Factors Predicting Psychological Well-being of Community-residing Older Adults

นิพนธ์ต้นฉบับ

Original Article

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บทคัดย่อ

วัตถุประสงค์: เพื่อวิเคราะห์ความผาสุกทางใจและอิทธิพลของปัจจัยทำนายความผาสุกทางใจของผู้สูงอายุ ได้แก่ การรับรู้ภาวะสุขภาพ ความสามารถในการปฏิบัติกิจวัตรประจำวันขั้นสูง การปฏิบัติกิจกรรมทางศาสนา การรับรู้ความเครียด การรับรู้ความสามารถแห่งตน และการสนับสนุนทางสังคม **วิธีการศึกษา:** กลุ่มตัวอย่างที่ศึกษาคือ ผู้สูงอายุที่อาศัยอยู่ในเขตเทศบาลเมืองแสนสุข จังหวัดชลบุรี ทั้งเพศชายและหญิง จำนวน 400 คน โดยมีอายุตั้งแต่ 60 ปีขึ้นไปและมีคุณสมบัติตามที่งานวิจัยกำหนด ได้มาโดยการสุ่มตัวอย่างแบบหลายขั้นตอน เก็บรวบรวมข้อมูลด้วยแบบสอบถามโดยใช้วิธีการสัมภาษณ์ แบบสอบถามประกอบด้วย1) แบบสอบถามข้อมูลส่วนบุคคล 2) แบบสอบถามการรับรู้ภาวะสุขภาพ 3.) แบบสอบถามความสามารถในการปฏิบัติกิจวัตรประจำวันขั้นสูง 4) แบบสอบถามการปฏิบัติกิจกรรมทางศาสนา 5) แบบสอบถามการรับรู้ความสามารถแห่งตน 6) แบบสอบถามการรับรู้ความเครียด 7) แบบสอบถามการสนับสนุนทางสังคม และ8) แบบสอบถามความผาสุกทางใจ วิเคราะห์ข้อมูลด้วยสถิติพรรณนา และการวิเคราะห์ถดถอยพหุคูณแบบขั้นตอน **ผลการศึกษา**: ผู้สูงอายุมีค่าเฉลี่ยความผาสุกทางใจโดยรวมเท่ากับ 4.28 ± 0.29 จัดอยู่ในระดับปานกลางเมื่อพิจารณาเป็นรายด้านพบว่า กลุ่มตัวอย่างมีความผาสุกทางใจโดยเรียงลำดับจากค่าเฉลี่ยสูงสุดไปต่ำสุด คือ การมีสัมพันธภาพที่ดีกับผู้อื่น (M = 4.63 ± 0.36) การยอมรับตนเอง (M = 4.39 ± 0.37) การมีจุดมุ่งหมายในชีวิต (M = 4.30 ± 0.52) ความสามารถในการควบคุมจัดการกับสิ่งแวดล้อม (M = 4.21 ± 0.46) ความเจริญงอกงามของบุคคล (M = 4.16 ± 0.42) และด้านความเป็นตัวของตัวเอง (M = 3.84 ± 0.47) จากการวิเคราะห์ถดถอยพหุคูณแบบขั้นตอน พบว่า ปัจจัยที่สามารถทำนายความผาสุกทางใจในผู้สูงอายุได้อย่างมีนัยสำคัญทางสถิติ เรียงจากที่มีอิทธิพลสูงสุดไปต่ำสุด คือ การปฏิบัติกิจกรรมทางศาสนา (β =0 .338, P < 0.001) การรับรู้ความสามารถแห่งตน (β = 0.250, P < 0.001) การสนับสนุนทางสังคม (β = 0.165, P < 0.001) และ การรับรู้ความเครียด (β = 0.126, P < 0.05) โดยตัวแปรเหล่านี้สามารถร่วมกันทำนายความแปรปรวนของความผาสุกทางใจในผู้สูงอายุได้ร้อยละ 28.50 (R^2= 0.285, F = 39.02, P < 0.001) **สรุป:** การวิจัยนี้ช่วยส่งเสริมความเข้าใจเกี่ยวกับความผาสุกทางใจในผู้สูงอายุ และปัจจัยที่มีอิทธิพลต่อความผาสุกทางใจ ผู้ให้บริการด้านสุขภาพควรตระหนักถึงความสำคัญในการพัฒนากิจกรรมหรือโปรแกรมที่ช่วยลดการรับรู้ความเครียด ตลอดจนการส่งเสริมการทำกิจกรรมทางศาสนา การรับรู้ความสามารถแห่งตน และการรับรู้การสนับสนุนทางสังคมอันจะช่วยเพิ่มความผาสุกทางใจของผู้สูงอายุเหล่านี้

คำสำคัญ: ความผาสุกทางใจ, ผู้สูงอายุ, ปัจจัยทำนาย

Abstract

Objectives: To investigate the psychological well-being and its predictors of older adults, i.e., perceived health status, Instrumental Activities of Daily Livings (IADLs), practice of religious activities, perceived stress, perceived self-efficacy, and social support. **Methods:** A total of 400 community-dwelling older adults residing in Sansuk Municipality, Chonburi Province participated in this study. The multi–stage sampling was used to recruit the sample. Participants were males and females aged 60 years or older who met the inclusion criteria. They were interviewed using a structured questionnaire to gather data for 1) participants' general information, 2) perceived health status, 3) IADLs, 4) practice of religious activities, 5) perceived self-efficacy, 6) perceived stress, 7) social support, and 8) psychological well-being. Descriptive statistics and stepwise multiple regression were employed to analyze the data. **Results**: The overall psychological well-being among these older adults was at a moderate level (M = 4.28 ± 0.29). The mean scores for sub-scales of psychological well- being in the order of highest to lowest were: positive relations with others (M = 4.63 ± 0.36), self-acceptance (M = 4.39 ± 0.37), purpose in life (M = 4.30 ± 0.52), environmental mastery (M = 4.21 ± 0.46), personal growth (M = 4.16 ± 0.42), and autonomy (M = 3.84 ± 0.47). The stepwise multiple regression analysis demonstrated that factors that significantly predicted psychological well-being in the order of strongest to lowest were the practice of religious activities (β = 0.338, P < 0.001), perceived self-efficacy (β = 0.250, P < 0.001), social support (β = 0.165, P < 0.001) and perceived stress (β = 0.126, P < 0.05), respectively. These factors could explain 28.50% of variance for psychological well-being (R^2 = 0.285, F = 39.02, P < 0.001). **Conclusion**: This study provided the better understanding of psychological well-being and its predictors among community-dwelling older adults. Healthcare personnel should be aware of the importance for developing proper activities or programs aimed at reducing stress and enhancing the practice of religion activities, perceived self-efficacy, and social support. This would help promote psychological well-being among the older adults.

Keywords: Psychological well-being, older adults, predictive factors

Introduction

The number of older people in Thailand has been increasing rapidly from 5.79 millions in 2002 to 6.82 millions in 2007. The number is expected to reach 11 millions in 2020, accounting for 17 percent of the total population.[1] The increase in the number of older people is due to the increase in Thai life expectancy and a lower mortality rate. These have resulted from the advances in medical technology and the thoroughness of the health service system that makes

treatment for various diseases more effective. According to the increase of older population, the promotion, prevention, and rehabilitation of health problems that may occur in the elderly are crucial. Generally, geriatric changes are degenerative with advanced age. This causes the older persons to have both physical and mental health problems. Promoting them to live a happy life with a better well-being, especially their psychological one, should be a prime concern. Psychological well-being is crucial and desirable to the life of human beings. It serves as an indicator of a good quality of life and a successful aging.[2-4]

Psychological well-being is a fundamentally micro-level practice that conveys information about how individuals evaluate themselves and the quality of their lives. It is a positive psychological feature, which is associated with growth and personal development. This well-being was drawn from three separate aspects of developmental psychology including life span development, personal growth, and mental health. Based on the integration of these three aspects, **six dimensions of psychological well-being** were identified.[3,4] The first dimension, ***self-acceptance,*** is having a positive attitude towards one's self and one's life. ***Positive relation with others***, the second dimension, is being able to make and maintain warm, satisfying, and trusting relations with others. The third dimension, ***Autonomy***, is defined as being independent, self-determining, and internally regulated. ***Environmental mastery***, the fourth dimension, is being competent in managing the environment and making use of surrounding opportunities and supports. The fifth dimension, ***Purpose in life***, is defined as having goals and objectives for living, a sense of directedness, and feeling there is a meaning to life. The last dimension, ***Personal growth***, is referred to having feelings of continuing development, being open to new experiences, and having a sense of realizing one's potential. These six dimensions of well-being have been studied in local community and national probability samples and in studies with cross-sectional and longitudinal designs.[5-8]

Based on empirical findings, there are multiple factors that influence psychological well-being. Select factors examined in this study included 1) perceived health status, 2) Instrumental Activities of Daily Livings or IADLs, 3) practice of religious activities, 4) perceived stress, 5) perceived self-efficacy, and 6) social support. Perceived health status is the perception of the older adults on their overall health status. It was significantly associated with psychological well-being (r = 0.401, P < 0.05) and could predict as high as 61.10% of the variance of psychological well-being (R^2= 61.10).[9] Instrumental Activities of Daily Livings (IADLs) is the capabilities of older adults in performing activities necessary for living in the community. These activities are related to independent living and are valuable for evaluating persons with early-stage disease, both to assess the severity level of disease and to determine the person's ability to care for themselves. Older people who are capable of performing these activities independently without having to rely on others would feel that they have the potentials and have the ability to control and manage themselves. They would also feel that they are a valuable part of the society and able to live with a better well-being. According to the study conducted by Silsungworn and colleagues (2014)[10], IADLS served as a significant predictor of psychological well-being among the older adults residing in Uttaradit Municipality, Uttaradit province, Thailand (R^2 = 0.119, P < 0.001).

Practice of religious activities is also correlated with well-being.[11] The emphasis of religious practice in this study included the practice in religious places and the private practice in which the older adults practice on their own. With an advanced age, older adults are more likely to turn their attention to and practice more religious activities. Their retirement gave them more time to connect with religion. They would pay more attention to follow the doctrine of religion as a guidance to live a more peaceful life, and to have a real understanding on life or the world. Religiosity also makes them live their lives consciously and in a valuable way. Religiosity also serves as a protective factor to prevent them from mental health problems such as stress or depression. Hanh et al. (2004)[12] examined the relationship between religious attendance and depression among Taiwanese older persons. The results showed that the persons not attending religious activities in the past six months had a greater risk of depression than those who continued practicing religious activities. In addition, Thumcharoen (2012)[13] also affirmed that involvement with societies and religious activities had both direct and indirect effects on levels of happiness among the older adults.

Perceived stress is the feelings or thoughts that an individual has about how much stress they are under at a given point in time or over a given time period. Perception of stress can happen to anyone and everyone has to undergo

more or less stress. If the stress level is not too high either in low or moderate levels, it will stimulate the persons to do things enthusiastically. They would feel confident and have better self-esteem when the work is done successfully. On the other hand, if stress is at a high level, it can have a detrimental effect on the body and mind. It may also manifest itself in various forms of illnesses. Sometimes, the persons may not be aware that the symptoms are caused by the stress. If people cannot cope with stress successfully in a timely fashion or are unable to solve the problems, it can lead to mental health problems which could further affect the persons' well-being both physically and psychologically. In the study of Tsai, Chi, and Wang (2013)[14], it was found that perceived stress had effects on depression among Taiwanese older adults.

Perceived self-efficacy is a belief in the individual's capacity to do and carry out activities in order to achieve their goals. It is a significant mechanism of individuals' potential[15] and has an influence towards behavioral change. If the older adults were confident in their capacities, they would be persistent in their efforts to accomplish that particular activity. These would help enhance their psychological well-being. From the study conducted by Kulprasutdilok and colleagues (2014)[16], it was found that perceived self-efficacy was positively correlated with quality of life among the older adults in Bang Khen district, Bangkok **(**r = 0.265, P < 0.001**)**.

Social support is the perception and actuality that one is cared for with assistance available from other people as a part of a supportive social network. It is a positive relationship that arises from the functions of the individual, family, and society. It helps the person to feel valued and warm, to have a sense of being a part of society, and to help others. Social support consists of five dimensions including provision of intimacy, social integration, opportunity for nurturing behaviors, reassurance of worth as an individual and in role accomplishments, and availability of informational, emotional and material assistance.[17] Social support was positively associated with self-adjustment of the elderly in a municipality of Ubon Ratchathani province.[18] Based on the study of Sirotamarat[8], social support was positively correlated with psychological well-being and could predict 54.80% of the variance of psychological well-being.

Our present study aimed at describing psychological well-being and examining its predicting factors among a sample of older adults residing in Sansuk Municipality, Chonburi province. This sample was considered non- institutionalized older adults. They lived in a community, at home with their family members, and still engaged in community's activities. The information in this study would reflect individuals living in community than the data obtained from those residing in institutes such as social development centers, nursing homes, hospices, or hospitals. Results obtained from this study would generate a better understanding towards psychological well-being and its predictive factors among the community residing older adults. Specific objectives of the study were to investigate psychological well-being among the community-dwelling older adults and the predictors of psychological well-being including perceived health status, Instrumental Activities of Daily Livings (IADLs), practice of religious activities, perceived stress, perceived self-efficacy, and social support among community residing older adults.

Methods

This cross-sectional, predictive correlational study was conducted to investigate psychological well-being and its predictors among the older adults residing in Sansuk Municipality, Chonburi province. The population in this study included male and female older adults, aged 60 years or over residing in Sansuk Municipality area, Chonburi province. They had to be able to communicate, and had no severe physical or mental illnesses which could impair their abilities to answer the interviewed questionnaires. The sample size in this study was based on the number of sample size for finite population which is presented in the standardized table developed by Krejcie and Morgan (1970).[19] According to Sansuk Municipality's Census statistics, in the year 2014, there were 5,796 older residents. The required sample size for this study should be at least 357 participants. In this study, 400 participants were recruited. Multi-stage sampling was used to draw the study sample.

Instruments

Instruments were divided into 8 parts and their details were as follows. Part 1 asked about general information of the participants including gender, age, education background, living status, marital status, and their perception towards income sufficiency. In part 2, a single question asked about perceived health status with the statement "In general, how would you rate your health?" on a 5-point rating scale of 1-not healthy to 5-very

healthy. The possible scores ranged from 1 to 5 with higher scores indicating better health perception. This measure has been described as one of the best predictors of mortality and morbidity among older adults.[20]

Part 3 of the questionnaires was the Instrumental Activities of Daily Living, IADLs. It is the ability of the elderly to carry out the daily activities necessary for living in the community. Chula ADL Index (CAI) developed by Jittapunkul et al. (1994)[21] was used. This instrument captured the capacities of older adults in performing 1) walking outdoor, 2) cooking, 3) doing heavy housework, 4) using and exchanging money and 5) using public transportation. The scores from all items were summed up to generate the total score indicating capacities of the older adult's in performing IADLs. Its possible total scores ranged from 0 to 9, with higher scores indicating a better functional capacity. The total scores could also be classified into 4 levels namely complete (0 – 2), severe (3 – 4), moderate (5 – 6), and no dependency burden (7 – 9). This scale had been widely used with the older persons and yielded an acceptable reliability.[9,10] Its Cronbach's alpha coefficient yielded in this study was 0.84.

In part 4 of the questionnaire, we asked the participants about their religious activities. The measure was modified from the religious questionnaire entitled "The Duke University Religion Index (DUREL)" which is a five-item measure used in the epidemiological study of Koenig and Büssing (2010).[22] This instrument evaluated the practice of religious activities in two aspects. The first aspect, the organization religious practice, was referred to the practice of religious activities in religious places. This aspect aimed to measure how often the older individuals participated in the religious activities in the religious place or organization. The answers were in a 6-point rating scale ranging from 1-not at all, to 2-once a year, 3-two to three times a year, 4-two to three times a month, 5-once a week, and 6-more than once a week. The second aspect, non-organization practice, was referred to the practice of religious activities on their own at home. This aspect aimed to measure how often that the older individuals participated the private practice of religious activities. The answers were in the same format as those in the first aspect. The scores of these two items were summed up to reflect the total score ranging from 2 to 12 with higher scores indicating more frequent practice of religious activities. The overall scores can also be classified into low (2.00 – 5.33), moderate (5.34 – 8.67), and high (8.68 – 12.00) levels of religious practice based on the method postulated by Polit and Beck.[23]

In part 5 of the questionnaire, the perceived stress questions measured the degree to which situations in one's life were appraised as stressful. We used the perceived stress scale of 10 items developed by Cohen, Kamarck, and Mermelstein (1983)[24], and translated into Thai by Mingkwun (2009).[25] This scale is one of the most widely used psychological instruments for measuring nonspecific perceived stress. It comprises of 10 items with a 5-point Likert-type scale ranging from 0-never to 4-often. Participants were asked to indicate how often they feel or think in certain ways towards their life situation during the past month. The item scores were summed up to obtain the total perceived stress score. The possible scores ranged from 0 to 40 with higher scores indicating higher perceived stress. In this study, this scale yielded a high reliability with a Cronbach's alpha of 0.86. The scores can also be classified into 3 levels of perceived stress, specifically, low (0 – 13.34), moderate (13.35 – 26.69), and high (26.70 – 40.00) based on the method postulated by Polit and Beck.[23]

Part 6 of the questionnaire evaluated the participant's perceived self-efficacy which means the extent to which people believe they are capable of performing specific behaviors in order to attain certain goals. In this study, general self-efficacy was a focus. The general self-efficacy scale is a 10-item psychometric scale that was designed to assess optimistic self-beliefs to cope with a variety of difficult demands in life. The scale was originally developed in German by Jerusalem and Schwarzer (1981)[26] and has been used widely across countries. Thai version of this scale used in the study of Sukmak and colleagues (2002)[27] was used in this present study. The response categories were 1-not at all true, 2-hardly true, 3-moderately true, and 4-exactly true. Summing up the responses of all 10 items was employed in order to yield the final composite score. With a range of 10 to 40, higher scores indicated more efficacy. This scale was used to describe the respondents' perceived self- efficacy among the older people residing in Nonthaburi province.[8] In this study, the scale yielded a high reliability with a Cronbach's alpha of 0.89. The total scores can be further divided into 3 levels of self-efficacy namely, low (10 – 20), moderate (21 – 31), and high (32 – 40).

Part 7 of the questionnaire asked about the participant's social support using the Personal Resource Questionnaire (PRQ 2000) part II, developed by Weinert (2000).[28] The PRQ 2000 consists of 15 items on a 7-point Likert-type scale ranging from 1-strongly disagree to 7-strongly agree. The scores of 15

items are summed to reach possible total scores ranging from 15 to 105, with higher scores indicating higher levels of perceived social support. This scale was used with the Thai older adults.[29,30] In this study, the scale yielded a high reliability with a Cronbach's alpha of 0.93 .Based on the total scores, 3 levels of social support can be categorized, specifically, low (15 – 45), moderate (46 – 75), and high (76 – 105).

The last part of the questionnaire assessed the participant's psychological well-being. The psychological well-being scale developed by Ryff and Keyes (1995)[4] was used in this study. This scale was a shortened versions of Ryff's original well-being scale. It was translated into Thai and used in the study of Hengudomsub (2004).[30] This scale was composed of 6 dimensions of positive psychological functioning including positive relations with others, autonomy, environmental mastery, purpose in life, personal growth, and self-acceptance. Items of the scale were mixed into a single self-report inventory administered according to a response format of 1-strongly disagree to 6-strongly agree. Mean scores were computed, with higher scores indicating higher levels of well-being. The possible total score ranged from 1 to 6. In this study, the scale yielded a high internal consistency reliability with a Cronbach's alpha of 0.90. Based on the method postulated by Polit and Beck[23], scores can be classified into 3 levels of psychological well-being including low (1.00 – 2.67), moderate (2.68 – 4.35), and high (4.36 – 6.00).

Human subject protections

This study was granted for approval from the Ethical Approval Committee of Burapha University prior to administering the questionnaires to the participants. The participants were informed by written and verbal explanation. Their participation in this study was voluntary and they had the right to withdraw from the study at any time. Anonymity and confidentiality of the participants were assured and no personal information was disclosed to any other persons. All data were stored in a secure place and only utilized for the purpose of the study. The results were reported as group, not individual participant data.

Data collection

Data collection was conducted after the research proposal was approved by the Ethical Approval Committee of Burapha University. A letter from the Faculty of Nursing, Burapha University was sent to the Mayor of Sansuk Municipality, Chonburi province to ask for permission for data collection with the residents of Sansuk Municipality. Participants who were randomly selected, met the study criteria and agreed to participate in the study were asked to sign a consent form. If they could not write, their thumb stamping was used as a written consent. With their consent, each participant was interviewed by the researchers or research assistants. It took about 60 minutes to complete the questionnaire.

Data analysis

Data analysis was divided into two major parts. Descriptive statistics including frequency, percentage, mean, and standard deviation (SD) were used to describe demographic data of the participants and all variables examined including 1) psychological well-being 2) perceived health status 3) IADLs, 4) practice of religious activities 5) perceived stress 6) perceived self-efficacy and 7) social support. Stepwise multiple regression analysis in which the choice of predictive variables was carried out by an automatic procedure was used to determine the predictors of psychological well-being. All data were analyzed by using an open-source PSPP statistical software program available at https://www.gnu.org/software/ pspp/.

Results

The results of this study were presented in four parts including 1) description of participants' characteristics, 2) description of psychological well-being status, 3) description of selected factors, and 4) the association between psychological well-being and its predicting factors.

Participants' characteristics

Of a total of 400 participants, there were slightly more female (54.20%) than male (45.80%) participants (Table 1). The sample had a mean age of 68.26 (SD = 6.00). By classifying their age into 3 age groups[31], about two-thirds were in the group of "young old" whose age ranged from 60 to 69 years (n = 260; 65.00%). The rest were in the "middle old" group whose age ranged from 70 to 79 years (28.80%) and the "very old" group (age of 80 years or older) (6.20%). The majority of them were Buddhist (96.00%). About half of them were married (50.20%), followed by those who were widowed

(25.50%) and single (19.80%). The majority of these participants completed primary school (77.25%), followed by high school graduation (9.00%). It was found that 74.25% lived with their family members, while 25.75% lived with their spouse. Seventy-five percent of them were not working. Regarding financial status, 30.00% of them reported they had an insufficient financial support with debt; while 45.00% reported they had an adequate financial support but with no saving.

For perceived health status, its mean score equaled to 3.21 (SD = 0.83) of a total of 5 points. It was found that 50.50% perceived their health status as "moderately healthy," followed by those reporting "healthy" (27.70%). Only 14.00% perceived their health status as "rather healthy" and 5.80% as "healthy."

Psychological well-being status

From Table 2, the mean score of overall well-being was at a moderate level, with a mean score of 4.28 (SD = 0.29). Mean scores (± SD) of the six dimensions ranked in a descending order were positive relationship with others (4.63 ± 0.36), self-acceptance (4.39 ± 0.37), purpose in life (4.30 ± 0.52), environmental mastery (4.21 ± 0.46), personal growth (4.16 ± 0.42) and autonomy (3.84 ± 0.47). Only positive relationships with others and self-acceptance were rated at high levels, while the other dimensions of psychological well-being were rated at moderate levels.

Factors potentially affecting the psychological well-being

In terms of factors potentially affecting the psychological well-being of older adults, the participants had an average score of perceived health status of 3.21 (SD = 0.83) which could be classified as a moderate level (Table 3). Their Instrumental Activities of Daily Livings (IADLs) had a mean score of 8.04 ± 1.89 which was classified as being independent with no burden. Their level of religious activity practice was high with a mean score of 7.79 ± 2.14. They perceived their stress at a moderate level with a mean score of 20.83 ± 4.32. With a mean score of 28.39 ± 4.20, they also perceived their general self-efficacy at a moderate level. The mean score of social support was 81.79 (SD = 4.19), which was at a high level.

Table 1 Demographic characteristics of the participants (*N* = 400).

Characteristics	N	(%)
Gender		
Male	183	45.80
Female	217	54.20
Age (Yrs) (M = 68.26, SD = 6.00; Min = 60, Max = 86)		
60 – 69 (Young old)	260	65.00
70 – 79 (Middle old)	115	28.80
≥ **80** (Very old)	25	6.20
Religion		
Buddhism	384	96.00
Islam	13	3.30
Catholic	3	0.70
Marital status		
Married	201	50.20
Widowed	102	25.50
Single	79	19.80
Divorced	18	4.50
Living status		
With family members	280	74.25
With only spouse	103	25.75
Alone	40	10.00
Educational background		
No formal education	35	8.75
Primary school	309	77.25
High School	36	9.00
Bachelor's degree	20	5.00
Working status		
Not working	300	75.00
Still working	100	25.00
Financial status		
Inadequate support and in debt	120	30.00
Adequate but no saving	180	45.00
Adequate with some saving	100	25.00
Perceived health Status (M = 3.21, SD = 0.83; Min = 1, Max = 5)		
Not healthy	8	2.00
Rather healthy	56	14.00
Moderately healthy	202	50.50
Healthy	111	27.70
Very healthy	23	5.80

Table 2 Psychological well-being status of the participants (N = 400).

Dimensions of psychological well-being	*M*	*SD*	*Level*
Positive relations with others	4.63	0.36	High
Self-acceptance	4.39	0.37	High
Purpose in life	4.30	0.52	Moderate
Environmental mastery	4.21	0.46	Moderate
Personal growth	4.16	0.42	Moderate
Autonomy	3.84	0.47	Moderate
Overall psychological well-being	4.28	.29	Moderate

Table 3 Description of selected factors (N = 400).

Factors	Mean	SD	Possible range	Actual range	Level
Perceived health	3.21	0.83	1 - 5	1 - 5	Moderate
IADLs	8.04	1.89	0 - 9	2 - 9	Independent no burden
Practice of religious activities	7.79	2.14	2 - 12	4 - 12	High
Perceived stress	20.83	4.32	0 - 40	12 - 31	Moderate
Perceived self-efficacy	28.39	4.20	10 - 40	15 - 39	Moderate
Social support	81.79	4.19	15 - 105	70 - 92	High

Note: IADLs = Instrumental Activities of Daily Livings; SD = standard deviation.

Potential predictors of psychological well-being

From six selected factors previously mentioned, stepwise multiple regression revealed four significant predictors of the older adults' psychological well-being (Table 4). In a descending order of the beta coefficients, the most influencing factor was practice of religious activities (β = 0.338, P < 0.001), followed by perceived self-efficacy (β = 0.250, P < 0.001), social support (β = 0.165, P < 0.001) and perceived stress (β = 0.126, P < 0.05). These four predictors could explain only 28.50% of the variance of the psychological well-being (R^2 = 0.285, P < 0.001).

Table 4 Predictors of the psychological well-being of older adults based on a stepwise multiple regression (N = 400).

Variables	R^2	R^2 change	β	*P*-value
Practice of religious activities	0.188	0.188	0.338	< 0.001
Perceived self-efficacy	0.238	0.050	0.250	< 0.001
Social support	0.270	0.032	0.165	< 0.001
Perceived stress	0.285	0.015	0.126	< 0.05

Model statistics: R^2 = 0.285; Adjusted R^2 = 0.277; $F_{(4,392)}$ = 39.020, P < 0.001.

Discussions and Conclusion

In our investigation on the elderly psychological well-being, all discussions relevant to the study objectives are as follows. We found that psychosocial well-being among the older participants was at a moderate level (4.28 ± 0.29). This finding was in consistent with the study conducted by Wijitrsiri and Sawangsopakul (2011).[32] They found that those who were the members of the older club of Sarod temple locating in Rat Burana District, Bangkok reported their psychological well-being at a moderate level.

Furthermore, the mean age of our sample was 68.26 years (SD = 6.00) which could be classified as the "young old" (60 - 69 years).[31] As a "young old," their overall health is considered good, although there might be a gradual decline in physical and mental development. However, the decline may not be obvious. These older adults are able to take care of themselves and perform daily activities on their own. They are also able to adjust themselves with the surroundings or particular situations. These make them more independent and feel no or less burden than the older adults who are in a poorer health. The study by Khamwong and colleagues (2011) also found that the older adults with a more advanced age had a higher level of dependence on others and felt more of a burden to the family.[33]

Apart from their age, about half of these older adults live with their spouse and other family members. It means that they had someone to support, take care of, or help them in various daily living activities. Furthermore, these older adults had someone they can count on or consult with. They had a good relationship with their family members. Furthermore, getting older could be associated with spending more time with their family members or spouse. According to our results, the older adults had a positive relationship with others at a high level. In addition, as they aged, the older adults had passed through various experiences, which in turn helped them acquire more self-acceptance.

In contrast to the high level of positive relationship with others, a decline in the older persons' health could have been associated with their moderate levels of autonomy, personal growth and purpose in life. Among the six dimensions of psychological well-being, only positive relationships with others and self-acceptance were at a high level, while the rest were in a moderate level. As a result, the overall psychological well-being was at a moderate level.

These predictors altogether could explain only 28.50% of the psychological well-being variance (R^2 = 0.285, P < 0.001). The most influential predictor of the psychological well-being was practice of religious activities (β = 0.338, P < 0.001), followed by perceived self-efficacy (β = 0.250, P < 0.001), social support (β = 0.165, P < 0.001), and perceived stress (β = 0.126, P < 0.05). On the other hand, perceived health status and IADLs were not significantly associated with psychological well-being. These findings could be explained as follows.

The practice of religious activities served as the best predictor of psychological well-being (β = 0.338, P < 0.001). This was consistent with the studies conducted by Paonil and Sringernyuang (2002)[34] and Sasiwongsaroj and colleagues (2012).[35] These studies found that religious activities were significant predictors of psychological well-being in the older

adults. In addition, the results obtained from this study were also consistent with the studies conducted by Fry (2000)[36] and Hsu (2014)[37] which found that religious involvement served as a significant predictor of psychological well-being in Canadian and Taiwanese older adults. According to Idler (2000)[38], the relationship between religion and well-being could be explained as follows. First, religion helps promote healthy lifestyles. Second, religion may facilitate social support by the individual's involvement in religious activities with others. Third, religion may provide a coherent schema or framework of meaning, which provides coping, comfort, and understanding of the difficult life transitions, especially in later life. Fourth, religion is viewed as a coping system for dealing with stress, especially for the older persons who usually face multiple life stressors, such as disease, disability and a change in economic status.

Older people are more likely to turn their attention to religion. Their retirement allows them more time to engage with religious activities. Religion has infiltrated and assimilated into the traditional Thai culture and society for a long period of time. Entering into old age, it is somehow considered the last stage of the human life cycle. Some people would pay more attention to and appreciate more in religion, and use religion as a supporting mean for their life. Based on empirical finding, it was found that the older adults practicing more religion activities reported a higher level of happiness and satisfaction in life than those not participating in religious activities.[37,38] In Thailand, the majority of the population are Buddhist. The elderly usually have more time to practice religious activities, such as going to the temple to make a merit or worship. The practice of religious activities has helped the elderly become more self-reliant and self-conscious. The practice of religious activities is thus considered one of significant predictors of psychological well-being.

Perceived self-efficacy was the second best predictor of psychological well-being which could explain 25% the psychological well-being variance (β = 0.250, P < 0.001). This was consistent with the study of Karademas (2005)[39] which found that perceived self-efficacy could significantly predict life satisfaction among the older adults (β = 0.23, P < 0.001). Similar findings were also reported by Sirotamarut (2010)[8] and Kulprasutdilok and colleagues (2014).[16] In our present study, perceived self-efficacy served as a significant predictor of psychological well-being. Self-efficacy is a result of positive learning experiences and efforts in behavioral modification. The two combined in turn leads to well-adjusted behaviors in a self-beneficial way.[40] It is important to make the person confident so that they can control or handle the situation. It also helps promote their purpose in life and make them feel that they can grow up, resulting in an increased psychological well-being. Perceived self-efficacy helps the person acknowledge their personal growth and adjust well with the situation and surroundings. The more the self-efficacy, the more likely the person believes that a particular behavior can result in a desirable health outcome. These supported the notion that perceived self-efficacy served as one of the significant factors of psychological well-being.

Social support was the third significant predictor of psychological well-being found in this study (β = 0.165, P < 0.001). This finding was consistent with the study conducted by Sirotamarat (2010)[8] which found that social support was positively correlated with psychological well-being (r = 0.628, P < 0.01) with a 54.80% of psychological well-being variance explained. In accordance with our study, the study conducted by Tongwichian (2012)[41] also found a positive association between social support and psychological well-being in senior citizens. The predictive role of social support on psychological well-being could be due to the fact that social support is the basic need of a person in interacting with others. It is an important factor for stress reduction as it promotes effective coping mechanism. Older adults who perceive more social support would feel being loved and recognized by others including their family members. As a result, social support helps enhance self-esteem, and promote confidence and stability in building good relationships with others. They are also aware of resources that could help them achieve their goals. Social support enhances both physical and psychological well-being. In agreement with this basic knowledge, social support was found to be a significant predictor of psychological well-being among older adults in our present study.

Perceived stress was a factor that also predicted psychological well-being in this study (β = 0.126, P < 0.01). This was in line with the study conducted by Haesook and Ruth (2009)[42] which showed that stress was a crucial factor contributing to psychological distress, depression in particular. At a certain point in their lives, the older adults experienced more changes in their physical, mental, emotional, and social life aspects. If they could not handle these critical changes, physical and psychological distresses could be a result. The

study of McHugh and Lawlor (2012)[43] revealed the mediating role of social support on the relationship between loneliness and quality of sleep. The older adults who perceived more stress had a lower psychological well-being than their counterpart.[44] Those with higher perception of stress would have less control towards themselves and environment, poor relationship with others, and more health decline. Explanation mentioned thus far supported that perceived stress served as a predictor of psychological well-being among older adults in our study.

In addition to factors significantly associated with psychological well-being, those not significantly related, namely perceived health status and Instrumental Activities of Daily Livings (IADLs), were also worth discussing. No significant relation between perceived health status and psychological well-being was perhaps owing to the fact that the majority of the sample were in their "young old" age group. These "young old" individuals were less likely to have a decline in physical and psychological health in comparison with their older counterpart. Despite the fact that the older adults reported having chronic illness and health decline, the decline might not be so obvious. These older adults were able to take care of themselves. The older adults with advanced age would be more dependent to others and would perceive themselves to be more burdensome to their families.[33] This could be in part explained by a moderate level of their perceived health status among our older adult participants. Furthermore, perceived health status is a perception that could change at any time depending on their physical or emotional state at the time of assessment. On the other hand, psychological well-being is a complex issue involving a variety of factors, not merely perceived health status. Strong social support, for example, could help mediate the perception of health status to a higher level. Since various factors could affect perceived health status, psychological well-being and their relationships as mentioned above, perceived health status could not predict psychological well-being among the older adults in our present study.

A non-significant relationship between the Instrumental Activities of Daily Livings (IADLs) and psychological well-being could also be similar to the one between perceived health status and the well-being. With their "young old" age, their capability to perform daily activities had not been declined so they were able to perform daily activities on their own. Such capability would thus have less effect on their psychological well-being. According to Khamwong and colleagues, older adults with a more advanced age reported more dependency and perceived being more burdensome to their family.[33] Like the relationship between perceived health status and psychological well-being, the relationship between IADLs and psychological well-being could be affected by other factors. There could be other cognitive factors that buffered or mediated the relationship between the two factors. For example, some older adults probably had a higher level of performing IADLs but they perceived their self-efficacy to perform the tasks as low, and hence their low psychological well-being. As a result, IADLs could not significantly predict psychological well-being among older adults in this study.

In terms of recommendations for healthcare practice, healthcare providers could apply the findings of significant predictors towards the psychological well-being. Programs or activities aiming at enhancing self-efficacy, social support and religious activities participation should be developed. Stress among the older people should be handled more effectively. For education and training, educators in health related fields could apply the study results as empirical findings pertinent to psychological well-being in older adults and its predicting factors in the curriculum.

Our study was with some limitations. With the cross-sectional nature of the study, predicting capability of the study factors was limited. Future research using repeated measures multivariate analyses would be useful to understand the longitudinal effect of the predictors on psychological well-being in later life. Qualitative research in addition to quantitative study is recommended to fully understand the psychological well-being of older adults and its predictors.

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Editorial note
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