) was calculated. The pre-test was conducted with 40 elderly in a Thai Muslim community in Ngow sub-district of the capital district of Ranong. The measures of Cronbachs Alpha for each of the scales is shown for the pre-test and the actual survey in Table 3.1. The levels of the coefficient (all over 0.70), suggest that the indicators of each of the indexes can be used to calculate reliable indexes.

Table 3.2 Reliability statistics for indexes used in the survey

Scale	Pilot (n = 40)	Survey (n=403)
Behavior and morality regarding:		
Religion Beliefs	.78	.71
Religion Practices	.76	.74
Assistance extended by the family	.91	.90
Health conditions and use of services	.81	.72
Quality of Life	.85	.83

3.4 Data collection

The steps involved in data collection were as follows:

1. The Graduate Study College sent a letter to the medical officer of the provincial public health department in Ranong.
2. Three assistant researchers, consisting of a professional nurse and two students who had finished advanced vocational education (one being Muslim) were recruited by the researcher to help collect the data.
3. The assistant researchers were trained on sampling and interviewing.
4. Village meetings were held to explain the purpose of the study to the elderly, village health volunteers (Or Sor Mor), and local public health officials.
5. The researcher and assistant researchers completed interviews from February 26,1999 to April 20,1999. The average interview took 40 minutes to complete and 403 interviews were conducted.

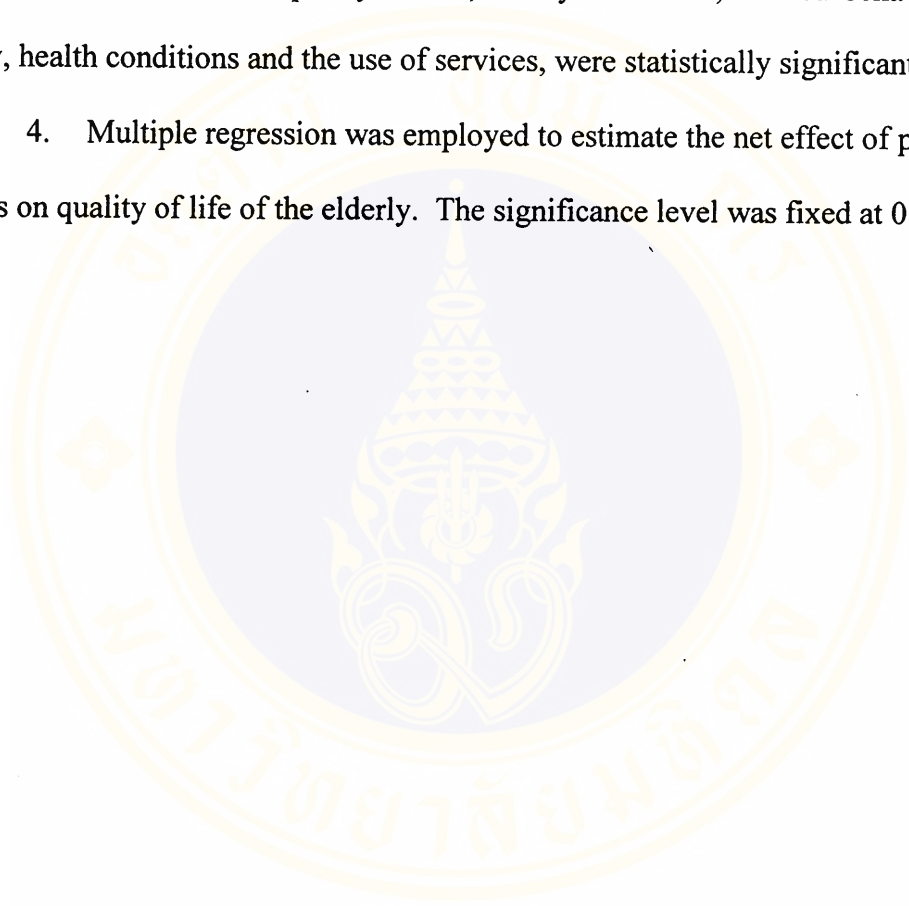
3.5 Data analysis

1. Descriptive analysis was carried out using social, demographic and economic variables including sex, age, economic status, level of education, working for a living, ownership of home, participation in the community, and nature of lodging.
2. The mean values and standard deviation of factors related to desired behavior and morality, and the family's assistance in response to the four aspects of care, namely physical, emotional, roles and duties were calculated. Interrelations among these factors and relationships between them and factors related to health

conditions, the use of services and the quality of life of the elderly were also estimated.

3. T-tests were conducted to test whether the differences among the two religious groups in terms of quality of life, family assistance, desired behavior and morality, health conditions and the use of services, were statistically significant.

4. Multiple regression was employed to estimate the net effect of predictor variables on quality of life of the elderly. The significance level was fixed at 0.05.



Chapter 4

Results of Analysis

The data analysis is divided into three parts. Part 1 presents data related to the demographic, social and economic characteristics of the elderly Thai Buddhist and Muslims. These characteristics include sex, age, marital status, education, income, type of family of residence, work roles, ownership of place of residence, and participation in community life. Part 2 presents the results of a comparison of factors related to desired conduct and morality, family support, factors related to health conditions and the use of services, and quality of life of the elderly. Part 3 reports on an analysis of factors influencing the quality of life of Thai Buddhist and Muslim elderly.

4.1 Demographic, social and economic characteristics

The total sample was 403 persons chosen from predominantly Thai Muslim communities in Ranong Province. There were 203 Buddhists and 200 Muslims. Their characteristics are shown in Table 4.1. The distribution by sex is similar for both religious groups, with a slightly higher proportion of females than males. The majority of respondents belonged in the 60-64 and 70-74 age groups. Two-thirds of them were currently married.

Most respondents had completed a primary or lower level of education. Only a small proportion, most of who were Buddhist, had finished secondary education. On average, the number of years of education was higher for the Buddhists than the Muslims.

Most of the elderly still worked for a living. The majority worked in agriculture (rice farming, fruit growers, ranchers), the second highest proportion was found in the employees category, followed by trading. Fishing was an occupation was only undertaken by a few of the Muslim elderly. Total monthly incomes were low. The majority of elderly in both religious groups had incomes less than 2,000 baht. On average, the monthly incomes of Buddhists were higher than for Muslims.

Table 4.1 Percentage distribution on selected demographic, social and economic characteristics of elderly Buddhists and Muslims

Characteristics	Thai Buddhist	Thai Muslim
	N = 203	N = 200
• Sex		
Male	46.80	48.50
Female	53.20	51.50
• Age	$\bar{X} = 67.06$	$\bar{X} = 66.91$
60 – 64	35.46	35.00
65 – 69	29.08	27.50
70 – 74	35.46	37.50

Table 4.1 (Continued) Percentage distribution on selected demographic, social and economic characteristics of elderly Buddhists and Muslims

Characteristics	Thai Buddhist	Thai Muslim
	N = 203	N = 200
• Marital Status		
Single	0.98	0.00
Married	67.49	70.50
Widow	27.59	25.00
Divorced/Separated	3.94	4.50
• Education (years of schooling)	$\bar{X} = 3.41$	$\bar{X} = 2.17$
No schooling (0 years)	25.62	38.50
Primary education (1- 4 years)	65.47	59.50
Junior secondary education (5-10 years)	2.00	2.00
Senior secondary education (11-12 years)	4.92	0.00
Higher than senior secondary education (13-16 years)	1.97	0.00
• Occupation		
Agriculture (gardening, rice farming)	34.43	37.00
Fishery	0.00	6.50
Farming	0.49	1.50
Wage earning	13.30	12.00
Retired Government Official	0.49	0.00
Trading	8.90	8.00
No occupation	42.39	35.00
• Income from work and other sources	$\bar{X} = 2042.80$	$\bar{X} = 1449.50$
Less or equal to 2000 bath/month	71.92	77.00
More than 2000 bath/month	28.08	23.00

Table 4.1 (Continued) Percentage distribution on selected demographic, social and economic characteristics of elderly Buddhists and Muslims

Characteristics	Thai Buddhist	Thai Muslim
	N = 203	N = 200
• Family characteristics		
Living with offspring	49.26	49.50
Living with spouse and children	16.74	26.50
Living alone	9.85	6.50
Living with spouse	22.18	15.50
Other	1.97	2.00
• Roles and duties in work		
Scoring 5 - 8 (high)	25.12	12.00
Scoring 1 - 4 (medium)	36.95	52.00
Scoring 0 (no functional role in work)	37.93	36.00
• Ownership of land and residence		
Scoring 5 - 6 (high)	68.47	58.00
Scoring 3 - 4 (medium)	19.70	32.50
Scoring 0 - 2 (low)	11.83	9.50
• Participation in community		
Scoring 6 - 8 (high)	12.32	1.50
Scoring 3 - 5 (medium)	45.81	56.50
Scoring 0 - 2 (low)	41.87	42.00

Most of the elderly still had a medium level of roles and duties in working for a living at middle levels and higher. More than one-half had high levels of ownership of their place of residence. Approximately one-half of respondents of both religious groups had a medium level of participation in the community. About 40

percent of both groups had low levels of participation in the community. Only a small minority of the elderly participated in the community at a high level (1.5 percent for Muslims and 12.3 percent for Buddhists).

4.2 Factors related to desired behavior and morality, family support, health conditions and the use of services, and quality of life

4.2.1 Factors related to desired behavioral and morality are divided into two parts: beliefs according to religious principles and personal practices according to religious principles.

A. Beliefs according to religious principles

Table 4.2 Mean and standard deviation for items related to ethical and moral beliefs of Buddhist and Muslim elderly

Belief	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
1. Good deeds produce good results, bad deeds produce bad result	4.58	.64	4.69	.52
2. Make merit you'll go to heaven, commit sin you'll go to hell	3.97	.93	4.57	.68*
3. Heaven and hell really exist	3.82	1.01	4.64	.62*
4. Reincarnation is for repaying a person's own karma	3.64	1.05	4.26	.98*

* Statistically Significance levels at 0.05

Table 4.2 (Continued) Mean and standard deviation for items related to ethical and moral beliefs of Buddhist and Muslim elderly

Belief	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
5. Whoever does evil or commits sin, after death will have to repay for such bad karma	3.82	1.03	4.68	.54*
6. Heaven is in the heart, hell is in the mind	4.29	.86	4.26	.75
7. Strictly religious persons are not outmoded	3.79	1.01	3.78	1.13
Total	27.45	4.39	30.24	2.78

* Statistically Significance levels at 0.05 $t = -7.629$ $p = .000$

From table 4.2, it can be seen that there are no significant differences among the two groups in the beliefs that ‘good deeds would produce good results, bad deeds bad results’, ‘heaven is in the heart, hell is in the mind’, and ‘people who strictly keep up with moral principles are not outmoded’. The highest mean score was for the item ‘good deeds produce good result, bad deeds produce bad result’. The lowest mean score was for the item asked of Buddhists, ‘reincarnation is to the repayment of the past Karma’. For Muslims, the lowest mean score was for ‘religiously strict persons are not outmoded’. There were significant differences between the two groups in items related to beliefs about the real existence of hell and heaven, such as ‘making merit

would help one go to heaven, committing sins would push one to hell', and 'evil doers and sinners would have to repay for their bad deeds after death'.

It appears that the Muslim elderly had stronger beliefs than the Buddhist elderly did. This may be because the Muslim elderly held more firmly to their religion than the Buddhist elderly. The influence of the Muslim religion is reflected in the firm belief in the duties one has to perform for God and to fellow human beings. Muslims have the incentives to perform good deeds as this will provide them with a purpose in the next world. They believe that everything must have its termination on a fixed date. Sinners must be punished (Muhammad Hudson 1991: 48)

As for Buddhism, the law of karma is held. Buddhists are taught to create good karma to compile as much merit as much as possible in order to obtain favorable responses in this life without having to wait until the next life (Thanasiri, 1991:23). Although the two religions have similar ways of teaching people to do good, the orientation (this life vs. next life) differ. Overall, the strength of beliefs of the elderly differs significantly, with the Muslim elderly having stronger religious convictions than the Buddhist.

B. Personal practices according to religious principles

From table 4.3 it can be seen that the strength of practices according to religious principles were different on each item for the two groups. The Muslim elderly were stricter than Buddhists in their religious practices. The highest mean score was given to the issue of refraining from drinking alcohol and consuming any

intoxicant. The lowest mean score for both groups was for teaching religion to their children. Muslims have to strictly practice their religion, especially the five principles that every Muslim must undertake (Chitmuad,1981: 97 - 145). These are to worship and dedicate one's self physically and mentally to God 5 times every day. On Fridays it is the duty of every male Muslim to go to worship at the mosque as well as for training and transmitting religious principles and morality to young people.

Table 4.3 Mean and standard deviations for items related to ethical and moral conception of religious practice of Buddhists and Muslims

Religious Practice	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
1. Have you ever asked for blessing to have a good life in the next life? (Have you ever made a wish for you to have a good life in the next life?)	3.25	1.45	4.84	.58*
2. Do you study Moslem scriptures and Dhama? (Do you read and study Dhama?)	1.98	1.21	2.90	1.48*
3. Do you teach religion to children? (Do you transmit Dhama to offspring?)	1.85	.93	2.13	1.32*
4. When entering old age, do not you drink whisky, beer, or consume intoxicants?	4.42	1.05	4.99	.09*

* Statistically Significance level at 0.05

Note: Questions in parenthesis are for Thai Buddhists.

Questions 4 ,7, 8 are the same for both groups.

Table 4.3 (Continued) Mean and standard deviations for items related to ethical and moral conception of religious practice of Buddhists and Muslims

Religious Practice	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
5. Do you observe the fasting precept during Ramadan regularly every day? (Do you observe the five precepts on Sabbath day (wan pra) and other religiously important days?)	2.57	1.34	4.64	.63*
6. Do you undertake Jacket? (Do you go to temple for making merit on religiously important days or other occasions?)	2.76	.95	3.45	1.53*
7. Have you ever exchanged opinions about religion with persons?	2.47	1.04	2.71	1.12*
8. When entering old age do you not take up gambling?	3.96	.85	4.92	.29*
9. Do you worship regularly everyday? (Do you pray before going to bed regularly overnight?)	4.05	1.38	4.72	.62*
Total	27.31	5.40	35.29	3.80

* Statistically Significance level at 0.05 $t = -17.1$ $p = .000$

Note: Questions in parenthesis are for Thai Buddhists.

Questions 4 ,7, 8 are the same for both groups.

The Thai Buddhist elderly were found to be somewhat lagging in their practices according to their religious principles such as following the five precepts, to going for merit making at the temple, and abstinence from gambling. Buddhism teaches people to hold fast to cause and effect, and that nirvana(nippan) is the ultimate goal of a Buddhist's life. Since this state is very difficult for common people to attain, this may cause them to be discouraged and lagging in their religious practices. For these reasons, there are statistically significant differences in religious practices, with the Muslim elderly stricter than the Buddhist elderly.

4.2.2 Factors related to family support

A. Family support for physical comfort

From table 4.4 it can be seen that there were few differences among religious groups in levels of family support for physical comforts of the elderly of both groups. There were no significant difference in mean score on the following items: provision of useful food, provision of a private space, cleaning of toilets and bath rooms, cleanliness and tidiness of bedding, approval for nap taking, provision of household medications, attention for their taking medicine, and facilitation for trips to see a doctor in case of health problems. The highest mean score was given to the approval for nap taking, while the lowest was given to provision of a private space.

There were some items where there were differences between the two groups, these included provision of suitable clothes, provision of personal effects for everyday use. The Buddhist elderly received more encouragement from their offspring

in regard to taking physical exercise. In general, however, family support related to physical comforts bore no differences; perhaps because support for physical comforts can be shown easily in concrete forms by the offspring, and also there were various religious teachings about the duties of children to treat their parents properly. It is a well-accepted religious principle that children have to repay to their parents for rearing them. Muslim people hold fast to the belief that, next to God, parents deserve their highest respect in order to compensate for their love and kindness. While Buddhism teaches that to look after one's parents is a supreme blessing. Most of the elderly in the study lived in extended families and were looked after very well by their offspring. These findings are consistent with those of Chayowan et al(1992) and by Siriboon (1992) which found that most of the elderly living with their offspring were provided with good care in terms of lodging, meals, money, and clothes.

Table 4.4 Mean and standard deviations for items related to physical comfort received from the families of respondents: by religion

Physical comfort from family	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
Offspring or relatives				
1. Provide/purchase suitable clothes for you	3.33	1.21	2.61	1.31*
2. Provide personal belongings suitable for your daily activities	2.77	1.47	2.42	1.42*
3. Provide nutritious food for you	2.69	1.54	2.82	1.55
4. Provide you with a living place with privacy	2.27	1.50	2.24	1.48
5. Clean your bathroom and toilet	2.74	1.63	2.78	1.56
6. Keep your bedding tidy and clean	2.67	1.68	2.68	1.56
7. Allow you to take a nap in the afternoon	4.86	.58	4.79	.65
8. Support you to have physical exercise	4.37	1.06	4.13	1.27*
9. Provide ordinary medicines for your own use	2.51	1.47	2.42	1.46
10. Observe you take medicine when you are sick	2.98	1.44	2.87	1.38
11. Take you to the doctor or public health authorities when you have health problems	3.19	1.47	3.27	1.46
Total	34.37	10.29	33.03	9.29

* Statistically Significant level at 0.05 t = 1.371 p = 0.09

B. Family support related to emotional condition

From table 4.5, it can be seen that there were several issues where there were no significant differences between the groups. For example, do not leave the elderly when going on vacation and pay close attention when the elderly tell stories. The highest average score for the Buddhist elderly was the freedom to choose TV channels, while the lowest score was for not being left alone when the family went on vacation. For Muslims, the highest mean score was not being left alone when the family is on vacation, and the lowest mean score was for the item related to the attention paid to, and queries about, their well being or suffering.

Table 4.5 Mean and standard deviation for items related to psychological support from family by religion of respondent

Emotional condition	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
Your offspring or relatives				
1. Don't leave you alone when they take vacation	3.18	1.65	3.50	1.64
2. When you tell stories they listen till the end with attention	3.34	1.12	3.46	1.10
3. Buy things according to your needs	3.68	1.17	3.14	1.31*
4. Attentive to your suffering or happiness and ask about it occasionally	3.59	.99	3.01	1.17*
5. Inform you when they leave the house	3.50	1.28	3.17	1.30*
6. Give you opportunities to choose Television programs according to your wishes	3.82	1.52	3.21	1.67*
7. Each day you feel very much unengaged and do not feel bored	3.41	1.27	3.06	1.28*
Total	24.52	5.26	22.55	5.66

* Statistically significant level at 0.05 $t = 3.633$ $p = .000$

For most items there were significant differences between the two religious groups. These items included: the purchase of things as needed, informing the elderly when leaving the house, the freedom to choose TV channels and the attention and

queries about their well-being and suffering. It appeared that the Buddhist elderly were given better family support related to emotional conditions than were the Muslim elderly. This is because the Buddhist elderly had maintained better roles and duties in their work than did the Muslim elderly. The study by Anuwatyanyong (1997: 87 – 91) also found that periods of widowhood, divorce, and separation of the Muslim elderly were longer than those of the Buddhist elderly, making the periods they had to be taken care of by their offspring longer. These reasons possibly are related to the higher level of support given to the Buddhist elderly in the purchase of the things they need.

Furthermore, most of the Muslim families engaged in agricultural occupations or fishery, so their daily life activities make it impossible, especially in rural areas, to bid goodbye when leaving their houses. This issue is also related to their chances of regularly providing attention to, or making queries about, the well-being and suffering of the elderly. As regards the freedom to choose TV channels, this may be because TV media now has influences on the offspring of both groups. Moreover most of the programs presented are very constructive, especially those entertainment activities that go against the cultural values of the community. It is difficult for the elderly to accept them. Some even caused the elderly to feel opposed to some programmes, leading to conflicting attitudes towards the selection of such TV programs. These components may have been the cause of some of the differences in the family support extended for emotional conditions. Overall, the difference was statistically significant, with Buddhist elderly given more family support in this areas than were the Muslim elderly.

C. Family support related to roles and duties

From table 4.6 it can be seen that there were no statistically significant differences between the two groups on some items measuring family support given to roles and duties of the elderly. These items were: trust in letting the elderly help look after children and some household chores, their consultation with offspring about various problems, and the children's acceptance of their reprimanding and warnings. The highest mean score was given to the children's acceptance of their reprimanding and warnings, while the lowest was given to the advice for the elderly to take up some suitable hobbies.

Table 4.6 Mean and standard deviation for items related to family support for roles and duties of the elderly; by religion

Support from the family in roles and duties	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
Offspring or relatives				
1. Encourage you to become a member of clubs or activities groups in the community	3.78	1.37	3.31	1.45*
2. Trust you and let you help looking after children or perform household chores	3.45	1.46	3.23	1.53
3. Come to discuss problems with you	3.31	1.15	3.20	1.23
4. Listen to you when give reprimand or warning	4.22	.98	4.18	1.09
5. Advise you to take up suitable hobbies	2.20	1.29	1.86	1.15*
Total	16.97	3.34	15.78	3.89

* Statistically significant level at 0.05

t = 3.293

p = .000

There were some items where there were statistically significant differences between the two groups. These items included: encouragement extended to the elderly to become members of various clubs, and advice for to take up hobbies. These findings are consistent with data that participation in community activities by the Muslim elderly was less than for the Buddhist elderly. Perhaps this is because the Muslims had certain restraints related to their occupations such as being farmers, employees, or

fishermen and their offspring did not encourage them, or even help them, to realize the importance of taking part in various community activities or to take up hobbies. It was also found in this study that the Muslim elderly were more likely than the Buddhist elderly to experience regular sickness. This may be one of the reasons for the statistically significant overall difference between Buddhists and Muslims in the level of family support provided to roles and duties of the elderly.

D. Family support related to interrelations and interdependence

From table 4.7 it can be seen that there is no significant difference by religion in the level of family support in terms of taking the elderly to visit relatives or close friends, and taking the elderly to perform activities on religiously important days. Among the Buddhist elderly the highest mean score was given to the issue of giving the elderly enough money for everyday spending, while the lowest was given to the issue of taking the elderly to perform religious activities on religious days. For the Muslim elderly the highest mean score was given to the issue of providing access to means for receiving news, while the lowest was given to the issue of taking the elderly to join entertainment activities.

Table 4.7 Mean and standard deviation for items related to family support for relationships and independence; by religion

Support from family in relationships and independence	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
Your offspring or relatives				
1. Give you enough money for daily expenses	3.06	1.40	2.48	1.27*
2. Take you to join fairs or annual festivals	2.21	1.39	1.84	1.25*
3. Take you to visit relatives or close friends	2.50	1.44	2.35	1.41
4. Take you to perform activities on religiously important days	2.17	1.35	1.95	1.37
5. Provide you with material required for performing religious activities	2.37	1.49	2.04	1.36*
6. Provide you with material or equipment that give you access to news, such as newspapers, TV or radio	2.90	1.70	2.49	1.70*
Total	15.21	5.98	13.14	5.21

* Statistically significant level at 0.05

$t = 3.71$

$p = .000$

The items where there were significant differences between Buddhists and Muslims were: being given too little money for everyday expenses, taking the elderly to fairs and festivals, and the provision of materials for performing religious activities. The Buddhist elderly received more family support than the Muslim elderly. This may

be because the Muslim family sizes are larger than those of the Buddhists. Also, the Muslim families were more likely to engage in low-earning occupations (Anuwatanyong 1997: 134). This is consistent with the data that the Muslim elderly earned lower incomes than the Buddhist elderly causing some differences in their receiving sufficient money from their offspring for their everyday spending. As for the provision of materials for performing religious activities, Muslim religious activities require fewer materials than required for Buddhist religious activities. This fact also caused some differences regarding the provision of equipment for receiving news such as newspapers. It is also possible that as the levels of education among the Muslim elderly were lower than of the Buddhist elderly, there was less demand among the Muslims to access the news. Additionally, the ability of some Muslim elderly to read and understand the Thai language was minimal, and this may have limited their demand for access to news. These reasons have contributed to overall statistically significant difference in the level of family support related to relationships and independence provided to Buddhist and Muslim elderly. Overall, the Buddhist elderly received higher levels of family support on this dimension than did the Muslim elderly.

4.2.3 Factors related to health conditions and the use of services

A. Health conditions

On several items there were no significant differences in the reported health of Buddhist and Muslim elderly (see table 4.8). These items included: including

regular physical exercise, feeling easily tired, sleeping 3-5 hours per night or longer, no regular pain in joints, knees or back, being free of worries, and not having to go to the doctor every month. The highest mean score of both groups was given to the issue of being able to help themselves in everyday life activities, while the lowest was given to the issue of their no regular pain in joints, knees and back.

There were also statistically significant differences between the two groups on several of the health items, including: the feeling of being healthy and strong, the ability to take meals as usual, the ability to help themselves in everyday life activities, being without regular sickness, without constipation, without tendency to faint, and that they could urinate as usual.

Table 4.8 Mean and standard deviation for items related to health conditions of the elderly: by religion

Health Conditions	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
1. You feel that you are strong	.55	.50	.40	.49 *
2. You can eat as usual	.71	.45	.61	.49 *
3. You take physical exercise regularly	.95	.22	.94	.25
4. You can help yourself with daily life activities	1.00	.07	.96	.20 *
5. You don't feel tired easily and pant regularly	.47	.50	.54	.50
6. Each night you can sleep about 3 – 5 hours or longer	.66	.47	.71	.45
7. No diseases	.43	.50	.33	.47 *
8. No disabilities	.94	.25	.92	.27
9. Not have frequent constipation	.68	.47	.56	.50 *
10. No regular pain in joints, knees or back	.23	.42	.25	.43
11. Not often faint	.67	.47	.52	.50 *
12. Normal urination	.84	.37	.73	.45 *
13. No worries	.49	.50	.42	.49
14. No need to have monthly medical check	.67	.47	.61	.49
Total	9.28	2.76	8.49	2.77

* Statistically significant level at 0.05

t = 2.893 p = .002

It appears that the health of the Buddhist elderly is better than that of the Muslims. Factors that could lead to poor health include poor education and low incomes. These variables, plus religion, can impact upon the system of health beliefs and practices, particularly for the elderly. Hasdee (1988: 150-187) found in his study, that people without any education believed that what happened in life, such as sickness, had been fixed by God. The use of medicine for self-treatment also impacts on the health conditions of the elderly. Sirirassamee (1997) found that elderly had more incorrect behavior related to the use of medicines than did persons in other. This inappropriate behavior may have stemmed from their lack of education. As noted earlier, levels of education of Thai Muslim are lower than for Thai Buddhists. For the elderly with higher incomes, opportunities exist for them to choose better services offered by the private sector. Overall, the results indicate that the health of Buddhist elderly was better than that of the Muslim elderly.

B. The use of public health services in the community

The mean scores on items for the perception of the ability to ask for medication from public health officials in case of sickness, the availability of the nearest treatment center at all times, the use of the health cards for the elderly, visits by village health volunteers, and the expectation that neighbors would help them out if the family members refrained from helping them, were not significantly different for the Buddhist and Muslim elderly (see table 4.9). The highest mean score for Buddhists was related to the item their chances of receiving medical treatment at all times in case of serious sickness, and the issue of being able to seek advice to discuss

health problems with public health officials. The highest mean score for Muslim elderly was for the item related to being able to ask for mediation from the authorities in the case of sickness. The lowest mean score for both groups was for the issue of their chances of receiving medical treatment by public health officials at their own houses.

Statistically significant differences were found between the two religious groups in the expectation of getting assistance from neighbors when a crisis occurs, and chances of being looked after, asking for consultation or discussing health problems with public health officials. It appears that the Buddhist elderly had access to better services, perhaps because public health officials working in Thai Muslim areas mainly come from other localities, with most being Buddhist. After working long hours at the health station and community hospital, they usually return home, minimizing their chances of socializing with the elderly. Furthermore, the Muslim elderly would rather associate with community leaders who follow the same religion, causing differences in their ability to ask for consultation about health problems and visits by the officials. Also the public health services were very passive, lacking regular visits to the elderly. As regards the issue of expecting the neighbors to help them out at time of crisis, this could stem from economic conditions. Muslim elderly have low incomes, leading them to ask for neighbor's assistance. Overall, there was a statistically significant relationship between Muslims and Buddhists in their receipt of public health services in the community, with Buddhist elderly having better access to health services than Muslim elderly.

Table 4.9 Mean and standard deviation for items related to public health services in the community; by religion

Public health services	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
1. When you are slightly sick, can you ask for medication from the public health authorities.	.96	.16	.98	.16
2. When you are severely sick, can you go for treatment at the nearest place available at all times.	.99	.09	.97	.18
3. Can you use the card for the aged to ask for services from the health station and the branch Office of the Accelerated Rural Development Bureau.	.78	.42	.77	.42
4. Do public health authorities come to check the health condition of the elderly at their homes.	.41	.49	.33	.47 *
5. Do public health volunteers regularly come to visit your house	.61	.49	.63	.48
6. Neighbors can help you out when crisis occurs	.88	.32	.77	.42 *
7. You can discuss your health problems with the public health authorities in the community	.99	.09	.94	.25 *
8. If your family cannot look after you, your neighbors can help you out	.49	.50	.49	.50
Total	6.13	1.09	5.86	1.32

* Statistically significant level at 0.05

$t = 2.221$ $p = .013$

Overview

In general, it was found that the factors related to religious concepts and personal practices of Buddhist and Muslim elderly were significantly different (see table 4.10). Muslim elderly had stronger beliefs and stricter practices in accordance with religious principles than did Buddhist elderly. There was no difference between religious groups in family support provided for physical comforts. However, statistically significant differences were found for family support related to emotional condition, roles and duties, and relationships and independence, with Buddhists receiving more support than Muslims. Health conditions and the use of public health services are significantly different, with Buddhists having better health, and better access to public health services than Muslims.

Table 4.10 Mean and standard deviation classified by main factors: by religion

Factors	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
• Belief in religious principles	35.90	5.23	38.78	3.49*
• Practice according to religious principles	27.31	5.40	35.29	3.80*
• Physical support from family	34.37	10.29	33.03	9.29
• Emotional support from family	24.52	5.26	22.55	5.66*
• Family support for roles and duties	16.97	3.34	15.78	3.89*
• Family support for relationships and independence	15.21	5.98	13.14	5.21*
• Health conditions	9.28	2.76	8.49	2.77*
• Public health services in the community	6.23	1.09	5.86	1.32*

* Statistically Significant level at 0.05

Differences in levels of family support and health may relate to variations in quality of life. These factors are correlated. Beliefs and practices according to religious principles, family support, and access to public health services in the community impact on the health conditions of the elderly. Levels of family support are influenced from religious belief and the cultural practices, and in turn influence the services provided health officials. These factors contribute to the health conditions of the elderly, which is one of the best predictors of their quality of life (Ward, 1986:29)

4.2.4 Quality of life of the elderly

There is considerable variation among items in terms of differences between Buddhists and Muslims (see table 4.11). There were no statistically significant differences in feelings about: happiness being higher than had expected, being luckier than their acquaintances, being as happy as when they were young, regarding the present as the best time, thinking that the future would produce more favorable events, being engaged in interesting undertakings, feeling proud of themselves when thinking of the past, starting life over the same way, having plans for the future, and having obtained the needed things and having fulfilled the hopes in life.



**Table 4.11 Mean and standard deviation of items related to quality of life:
by religion**

Factors	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
1. When age advances you feel happier than expected	2.89	1.00	2.89	1.11
2. You feel that you are luckier than your acquaintances.	3.41	.81	3.30	.93
3. At present you don't feel lonely	3.34	1.51	2.98	1.21*
4. You feel as happy as when you were younger	2.37	.96	2.35	1.07
5. Your life is happy as it should be	2.90	.98	2.71	.94*
6. The present time is the best period of your life	3.45	.96	3.62	.87
7. Most of the things you do are not repetitious or boring	3.17	1.07	2.83	1.15*
8. You expect some good things to happen in the future	3.16	1.01	3.24	1.03
9. Things you are doing still keep you interested as before	3.48	.90	3.46	.92
10. You don't feel old and weak	1.60	.77	1.37	.56*
11. Thinking of the past, you feel very proud of yourself	3.98	.65	4.02	.70

Table 4.11 (Continued) Mean and standard deviation of items related to quality of life; by religion

Factors	Thai Buddhist		Thai Muslim	
	\bar{X}	SD	\bar{X}	SD
12. If it could be re-started, you would go back to start your life the same way again	3.71	1.13	3.55	1.24
13. You look strong when compared with others of the same age	3.39	.93	3.11	1.00*
14. You still have plans to be carried out in the future	2.67	1.09	2.56	1.17
15. Thinking of the past, you are satisfied with your needs	2.67	1.11	2.54	1.12
16. In comparison, you are not sadder than other people	3.30	1.06	2.89	1.10*
17. Your hopes have been fulfilled to an appreciable extent	3.83	.86	3.90	.85
18. You feel that society is getting better	2.68	1.03	2.40	1.06*
Total	56.02	9.17	53.68	8.79

* Statistically significant level at 0.05

$t = 2.614$

$p = .004$

Significant differences can be observed for following items: feelings of not being lonely at present, being quite happy, being engaged in interesting undertakings, not feeling old and weaken, being healthy and strong in comparison with other people of similar ages, not being gloomier than their acquaintances, and in thinking that

society is getting better and better. Buddhist elderly had higher mean score than did Muslim elderly.

The quality of life of the elderly has many components, including health, economic conditions, independence, involvement in activities etc. In general, family support was concerned most with economic matters, social, and emotional conditions. The affect of this support is expressed in the form of loneliness or happiness. Respondents from both groups gave highest average scores to the quality of life item related feelings of being proud of themselves. This was followed by their fulfillment of hopes in life. Respondents had accumulated considerable experience, giving them lots of memories and pride about their past. Most of the Muslim elderly's families were larger in size than those of the Buddhist families, perhaps causing them to be prouder than the Buddhist elderly about being looked after better by their offspring.

The feeling of not being old and weak was given the lowest mean scores for both groups. The mean score was lower for the Muslim than the Buddhist elderly, perhaps because the health of Muslim elderly was not as good as for the Buddhists. The state of being old is mostly related to ways of looking after health, and because of their aged bodies whose conditions could not be maintained or returned to original forms, as stated in the theory of aging of Busse (1959), referred to in Anuwatyanyong (1997:3) the elderly feel weak.

The assessment quality of life of the elderly was in the form of a Subjective Scale Yielding Quantitative Data. This was implemented by measuring the feeling of satisfaction in life related to attitudes towards oneself, other people, society, the best of

life, feelings of fulfillment in life, and moods (Kaew Kangawal, 1989:2). The results show that there was a statistically significant difference in the quality of life of Buddhist and Muslim elderly, with Buddhist elderly having a higher quality of life than Muslim elderly.

Table 4.12 Percentage distribution, mean and standard deviation of self-assessed happiness of elderly: by religion.

Level of happiness	Thai Buddhist	Thai Muslim
	(N = 203)	(N = 200)
Completely unhappy	1.0	2.5
Unhappy	8.4	9.5
Fairly happy	62.1	66.0
Happy	24.6	16.5
Very happy	3.9	5.5
Total	100.0 $\bar{X} = 3.22, SD = .69$	100.0 $\bar{X} = 3.13, SD = 0.75$

* Statistically significant level at 0.05 $t = 1.273$ $p = 0.202$

Note: Variable is coded on a five-point scale, with completely unhappy coded as 1 and very happy coded as 5.

The results shown in table 4.12 indicate that 9 percent of Buddhists and 12 percent of Muslims indicate they are unhappy, while 29 percent of Buddhists and 22 percent of Muslims say they are happy. The mean level of self-assessed happiness is

higher for Buddhists than for Muslims, how the difference is not statistically significant. This result is in contrast to the difference of quality of life between the two religious groups. Happiness is only one part of quality of life. Quality of life has many elements, including attitudes toward themselves, attitudes toward others, attitudes toward society, and attitudes toward life from past to present.

4.3 Determinants of quality of life

In order to establish the factors influencing the quality of life of the elderly, after controlling for the influence of other variables, analysis was undertaken using the following variables: education, work roles, ownership of residence, participation in community affairs, factors related to desired behavioral conduct and morality (beliefs and personal practices), family support related to physical comforts, mental conditions, roles and duties, relationships and independence), factors related to health conditions and the use of services (health conditions and the use of public health services in the community). Other variables included religion, sex, marital status, and family structure. The dependent variable was quality of life of the elderly. In order to achieve a more normal distribution for education, a small number of Buddhist respondents were eliminated from the analysis.

The correlation coefficients presented in table 4.13 indicate that for the total sample most of the correlations with quality of life were relatively low. Health condition had the highest correlation with quality of life of the elderly. This was followed by family support related to emotional condition, work roles, family support related to roles and duties, and education. The correlations for quality of life and

family support related to relationships and independence, participation in community life, public health services in the community, ownership of residence, and age were also statistically significant. Family support related to physical comfort, marital status, beliefs and personal practices according to religious principles, were positively related to quality of life, although not statistically significant. Religion belief was negatively related to quality of life (i.e. Muslims had lower quality of life).

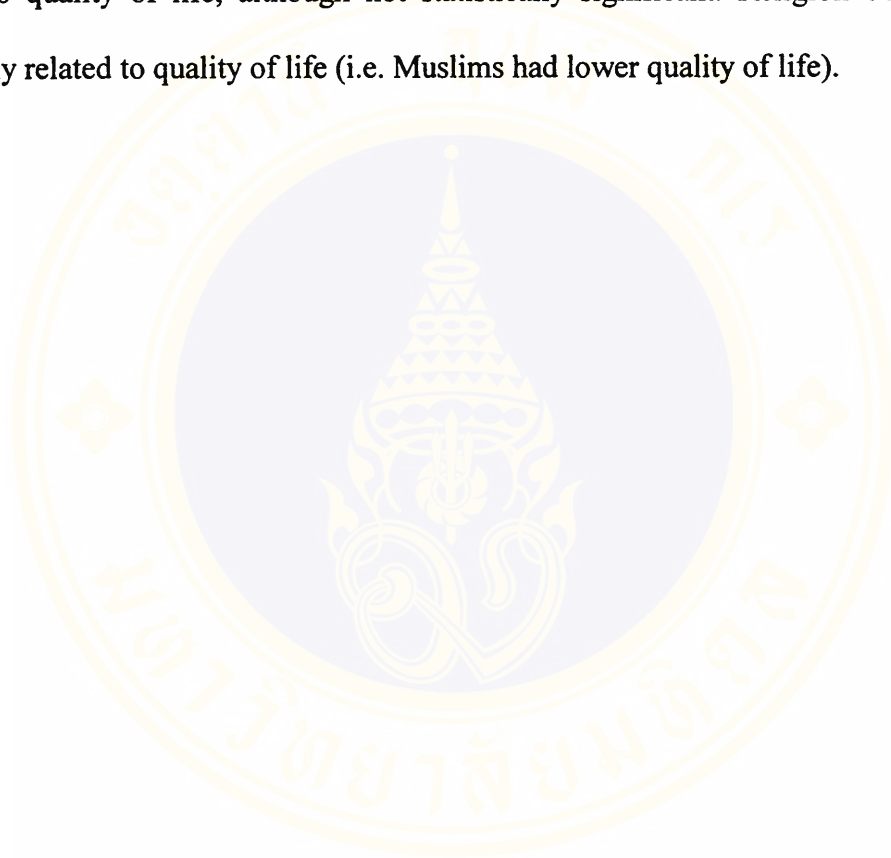


Table 4.13 Correlation matrix of selected variables and quality of life: Buddhist and Muslim elderly

Variable	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	
V1	1.000																		
V2	.021	1.000																	
V3	.123**	-.018	1.000																
V4	-.156**	.069	.013	1.000															
V5	.108*	.352**	-.040	-.273**	1.000														
V6	.273*	.155**	.202**	-.022	.153**	1.000													
V7	.325**	.169**	.062	-.398*	.328**	.289**	1.000												
V8	.205**	.192**	.068	-.217**	.282**	.225**	.378	1.000											
V9	.031	-.033	-.008	.026	-.104*	-.079	-.118**	-.078	1.000										
V10	.243**	.122**	.008*	-.129**	.169**	.254**	.234**	.231**	-.133**	1.000									
V11	-.095*	-.174**	-.301**	.030	-.154**	-.285**	-.135**	-.196**	.001	-.120	1.000								
V12	.034	.015	-.632**	-.054	.038	-.018	-.012	.040	.034	.068	.315**	1.000							
V13	.155**	-.074	.064	.096*	-.139**	-.070	-.246	-.047	.426**	-.070	.048	.033	1.000						
V14	.369**	-.026	.174**	-.091*	.057	.113*	.062	.086*	.307**	.068	-.019	.038	.583**	1.000					
V15	.301**	-.001	.158**	-.046	.035	.138**	.046	.065	.101*	.087	.006	.039	.367**	.623**	1.000				
V16	.267**	-.159**	.182**	.092*	-.095**	.095*	-.143	-.002**	.224**	.051	.034	.009	.640**	.567**	.452**	1.000			
V17	.541**	.093	.137**	-.220**	.126**	.209**	.343	.173**	.087**	.130	-.149**	-.127**	-.119**	.137**	.158**	-.021	1.000		
V18	.215	.082	.107*	.050	.048	.049	-.014	.038	.033	.067	.021	.057	.180**	.220**	.331**	.181**	.176**	1.000	

Remark V1 = Quality of life V2 = Sex V3 = Religion V4 = Age V5 = Marital Status V6 = Education V7 = Work for livelihood V8 = Ownership of residence

V9 = Living condition V10 = Participation V11 = Belief V12 = Practice V13 = Physical Support V14 = Emotional Support V15 = Functional Support

V16 = Relation Support V17 = Health V18 = Health Service

* Statistically Significance Level at 0.05

** Statistically Significance Level at 0.01

Table 4.14 summarizes the distributions of the variables used in this section of the analysis. As noted earlier, most of the sample is married with similar proportions living in nuclear families and extended families. The average number of years of education was 2.7 years, with Buddhist elderly having, on average, more year of education. They were also more likely than Muslims to be working, own their residence, and participate in community life. Muslims scored higher than Buddhists on a scale of beliefs and personal practices according to religious principles. Conversely, on various dimensions of family support, Buddhists scored higher than Muslims. Buddhist also scored higher in terms of health and quality of life.

Table 4.14 Mean and standard deviation of variables used in the study; by religion.

Variable	Buddhist (n=199)		Muslim (n=200)		Total (n=399)	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Social and economic factor						
Religion (Reference = Islam)						
Buddhist					0.50	0.50
Sex (Reference = Female)						
Male	0.47	0.50	0.49	0.50	0.48	0.50
Age	67.03	4.70	66.91	4.50	66.97	4.59
Status (Reference = Window, divorce separated)						
Couple	0.67	0.47	0.71	0.46	0.69	0.46
Education	3.18	2.83	2.71	1.97	2.67	2.48
Work for livelihood	2.29	2.33	2.02	1.99	2.15	2.16
Ownership of residence	4.65	1.38	4.47	1.37	4.56	1.38

Table 4.14 (Continued) Mean and standard deviation of variables used in the study; by religion.

Variable	Buddhist (n=199)		Muslim (n=200)		Total (n=399)	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Living condition (Reference = nuclear family)						
Extend family	0.49	0.50	0.50	0.50	0.49	0.50
Participation in community	3.17	1.63	2.91	1.26	3.04	1.52
Ethics and morality						
Belief	35.97	5.23	38.78	3.49	37.38	4.66
Practice	27.28	5.41	35.29	3.80	31.29	6.15
Family Support						
Physical support	34.30	10.37	33.03	9.29	33.67	9.85
Emotional support	24.48	5.28	22.55	5.66	23.51	5.55
Functional role	16.94	3.36	15.78	3.89	16.36	3.68
Relational support and mutual help	15.21	6.02	13.14	5.21	14.17	5.72
Health condition						
Health condition	9.21	2.76	8.49	2.77	8.86	2.79
Health service in community	6.12	1.10	5.86	1.32	5.99	1.22
Quality of life of elderly	55.91	9.22	53.68	8.78	54.79	9.07

Multiple regression was undertaken in order to determine the net effect of the various variables used in the analysis on quality of life (see table 4.15). For each independent variable, the unstandardized regression coefficients (B) can be interpreted as how much the quality of life of the elderly would change with a one unit change in the predictor variable, when controlling for the effects of other independent variables. The results of a bivariate analysis between quality of life and other variables was

shown in table 4.11, however, these results may be spurious, as they do not control for the effects of other variables.

The analysis was carried out in several steps. In the first step only religion was included in the equation. The results indicated that religion was a significant predictor of quality of life ($p = .009$). However, when health condition was added in the second step, religion became non-significant. This suggests that much of the effect of religion on quality of life operates through health. Buddhists, compared to Muslims, have a better quality of life because they are healthier.

The results of the full model presented in Table 4.15 show that health condition, working roles, emotional support from the family, participation in the community, and family support for relationships significantly affected the quality of life of the elderly. The full set of predictor variables could explain 46 percent of the variation in quality of life in the sample.

Health has the greatest impact on the quality of life of the elderly (Beta=0.453), showing that the elderly with good health had a higher quality of life. This finding is consistent with that of Ward (1984:29) which found that health conditions are the best predictor variable for quality of life, and the idea of Atchley (1980:108) which stated that health is the main factor in human life because it is so strongly associated with satisfaction in life.

Table 4.15 Results of multiple regression of selected variables on quality of life.

Predictor Variable	B	Beta	P
Constant	16.012		
Social and economic factor			
Religion (Reference = Islam)			
Buddhist	.425	.023	.668
Sex (Reference = Female)			
Male	.900	.050	.234
Age	.035	.018	.677
Status (Reference = Window, divorce separated)			
Couple	-.123	-.006	.886
Education	.289	.079	.070
Work for livelihood	.670	.160	.001*
Ownership of residence	.147	.022	.601
Living condition (Reference = nuclear family)			
Extend family	-.007	.000	.992
Participation in community	.637	.107	.009*
Ethics and morality			
Belief	-.009	-.005	.910
Practice	.138	.094	.084
Family Support			
Physical support	.069	.075	.200
Emotional support	.227	.139	.020*
Functional role	.004	.002	.974
Relationship support and mutual help	.213	.134	.015*
Health and use of service			
Health condition	1.474	.453	.000*
Public health service in community	.388	.052	.207

* Statistically Significance level 0.05

Multiple R = .68

R² = .46

N = 399

Working also had an influence on the quality of life of the elderly (Beta = .160). Quality of life was higher for those elderly who still worked or earned incomes. This was probably because work provides the elderly with pride that they can take care of themselves, causing them to feel of value and not dependent on other people. This finding is in accordance with the results of the studies of Chawarangoon (1995:83) and Chinantuya (1993:81).

Family support related to emotional condition had a positive influence on the quality of life (Beta = .139). Elderly care includes not only physical care, it also includes giving respect, honor, praise, and support for their participation in religious activities. According to Thai values, parents are regarded as important persons to whom we have to feel grateful. Looking after parents is considered a blessing that will lead one to prosperity, and will give satisfaction to the elderly. The results are consistent with those of Nawachinda and Piromthammasiri (1991), who found that the elderly who have been given greater emotional support had higher levels of life satisfaction

Family support for relationships and independence also had a positive influence on quality of life of the elderly (Beta = .134). This finding can be understood in terms of Roy's Adaptation Theory (referred to in Unipan 1986:160-181) which argues that one of four dimensions of behavioral expressions is adaptation of relationships to enhance the feeling of security of the elderly in order for them to retain an equilibrium between their independence and their dependence on other people. Where this can be achieved, a higher satisfaction with life is attained (Nuychand,1987:84-86; and Siriboon, 1982)

Participation in community activities also had a positive impact on quality of life of the elderly (Beta = .107). Participation in community life compensates for other activities that are lost during the aging process. This positive results is consistent with 'Activity Theory' which argues that the elderly who are able to participate in community activities will be able to meet with people which consequently are able to reduce their sadness and loneliness. It also helps them integrate physically, mentally, and socially into the community, leading to higher satisfaction (Nillert,1996).

The findings indicate that religion does not affect with the quality of life of the elderly after controlling for other factors. However, this does not mean that religiosity (i.e. variation in strength of religious beliefs within religions) does not affect quality of life. Religion links humans to a moral system (Srihaampai, 1988 :21-25). Through morality one can judge what is right and what is wrong or what should do and what should not do. Consequently, persons can live with the others in peace in the society. The findings from studies of Janabrom (1990 : 43) and Kachaphakdi (1995:43) reveal that meditation can increase longevity and decrease and prevent hypertension. Buddhists and Muslims also teach persons need to express his/her gratitude to their parents by taking care of their parents which leads to a better quality of life of the elderly. Although religiosity was not included as a variable in this study, its effect should be more fully investigated in future studies.

Table 4.16 shows the correlations between predictor variables and quality of life for Buddhist elderly (for Muslims the correlation coefficients are shown in Table 4.17). The variable with the strongest effects was health conditions. This is followed by family support for emotional condition, working roles, family support

related to roles and duties, education, participation in community life, family support related to relationship and independence, public health services in the community, age, and ownership of residence. Most of these correlations were positive, with only age having a negative relationship with quality of life of the Buddhist elderly. For Muslims, the results are similar to that observed for Buddhists. The strongest relationship is found for health conditions. This was followed by, in order of strength, family support related to emotional condition, personal practices according to religious principles, family support related to relationships and independence, family support related to roles and duties, ownership of residence, working roles, family support related to physical contorts, participation in community life, public health service in the community, marital status, and age.

Table 4.16 Correlation matrix of selected variables and quality of life: Buddhist elderly

Variable	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17
V1	1.000																
V2	.064	1.000															
V3	-.184*	-.68	1.000														
V4	.108	.355**	-.288**	1.000													
V5	.301**	.217**	.011	.194**	1.000												
V6	.365**	.267**	-.406**	.362**	.255**	1.000											
V7	.155**	.272**	-.224**	.241**	.244**	.355**	1.000										
V8	.022	-.075	-.009	-.115	-.139*	-.194	-.132*	1.000									
V9	.267**	.199**	-.143*	.235**	.322**	.230**	.363**	-.256*	1.000								
V10	-.95	-.282**	.040	-.221**	-.297**	-.109	-.232**	-.057	-.107*	1.000							
V11	.079	-.188**	-.084	-.144*	.121*	-.080	.107	.058	.175**	.212*	1.000						
V12	.104	-.127*	.006	-.137*	-.002	-.235**	-.068	.470**	-.133*	.085	.186**	1.000					
V13	.369**	-.116	-.218**	.049	.049	.043	.080	.351	.097	.010	.254**	.598**	1.000				
V14	.312**	-.024	-.115	.082	.164*	.095	.080	.109	.199*	-.049	.199**	.334**	.569**	1.000			
V15	.224**	-.136*	-.040	-.074	-.005	-.174**	-.029	.322**	.010	.064	.269**	.678**	.609**	.449**	1.000		
V16	.568**	.134*	-.203**	.147*	.218**	.376**	.140*	-.101	.221**	-.181**	-.178**	-.159*	.132*	.170**	-.096**	1.000	
V17	.219**	.044	-.031	.014	.058	-.037	.067	.128*	.112	.059	.145*	.161*	.208*	.283**	.283**	.182*	1.000

Remark V1 = Quality of life V2 = Sex V3 = Age V4 = Marital Status V5 = Education V6 = Work for livelihood V7 = Ownership of residence V8 = living condition
 V9 = Participation V10 = Belief V11 = Practice V12 = Physical Support V13 = Emotional Support V14 = Functional Support V15 = Relation Support

V16 = Health V17 = Health Service

* Statistically Significance Level at 0.05

** Statistically Significance Level at 0.01

Table 4.17 Correlation matrix of selected variables and quality of life: Muslim elderly

Variable	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17
V1	1.000																
V2	-.023	1.000															
V3	-.126*	-.059	1.000														
V4	.128*	.364**	-.248**	1.000													
V5	.195**	.064	-.033	.164**	1.000												
V6	.241**	.074	-.401**	.301**	.303**	1.000											
V7	.253**	.109	-.205**	.339**	.217**	.386**	1.000										
V8	.049	.020	.078	-.083	.095	-.045	-.015	1.000									
V9	.202**	.006	-.106	.102	.154*	.163*	.062	.047	1.000								
V10	-.026	-.032	.030	-.121*	-.150**	-.117	-.135*	-.088	-.119*	1.000							
V11	.282**	.269**	-.038	.258**	.227*	.212*	.129	-.007	.169*	.028	1.000						
V12	.205**	-.010	.202**	-.131*	.012	-.308**	-.025	-.378**	.041	.039	-.036	1.000					
V13	.346**	.053	.026	.086	.159*	.028	.081	.273*	.024	.056	.148*	.569**	1.000				
V14	.241**	.001	.014	.011	.059	-.023	.035	.100	-.049	.188**	.193**	.398**	.650**	1.000			
V15	.280**	-.181**	.248**	-.108	.172**	-.166**	.004	.115	.091	.149*	.018	.592**	.492**	.430**	1.000		
V16	.500**	.051	-.240**	.126*	.168**	.275**	.202**	-.069	.014	-.034	.141*	-.086	.112	.124*	.013	1.000	
V17	.196**	.118*	.118*	.090	.023	-.014	.003	-.047	.001	.049	.215**	.191*	.203*	.344**	.205**	.148*	1.000

Remark V1 = Quality of life V2 = Sex V3 = Age V4 = Marital Status V5 = Education V6 = Work for livelihood V7 = Ownership of residence V8 = living condition

V9 = Participation V10 = Belief V11 = Practice V12 = Physical Support V13 = Emotional Support V14 = Functional Support V15 = Relation Support

V16 = Health V17 = Health Service

* Statistically Significance Level 0.05

** Statistically Significance Level 0.01

In order to determine the net effect of each of the variables on quality of life of each of the two religious groups, multiple regression models were estimated separately for each of the religious groups (see table 4.18).

**Table 4.18 Results of multiple regression analysis of quality of life of the elderly:
by religion**

Variables	Buddhist			Muslim		
	B	Beta	p	B	Beta	p
Constant	17.528			13.815		
Social and economic factor						
Sex (Reference = Female)						
Male	-.650	-.035	.564	-1.730	-.009	.118
Age	.066	.034	.560	-.003	-.019	.772
Status (Reference = Window, divorce separated)						
Couple	-.850	-.044	.479	.002	.001	.987
Education	.497	.152	.013*	-.114	-.026	.683
Work for livelihood	.903	.228	.001*	.352	.080	.267
Ownership of residence Living condition (Reference = nuclear family)	-.255	-.038	.534	-.693	.108	.087
Extend family	.336	.018	.772	-.268	-.015	.806
Participation in community	.509	.090	.147	.883	.120	.044*
Ethics and morality						
Belief	.026	.015	.800	-.003	-.015	.806
Practice	.049	.029	.641	.413	.179	.005*

Table 4.18 (Continued) Results of multiple regression analysis of quality of life of the elderly: by religion

Variables	Buddhist			Muslim		
	B	Beta	p	B	Beta	p
Family Support						
Physical support	.013	.015	.860	.117	.123	.153
Emotional support	.271	.155	.064	.220	.142	.104
Functional role	-.046	-.017	.802	-.020	-.009	.909
Relational support and mutual help	.282	.184	.002*	.202	.120	.134
Health and use of service						
Health condition	1.517	.454	.000*	1.341	.422	.000*
Public health service in Community	.592	.071	.220	.248	.037	.550
N =	199			200		
Multiple R =	.71			.67		
R ² =	.50			.44		

* Statistically significance level 0.05

The regression for the Buddhist elderly explained 50 percent of the variation in quality of life. The variable with the strongest influence was health conditions, followed by working roles, family support related to relationships and independence, and education consecutively. As previous studies have shown, health has the greatest influence on quality of life Soamprayoon (1982:77) and Apichatbutr (1997). Employment increases independence and leads to greater life satisfaction (Chinatuya, 1993:81; Nuchsaengplee, 1989). As regards family support related to relationships and independence, providing support for the independence of the elderly promotes their life satisfaction (Nuychand, 1987:84-86; and Siriboon, 1987). Education can lead to better life conditions through increased life experience, enhancement of knowledge, and the use of thoughts in leading a suitable life. Education is also positively related to income. The positive impact of education on quality of life of the elderly found in this study is consistent with the studies of Nuchsaengplee (1989) Chawarangoon (1995:83) and Somboonsith (1992:83)

The regression equation for Muslim elderly explained 44 per cent of the variation in quality of life. As with Buddhists, the strongest impact was for health conditions. This was followed by personal practices according to religious principles, and participation in community life. Muslims believe that every life owed to God, who was the creator of everything. Believers therefore sacrifice themselves to God, and strictly practice according to the five religious principles (Chitmuad, 1981:97-145). Personal practices according to religious principles have been previously found to influences quality of life (Wasi, 1993:3; Chenobrom, 1991:43; and Kotchapakdee, 1985:43), which found that studying scriptures and going to mosque would bring peace of mind and lead to a better quality of life. Those elderly who participated in

community activities would have chances to meet people of similar ages, reducing time for sadness or loneliness, and resulting in higher life satisfaction. This is in accordance with the Activity Theory (Chenobrom (1991:32-37) and the idea of Berghorn et al. (1987:343-344) as well as the study results of Chinantuya (1993:22) and Nillert (1996).

Comparing factors influencing the quality of life of Buddhist and Muslim elderly, it was found that a common factor was health conditions. However, other important influences varied for the two groups. This suggest that agencies should adapt their plans and programs to take into account these differences in order to help maximize the quality of life of both Buddhist and Muslim elderly.

Chapter 5

Conclusions and Recommendations

This study has compared the quality of life, ethics and morality, family support, health conditions and the use of services, between Buddhist and Muslim elderly in the province of Ranong. The study also analyzed the determinants of quality of life of the elderly.

Data used in the study were from February 26, - April 20, 1999. The sample covered 403 elderly aged 60-74 years old. Of this number, 203 were Buddhist and 200 Muslim. The respondents were sampled from Kapur District and Suksamran Sub-district in Ranong Province. A structured questionnaire was used to collect the data.

The data were analyzed by computer, with percentage distributions used to describe the general characteristics of the sample. Measures of central tendency and dispersion – means and standard deviations -- were used in interpreting factors related to behavior and morality, family support, health conditions and quality of life. Differences between the two religious groups were tested using t-test, and through using ordinary least squares multiple regression to determine the variables that had an influence quality of life.

5.1 Conclusions

Both groups of elderly contained slightly higher proportions of females than males. The majority of respondents were aged 60-65 years old, followed by 70-74 years old. The average age of the sample was 67 years. Most respondents were married, and the majority had a primary education or lower. Most still engaged in an economic activity, with their occupations mostly related to agriculture (rice farmers, fruit-tree planters, ranchers).

The majority earned incomes from their occupation and other sources of less than 2,000 Baht per month, with the Buddhist elderly earning an average income of 2,042 Baht per month while the Muslim elderly earned an average income of 1,449 Baht per month. Most of lived in extended families (with their offspring).

In comparing factors related to desired behavior and morality (beliefs and personal practices) it was found that beliefs and personal practices according to religious principles were different for the two religious groups. Beliefs differed in regard to the issues of whether or not heaven and hell really exist, sinners will have to reply for their bad karma they had committed, making merit will help one go to heaven, and committing sin would push the sinner to hell. Their personal practices were different on every item. The highest mean score was for refraining from consuming intoxicants, while the lowest mean score was for transmitting morality to offspring. In general, ideas, beliefs and personal practices according to religious principles were stricter for the Muslim elderly than for the Buddhist elderly.

In comparing family support related to physical comforts, emotional condition, roles and duties, and relationships and independence, it was found that in general family support related to physical comfort did not differ between the groups. The highest mean score was for the offspring's approval for their taking a nap, while the lowest mean score was for the offspring's provision of a private place.

For family support of emotional conditions, differences were found in the issues of providing items according to needs, attention and queries about happiness and suffering, bidding goodbye when leaving the house and providing freedom to choose TV channels. For Buddhists, the highest mean score was giving chances to the elderly to watch TV among, and for Muslims, not letting them alone when taking vacation. Overall, the Buddhist elderly were provided better support related to emotional condition than were Muslim elderly.

In comparing family support related to roles and duties, differences were found in issues about encouraging the elderly to become members of various clubs in the community, and suggesting that the elderly to take up hobbies. The highest mean score was for the item related to the offspring's obedience to warnings or reprimanding, while the lowest mean score was for suggestions by offspring for the elderly to take up hobbies. Overall, the Buddhist elderly received better family support related to roles and duties than did the Muslim elderly.

Significant differences were found among the two groups for several items related to relationships and independence. These items included; giving money sufficient for everyday expenses, taking the elderly to join entertainment activities, provision of materials for performing religious ceremonies, and providing access to

news. The highest mean score for Buddhists was for the item giving sufficient money for everyday expenses, and the lowest score was for taking the elderly to perform religious ceremonies on important days. For the Muslims, the highest mean score was for providing access to news, and the lowest mean score was for taking the elderly to join entertainment activities. In general the Buddhist elderly received better family support in the areas of relationships and independence than the Muslim elderly did.

There were important differences in health conditions and the use of public health services in the community, between the two groups. The differences were found in the ability to help themselves in everyday life activities and health condition. Overall, the health condition of the Buddhist elderly was better than for the Muslim elderly. There were also differences in the ability to ask for consultation from public health officials and visits by them, as well as the ability to ask for help of neighbors in case of crisis. In general, the Buddhist elderly had better access to public health services than did the Muslim elderly.

Bivariate analysis of aspects of the quality of life of the elderly revealed that there were no differences between the Buddhist and Muslim elderly on being proud of oneself, fulfillment of hopes in life, feeling of being luckier than others and regarding the present as the best time in life. Significant differences were found for the items of: not feeling lonely, life not being boring, thinking that society was getting better, and feeling not old and weak. Both groups of the elderly had the highest mean score on the issue of being proud of oneself, followed by fulfillment of hopes in life. The lowest mean score was for the feeling of not being old and weak. Overall, the Buddhist elderly had a better quality of life than the Muslim elderly did.

However, after controlling for other variables (Multivariate Analysis) in regression it was found that there were no significant differences in the level of the quality of life of the two groups. Factors that had influences on quality of life of the elderly in general were health conditions, working roles, family support for emotional conditions, family support for relationships and independence, and participation in community life. The predictor variables could help explain 46 percent of the variation in the quality of life of the elderly.

In comparing factors that had influences on quality of life of the elderly separately for each of the religious groups, it was found that factors having an influence on the quality of life of the Buddhist elderly were: health conditions, working, family support related to relationships and independence, and education. For Muslims, the factors affecting quality life were: health conditions, personal practices according to religious principled, and participation in activities.

5.2 Discussion

Factors related to behavior and morality (beliefs and personal practices according to religious principles) of Buddhist and Muslim elderly were found to be statistically different at the level of 0.05 ($p = .000$). The results suggest that the Muslim elderly had stronger beliefs and practiced more strictly according to religious principles than did the Buddhist elderly. This is because Islam influences the Muslim elderly to hold fast to religious principles, and to dedicate their practices to God and to fellow human beings. Moreover, they are constantly urged to do good in this world and expect favorable responses in the next world, and remember that every thing has

its ending date fixed by God. (Muhammad Hudson, 1991 : 48). As for the Buddhist elderly, they tend to lag in their practices according to moral principles, because Buddhism teaches to seek causes and results of everything, not hold fast to anything, that everything must be in accordance with the law of the learner, and that people should dissolve their greed and desires by way of pacifying the mind. When the mind is calm, wisdom will come to help them understand correctly. Peace with oneself is called *nivarna*(*nippan*) (Prayuthto, 2542 : 54) and *nivarna* is the ultimate goal but is regarded as very difficult to learn and to practice for common people. This has caused differences in concepts on desired behavioral conduct and morality. The finding that Muslim elderly have stronger beliefs and practices according to their religious principles than do Buddhist elderly, is consistent with the third hypothesis of the study.

Elderly of both groups received similar levels of family support for physical comforts. Physical comforts are the easiest way for children to show their support for their elderly parents. The teachings of both religions stress that offspring must repay their parents. For example, in Islam heaven is considered to be under both soles of the mother (Chitmuad, 1991 : 337). Buddhism teaches that looking after one's parents is a great blessing in life. The study found that most of the elderly of both groups lived in extended families, therefore opportunities to obtain good care from their offspring were high. The results are consistent with those from the study by Chayowan and others (1992) that found no differences in family support related to physical comforts. However, the results are not consistent with the second hypothesis of the study, that

stated Muslim elderly would received better family support related to physical comforts than would the Thai Buddhist elderly.

There were, however, statistically significant differences in terms of family support for the emotional condition of the elderly. Buddhist elderly received higher levels of support than did Muslim elderly. This is related to the higher average incomes of the Buddhist compared to the Muslim elderly. Also, the period of widowhood, divorce/separation of the Muslim elderly was longer than the Buddhist elderly, making their offspring's chances of buying things necessary for their everyday use greater. Most of the elderly and their families were engaged in agriculture and fishery, especially for the Muslims, and most lived in extended families. Therefore, the opportunities of them being asked about happiness and suffering, as well as being bidden goodbye while leaving the house, was less than for the Buddhist elderly. The study of Anuwatyanyong (1997 : 128) found that children of the Muslim elderly who lived in other provinces came to visit them less frequently than did the children of Buddhist elderly. Regular visits were associated with greater happiness and decreased loneliness. The findings are not consistent with the second hypothesis of the study that Muslim elderly would receive better family support than the Buddhist elderly.

Buddhist elderly were significantly more likely than Muslim elderly to receive family support related to roles and duties. Muslim elderly, compared to Buddhists, received less support from their offspring to participate in various activities in the community, as well as being less likely to be advised for them to take up hobbies. This is probably because they were less able than the Buddhist elderly to

participate in community life. In addition, the tasks of Muslim elderly in regard to religious practices and their working roles were more onerous, plus they were more likely to have regular sickness than the Buddhist elderly, making it very difficult for them to participate in community activities and take up any hobby. The results are not consistent with the second hypothesis that Muslim elderly, compared to Buddhists, would receive better family support related to roles and duties.

There was also a significant difference in the levels of family support for relationships and independence of the elderly. This may be because the family sizes and kin networks of Muslims are larger than for Buddhist. In addition, most Muslim families were engaged in agriculture, which was related to the lower incomes of Muslim families compared to Buddhist families. This, in turn, led to differences in providing sufficient money for everyday use for the elderly as well as in the issue of providing equipment for accessing news, such as a TV or radio. In terms of providing materials for performing religious activities, it was found that Islamic activities required less material than did Buddhist activities. Regarding the issue of taking the elderly to join entertainment activities, religiously strict Muslims do not support participation in fairs or entertainment places. The results, are not consistent with the second hypothesis that the Muslim elderly would received higher levels of support related to relationships and independence than the Buddhist elderly.

Compared to the Muslim elderly, Buddhist elderly had significantly better health conditions and better access to health services. The better health conditions of the Buddhists may have been influenced by other variables such as level of education, incomes, religious beliefs, and behavior in looking after their health. The results are

consistent with the study results of Liewprueksan (1996 : 74), who found that the Buddhist elderly had better behavior in looking after their health conditions than did the Muslim elderly.

Most public health officials in the areas were Buddhists who had come from other areas, and who did not live regularly in the areas where they worked. But Muslims were more likely to support community leaders and providers who were followers of Islam. This resulted in a lack of visits to providers and poor treatment. There were differences in the probability of members of the two religious groups asking for consultations and advice related to health problems. In addition, there was an inadequate supply of good public health services in general. For the assistance from neighbors in critical times, Buddhist elderly received higher levels of assistance from neighbors, in spite of the fact that the family system was larger for the Muslims. This is consistent with the study of Anuwachanyong (1997 : 101). The results from this study are consistent with the fourth hypothesis that proposed that the Buddhist elderly would have better health conditions and greater access to public health services in community than the Muslim elderly.

The Buddhist elderly had a significantly higher quality of life than did the Muslim elderly. This is because they scored higher on many components of quality of life such as health, economic conditions, types of activities, education, independence etc. Factors related to family support and population characteristics also influence the quality of life. Health condition, level of education, and income were higher among the Buddhist elderly than the Muslim elderly. Family support related to emotional

condition, roles and duties, and relationships and interdependence, were also better for the Buddhist than for the Muslim elderly

Only on factors related to desired behavior and morality did the Muslim elderly score higher than the Buddhist elderly. This assessment of quality of life in this study was based on the evaluation of satisfaction obtained by the elderly, which was concerned with attitudes towards oneself, others, society and the world. It was an overall response from a wide range of the components of quality of life. These findings are consistent with the first hypothesis that the quality of life of Buddhist elderly is better than the Muslim elderly.

After controlling for the effects of all 17 predictor variables, it was found that there were no significant differences between members of the two religions in terms of quality of life. The predictor variable explained 46 percent of the variation in the quality of life. The most important explanatory variable was health condition, followed by working, family support for emotional condition, family support for relationships and independence, and participation in activities. Many of the bivariate relationships between independent variables and the quality of life disappeared when controlling for other variables

The explanatory variables having the strongest impact on the quality of life of the Buddhist elderly, were health condition, followed by working, family support related to relationships and independence, and education. The predictor variables could help explain 50 percent of the variation in the quality of life. The most influential factor on the quality of life of the Muslim elderly was health conditions. This was followed by personal practices according to religious principles, and

participation in community life. The predictor variables explained 44 percent of the variation in quality of life. Health condition had the strongest impact on quality of life for both groups. This is consistent with the studies of Ward (1984: 29) and Soamprayoon (1982 : 77) that found that health condition was the best predictor of quality of life of the elderly. The finding is also consistent with fifth and sixth hypothesis that stated that economic and social factors, factors related to desired behavior and morality, and factors related to health and the use of services influence quality of life as the elderly, with health condition the most influential factor.

The importance of working on quality of life has also been noted by Chawarangoon (1995: 83), and Chinantuya (1993 : 81). Family support for relationships and independence, meaning monetary assistance, meeting with friends, performing religious activities which make the elderly happy, were found to be important predictors of elderly quality of life in a study by Nuychand (1987 : 84). Somboonsith (1995:83), found that highly educated persons are likely to have a higher quality of life than those with lower levels of education. All these findings are consistent with the results of the current study.

Other variables that influence the quality of life of the Muslim elderly included personal practices according to religious principles. This is consistent with the findings of Kotchpakdee (1995: 43) and Lymchairunreang (1993: 58) that found that studying the scriptures and going to the mosque led to peace to the mind and contributed to a good quality of life. The importance of participation in community life in promoting a good quality of life is consistent with the findings of Nillert (1996) and Chinantuya (1993: 22).

The elderly in this study belonged to different religions and the influences on their quality of life differed according to their religion. Some of the difference, was socio-economic in nature. The Buddhist were more likely to be working than the Muslims, and hence to have higher incomes. The families of the Buddhist elderly, compared to the Muslims, also gave more money for their everyday life activities. The Buddhist elderly were also, on average more highly educated than the Muslim elderly. The effect of education on quality of life was greater for the Buddhists than the Muslims, perhaps reflecting a greater importance of education for Buddhists. Education, however, can also have an indirect effect on quality of life through its relationship with higher status occupations and incomes. Religion beliefs and practices were more important in determining the quality of life for the Muslim elderly than it was for the Buddhist elderly. The nature and effect of participation in community life also differed among the two religious groups, indicating that the way that communal life is organized by members of the different religions varies, and this has effects on the quality of life.

5.3 Recommendations

5.3.1 Recommendation for policy makers

(1) Health conditions are the most influential factors that impact upon the quality of life of the elderly of both Buddhists and Muslims. As the number of elderly is increasing, the government should promote programs for developing more health personnel in order that the elderly can care for themselves, enjoy good health, and receive high standard qualitative and qualitative health services from the

government. This would help both directly and indirectly to elevate the quality of life of the elderly.

(2) Access to public health services in the community differed by religion, with the Buddhist elderly having better access than Muslims. The government should encourage followers of Islam with good education to work in the Ministry of Public Health in order to take part in assisting and looking after the health conditions of Muslims in more Thai Muslim communities. This would help reduce the differences of services between the two religious communities and also help raise the work efficiency as well as to build confidence of Thai Muslim communities in the state's public health services.

(3) Provincial health offices should give important consideration to encouraging more Muslim official and give high priorities for their employment in Thai Muslim areas. They would have the same religious beliefs and would understand the local customs and culture of the Thai Muslim people better. This would also contribute to providing better services to the community.

(4) Work helps improve quality of life. Therefore the government should encourage and support employment opportunities of the elderly.

(5) Family support related to emotional conditions and to relationships and independence influence quality of life of the elderly. The government should establish policies to promote the role of the family in looking after the elderly, and for planting values of morality and a feeling of indebtedness in the youth of the new generation.

5.3.2 Recommendation for Implementers

- **For Buddhist and Muslim elderly.**

Health conditions have the greatest influence on quality of life of elderly belonging to both religious groups. Therefore, the provincial health office, the district health office, the community hospital, health stations and village administration should provide information to the elderly in their respective areas. This information should emphasize the available programs, such as home health care, and work with the public health coordination committee at the district level.

- **For Buddhist elderly.**

(1) Working has an influence on the quality of life of Buddhist elderly. The provincial administration should support and see to it that such local agencies as community development, provincial labor offices, village administrative organization etc. provide training courses in occupations suitable for the elderly. New knowledge and ideas should be given in preparation for proving care for the aged in the future

(2) Family support related to relationships and independence also has an influence on the quality of life of the Buddhist elderly. Agencies such as the provincial education offices, the district education offices, community development office, and the provincial public health offices should include in their work plans programs for promoting relationships with and the family in looking after the elderly. In doing so ideas and principles of religions, community culture, and local resources and wisdom should be drawn upon.

(3) As education influences the quality of life the provincial and district education offices should promote education programs within and out of the school system. This should be regarded as preparation for new generations to age with a good quality of life.

● **For Muslim elderly**

(1) Factors related to desired behavior and morality have strong influences on the quality of life of Muslim elderly. Agencies such as the provincial office of primary education, the district education offices, and village administrative organizations, should develop programs for promoting practices according to religious principles. Also they should help in promoting moral principles to youth on a wider scale. This should undertaken especially during periods of important religious events, with agencies taking part and providing support.

(2) Participation in community life improves quality of care for Muslims. Therefore agencies should encourage the elderly to take more active parts in activities at the local level. The activities of various clubs for the elderly should be extended to cover wider areas and should include activities such as self-health care, physical exercise, religious activities and recreation programs. Similar standards should be used in all clubs throughout the province.

(3) The Buddhist elderly have better family support than do the Muslim elderly. Therefore agencies such as the provincial and district public health offices, the provincial education office, and the district education offices, should

promote family support, especially in the area of care for the elderly, that is consistent with religious practice.

5.3.3 Suggestion for future research

(1) Qualitative research should be conducted in order to learn how Thai Muslims assess their quality of life.

(2) A study should be conducted on methods of providing quality support of elderly by their family that is consistent with family life and culture in the context of Thai Muslim communities.

(3) Extend the study to cover larger groups of the population, for example, covering bordering areas in the South such as Yala, Pattani, and Narathiwat Provinces.

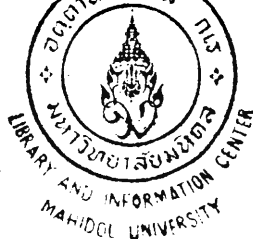
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Research Instrument

Subject: A comparative study on the quality of life among Thai Buddhist and Thai Muslim elderly in Ranong Province

Section 1 Demographic, social and economic aspects of elderly in Ranong.

Instruction: Please insert information in the place left blank, or give a check mark in the bracket corresponding to the selected answer.

1. Sex Male Female
2. Your religion is Buddhism Moslem
3. Currently you are years old.
4. Your present marital status is
 - have spouse (living with husband)
 - have spouse (living with one wife)
 - have spouse (living with more than one wife)
 - widowed
 - divorced / separated
 - other, please specify.....
5. What is your highest level of education (specify how many years you studied.....years)
 - no schooling at all
 - primary education: Prathom1-4 (1 2 3 4)
 - junior secondary education: Mattayom1-6 (5 6 7 8 9 10)
 - senior secondary education or equivalent of :Mattayom 7-8 (11 12)
 - higher than senior secondary education :university (13 14 15 16)

6. Currently your average regular income per month amounts tobaht

6.1 Are you currently working and earning income?

yes (specify type of work.....) no (skip to Q11)

7. Your average income earned from work/per month amounts tobaht

8. Adequacy of your income for living expenses

enough to save just sufficient insufficient

9. Security of your present work

very secure fairly secure not secure insecure

10. How is your satisfaction with your present work?

high satisfaction medium satisfaction low satisfaction

unsatisfied

11. The house in which you are staying is:

your own house house of offspring or close relatives rented house

employer's house other (specify.....)

12. Your place of living

has space or room for your personal use

have to share with others, but personal space is made available

have to share with others without personal space

other (specify.....)

13. Currently do you own any land?

yes, on which your current house is situated, and also at other place

yes, only at your current living place

no, not at all

other (specify.....)

14. Beside the elderly club, are you a member of any other group performing community activities?

no (skip to Q16) yes (being member ofgroup)

15. How often do you join your clubs or group

every time sometimes not at all

16. Are you satisfied with your participation in the community where you live?

high satisfaction medium satisfaction low satisfaction

17. Do you feel that you are useful to the community where you live?

high medium low

18. Characteristics of the family in which you currently live.

living with spouse and children (small family)

living with offspring (large family)

living alone living with spouse

other

Section 2. Desired behavioral conduct and moral factors related to religious principles followed by the elderly.

Instruction The interviewer should ask the elderly about his or her beliefs and ways of conducting themselves in everyday activities, following the choices placed below and give a circle in the space corresponding to the answer of the elderly

Extreme disbelief : meaning that the statement is not at all consistent with the respondents opinions. .

Disbelief : meaning that the statement is largely not consistent with the respondents opinions.

undecided : meaning that the respondent is not sure of the opinion about the statement.

belief : meaning that the statement is consistent with the respondents opinions.

Firm belief : meaning that the statement is completely consistent with the respondents opinions.

2.1 Beliefs.

Belief	Extreme Disbelief	Dis- belief	Undeci ded	Belief	Firm belief
1. Good deeds produce good results, bad deeds produce bad results	1	2	3	4	5
2. Make merit you'll go to heaven, commit sin you'll go to hell	1	2	3	4	5
3. Heaven and hell really exist	1	2	3	4	5
4. Reincarnation is for repaying that person's own karma	1	2	3	4	5
5. Whoever does evil or commits sin after death he will have to repay for such bad karma	1	2	3	4	5
6. Heaven is in the heart, hell is in the mind	1	2	3	4	5
7. Strictly religious persons are outmoded, lagging behind.	5	4	3	2	1

2.2 Self conduct according to the religious principles

never : meaning that the statement has never been practiced by the respondent at all.

Seldom : meaning that the statement has been seldom practiced by the respondent.

Regularly every month : meaning that the statement has been practiced regularly every month.

Regularly every week : meaning that the statement has been practiced regularly every week .

Regularly every day : meaning that the statement has been practiced regularly every day.

Self conduct according to religious principles.

Practice	Never	Seldom	Regular Every Month	Regular Every week	Regular Every Day
1. Have you ever asked for blessing to have a good life in the next life? (Have you ever made a wish for you to have a good life in the next life?)	1	2	3	4	5
2. Do you study Moslem scriptures and Dhamma? (Do you read and study Dhamma?)	1	2	3	4	5

Practice	Never	Seldom	Regular Every Month	Regular Every week	Regular Every Day
3.Do you teach religion to children? (Do you transmit Dhamma to offspring?)	1	2	3	4	5
4.When entering old age, do you drink whisky, beer, or consume intoxicant?	5	4	3	2	1
5.Do you observe the fasting precept during Ramadan regularly every day?(Do you observe the five precepts on Sabbath day(wan pra) and other religiously important days?)	1	2	3	4	5
6.Do you undertake Jakat? (Do you go to temple for making merit on religiously important days or other occasions?)	1	2	3	4	5
7.Have you ever exchanged opinions with religious by knowledgable persons?	1	2	3	4	5
8. When entering old age do you take up gambling?	5	4	3	2	1
9. Do you worship regularly everyday? (Do you pray before going to bed regularly everynight?)	1	2	3	4	5

Remarks: (Points 4,7,8 for asking both Thai Buddhist and Thai Muslim)

Section 3. Family support of the elderly.

Instruction: The interviewer should ask the elderly about receiving various types of support from their family. According to the choices placed below they choose for their answer among: not true at all; slightly, half i true, mainly true; mostly true, and circle in the space corresponding to the answer of the elderly.

Not true at all : meaning that the statement is not consistent with the feelings of the respondent.

Slightly true : meaning that the statement is slightly consistent with the feelings.

Half true : meaning that the statement is only half consistent with feelings.

Mainly true : meaning that the statement is mainly consistent with feelings.

Mostly true : meaning that the statement is completely consistent with the feeling.

Statement	Not true At all	Slightly true	Half true	Mainly true	Mostly True
Physical Support					
Your offspring or relatives					
1. Provide/purchase suitable clothes for you.	1	2	3	4	5
2. Provide personal belongings suitable for your daily activities	1	2	3	4	5
3. Provide nutritious food for you	1	2	3	4	5
4. Provide you with a living place with privacy	1	2	3	4	5
5. clean you bathroom and toilet	1	2	3	4	5
6. Keep your bedding tidy and Clean	1	2	3	4	5
7. Allow you to take a nap In the afternoon	5	4	3	2	1
8. Support you to have physical exercise	5	4	3	2	1
9. Provide ordinary medicines for your own use	1	2	3	4	5
10.Observe you to take medication when sick	1	2	3	4	5
11. Take you to the doctor or public health authorities when you have health problems	1	2	3	4	5

Statement	Not true At all	Slightly	Half true	Mainly true	Mostly True
Emotional Support					
Your offsprings or relatives					
12. Leave you alone when they take vacation	5	4	3	2	1
13. When you tell stories they listen till the end with attention	1	2	3	4	5
14. Buy things according to your needs.	1	2	3	4	5
15. Being attentive to your suffering or happiness and ask about it occasionally	1	2	3	4	5
16. Inform you when they leave the house.	1	2	3	4	5
17. Give you opportunities to choose television programmes according to your wish.	1	2	3	4	5
18. Each day you feel very much unengaged and bored	5	4	3	2	1
Roles and duties					
Your offspring or relatives					
19. Encourage you to become member of clubs or activity groups in the community	1	2	3	4	5
20. Trust you and let you help looking after children or perform household chores.	1	2	3	4	5
21. Come to discuss problems with you	1	2	3	4	5
22. Argue when you give them a reprimand or warning.	5	4	3	2	1
23. Advise you to take up suitable hobbies.	1	2	3	4	5

Statement	Not true At all	slightly	Half true	Mainly true	Mostly True
Relationships and independence					
Your offspring or relatives					
24. Give you little money, not enough for daily expenses	5	4	3	2	1
25. Take you to join fairs or annual festivals	1	2	3	4	5
26. Take you to visit relatives or close friends	1	2	3	4	5
27. Take you to perform activities on religiously important days	1	2	3	4	5
28. Provide you with material required for performing religions activities	1	2	3	4	5
29. Provide you with materials or equipment that transmit news to you such as newspapers, TV or radio etc.	1	2	3	4	5

Section 4. Health conditions and the use of services.

Instruction: The interview circle the choice provided by the respondent.

Choices are “yes” “no” and “don’t know”.

“yes” : meaning that the statement is consistent with respondents experience.

“no” : meaning that the statement is not consistent with respondents experience.

“don’t know” : meaning that the elderly has no experience related to the statement.

Statement	Yes	no	Don't know
Health conditions			
1. Currently you feel that you are strong	1	0	0
2. You can eat as usual	1	0	0
3. You take physical exercise regularly	1	0	0
4. You can help yourself with daily life activities such as going to the bathroom, taking a bath, eating meals, washing clothes, cooking rice etc.	1	0	0
5. You feel tired easily and pant regularly	0	1	0
6. Each night you can sleep about 3-5 hours or longer	1	0	0
7. Currently you have regular sickness (if yes) specify.....	0	1	0
8. You have disability (if yes) specify.....	0	1	0
9. You often have constipation	0	1	0
10. You have pain at joints, knees or back regularly	0	1	0
11. You often lose consciousness or faint	0	1	0
12. You have the symptoms of a Cystitis	0	1	0
13. Frequently you feel worried, anxious and unhappy	0	1	0
14. You have to go to the doctor and public health authority regularly every month because of health problems	0	1	0

15. Generally you consider your health as	Very bad	Some what bad	Fair	Good	Very good
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Statement	Yes	no	Don't know
Health services in the community			
1. When you are slightly sick, you can ask for medication from the public health authority in the community	1	0	0
2. When you are severely sick, you can go for treatment at the nearest place available at all time.	1	0	0
3. You cannot use the cared for the aged to ask for services from the health station and the branch office of the Accelerated Rural Development Bureau.	0	1	0
4. Currently public health authorities come to check health condition of the elderly at their home	1	0	0
5. Volunteer for health service come to visit you at your house regularly	1	0	0
6. neighbours can not help you out when crisis occurs	0	1	0
7. If your family has problems regarding the task of looking after your health, you can discuss them with the public health authorities in the community	1	0	0
8. If the family cannot look after you, the neighbors can help you out	1	0	0

9. Generally you consider the public health service in the community nearest to your home as	Very bad	Bad	Fair	Good	Very good
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Section 5. Evaluation of the quality of life of the elderly.

Instruction The interviewer should ask the elderly how he/she looks at his/her own life. All of the statements concern their different ways of looking at themselves. Choices are completely disagree; disagree; undecided; agree; completely agree. A circle ○ should be placed into the block corresponding to answer of the elderly.

Completely disagree : meaning that the statement is inconsistent with the opinions, feelings and thoughts in every way.

Disagree : meaning that the statement is mainly not consistent with opinions.

Undecided : meaning that the respondent is not sure of his or her opinions, feelings and thoughts.

Agreed : meaning that the statement is consistent with the respondents feelings and opinions.

Completely agree : meaning that the statement is consistent with the respondents opinions, feelings, and thoughts in every way.

Statement	Completel ydisagree	Dis- agree	Un- decided	Agree	Completel y Agree
1. When age advances you feel happier than expected	1	2	3	4	5
2. During the past period of your life you feel that your are luckier than your acquaintances.	1	2	3	4	5
3. The present time is the most lonely period of your life.	5	4	3	2	1
4. You feel as happy as when you were younger.	1	2	3	4	5
5. Your life is happy as it should be	5	4	3	2	1
6. The present time is the best period of your life	1	2	3	4	5
7. Most of the things you do are Repetitions and boring	5	4	3	2	1
8. You expect some good things to happen to you in the future	1	2	3	4	5
9. Things you are doing still keep you interested as before	1	2	3	4	5
10. You feel old and weakened	5	4	3	2	1
11. Thinking of the past, you feel very proud of yourself.	1	2	3	4	5
12. If it could be re-started, you would go back to start the same way again.	5	4	3	2	1
13. You look strong when compared with others of the same age	1	2	3	4	5
14. You still have plans to be carried out in the future.	1	2	3	4	5
15. Thinking of the past, you are satisfied with your needs	5	4	3	2	1
16. In comparison, you seem sadder than other people.	5	4	3	2	1
17. Your hopes have been fulfilled to an appreciable extent.	1	2	3	4	5
18. You feel that the society is getting worse, not getting better.	5	4	3	2	1
19. Generally, you are happy with life	Completely Unhappy	Un- Happy	Fairly Happy	Happy	Very happy

This is a form for interview to evaluate reliability sincerity, and intention of the informant. The interview will assess the answers by giving marks consecutively 1-5 as follows:

Low	1	2	3	4	5 high
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List of qualified persons in charge of examining the authenticity of the questionnaire forms:

Names of qualified persons	Place of work
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- Wat Rajathiwas School, 1967–1974 Senior Secondary Course, Section of Science.
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 - Chief of Mamu Health Station, Ranong Province 1983–1987
 - Assistant District Health Officer, Kraburi District, Ranong Province 1988– 1990
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