

Social support and other factors on resilience among older adults

Mali Photipim* Pas-pisit Pholsripradist ** Suchat Bonyaphagorn*** Jeerapa Bunyaphagorn***,
Valanchaya Ketbumroong* Jun Norkaew* Wararat Sungwalee* Wasugree Chavengkun****

Abstract

Background: Resilience among older adults is the human capacity to adapt to adverse life situations. The most important are social support and various protective factors.

Objective: To examine the social support and factors affected by resilience among older adults.

Methods: 440 older adults eligible for this study completed questionnaires on demographics, perceived social support, health behaviors, depression, health perceptions, and resilience scale from November 2021 to January 2022. Data were analyzed using descriptive statistics, Pearson's correlation coefficient, and multiple linear regression analysis.

Results: The levels of resilience ($M=112.58$, $SD=12.04$), social support ($M=3.92$, $SD=0.75$), health behaviors ($M=3.15$, $SD=0.87$), and health perceptions ($M=3.75$, $SD=1.36$) were high. Regression analyses showed that social support ($p<.001$) and health perceptions ($p<.001$) were significantly and positively associated with resilience levels.

Conclusions: Social support and health perception were important in older adults' perceived resilience. More research is required, particularly those involving longitudinal studies, to determine the relationship between social support, health behavior, and resilience.

Keywords: health perceptions, older adults, resilience, social support

*Faculty of Public Health, Vongchavalitkul University, Nakhon Ratchasima, Thailand

**Health Promotion Department, Nakhon Ratchasima Provincial Public Health Office, Thailand

***Nong Kham Health Promotion Hospital, Nakhon Ratchasima, Thailand

****Faculty of Science and Technology, Nakhon Ratchasima Rajabhat University, Thailand.

Corresponding Author: Mali Photipim, E-mail: malipho6@gmail.com

Received: December 4, 2022

Revised: July 1, 2023

Accepted: August 8, 2023

การสนับสนุนทางสังคม และปัจจัยอื่น ๆ ต่อพลังสุขภาพจิตผู้สูงอายุ

มะลิ โพธิพิมพ์* ภัษภิญญ์ พลศรีประดิษฐ์** สุชาติ บุญยภากร*** จีรภา บุญยภากร***
วลัญช์ชยา เขตบำรุง* จุน หน่อแก้ว* วรรัตน์ สักกะลี* วาสกรี เสงวนกุล****

บทคัดย่อ

บทนำ : พลังสุขภาพจิต คือ ความสามารถของบุคคลในการปรับตัวให้ผ่านพ้นสถานการณ์ที่มีความยากลำบาก ปัจจัยที่สำคัญได้แก่ การสนับสนุนทางสังคมและปัจจัยสนับสนุนต่าง ๆ

วัตถุประสงค์การวิจัย : เพื่อศึกษาการสนับสนุนทางสังคม และปัจจัยอื่น ๆ ต่อพลังสุขภาพจิตผู้สูงอายุ

วิธีการวิจัย : ตัวอย่าง คือ ผู้สูงอายุ จำนวน 440 คน เก็บข้อมูลโดยใช้แบบสอบถามข้อมูลทั่วไป การสนับสนุนทางสังคม พฤติกรรมสุขภาพ ภาวะซึมเศร้า การรับรู้ด้านสุขภาพ และพลังสุขภาพจิต ระหว่างเดือนพฤศจิกายน 2564 ถึงเดือนมกราคม 2565 วิเคราะห์ข้อมูลด้วยสถิติเชิงพรรณนา สหสัมพันธ์แบบเพียร์สัน และการวิเคราะห์การถดถอยพหุคูณ

ผลการวิจัย : ผู้สูงอายุมีคะแนนเฉลี่ยพลังสุขภาพจิต ($M=112.58$, $SD=12.04$) การสนับสนุนทางสังคม ($M=3.92$, $SD=.75$) พฤติกรรมสุขภาพ ($M=3.15$, $SD=0.87$) การรับรู้ด้านสุขภาพ ($M=3.75$, $SD=1.36$) อยู่ในระดับสูง ส่วนภาวะซึมเศร้า พบว่า ไม่มีภาวะซึมเศร้า ($M=5.11$, $SD=3.03$) ปัจจัยที่มีผลต่อพลังสุขภาพจิตอย่างมีนัยสำคัญทางสถิติที่ .001 ประกอบด้วย ปัจจัยการสนับสนุนทางสังคม และการรับรู้ด้านสุขภาพ

สรุปผล : การสนับสนุนทางสังคมและการรับรู้ด้านสุขภาพ จะทำให้ผู้สูงอายุมีพลังสุขภาพจิตที่ดี จึงควรศึกษาเพิ่มเติม เพื่อการยืนยันความสัมพันธ์ระหว่างการสนับสนุนทางสังคม การรับรู้ด้านสุขภาพ และพลังสุขภาพจิตผู้สูงอายุต่อไป

คำสำคัญ : การรับรู้ด้านสุขภาพ ผู้สูงอายุ พลังสุขภาพจิต การสนับสนุนทางสังคม

*คณะสาธารณสุขศาสตร์ มหาวิทยาลัยวงษ์ชวลิตกุล จังหวัดนครราชสีมา

**กลุ่มงานส่งเสริมสุขภาพ สำนักงานสาธารณสุขจังหวัดนครราชสีมา

***โรงพยาบาลส่งเสริมสุขภาพตำบลหนองขาม อ.พิมาย จ.นครราชสีมา

****คณะวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยราชภัฏนครราชสีมา

ผู้นิพนธ์ประสานงาน : มะลิ โพธิพิมพ์, E-mail: malipho6@gmail.com

Background

The older adult population in the world has increased rapidly. The number of older adults worldwide was predicted to have risen more than three times between 2015 and 2050, from 126.5 million to 446.6 million worldwide.^{1,2} In Thailand, the proportion of people aging was estimated to have risen by more than two times, from 11 million to 20 million between 2018 and 2038. Older adults were normally involved in aging-related changes and losses, such as decreased health and functioning, deaths of spouses or friends, and the failure of social networks.^{3,4}

Older adults encountered natural decreases in their physical function, which affected their mental health. The older adults' ability to care for themselves was impacted by these health issues, which also deteriorated their mental health and decreased their resilience. Resilience had been generally described as an individual's ability to cope with and recover from crises and sustain a sense of purpose and vitality,^{5,6} which varied with the context or different life surroundings, age, and gender.⁷⁻¹⁰ Recent studies identified factors that potentially influenced the resilience of older adults, including 1) demographic characteristics of participants,¹¹⁻¹³ such as gender, age, disease duration, lower household income, and education; 2) physical and mental health status factors,^{11,13,-15} including mental illness, congenital disease, greater cerebrovascular risk, more significant

medical comorbidity, and physical dysfunction; and 3) social and other factors,^{11,13,14} such as social support, family networks, quality of life, perceptions of general health, and the relationship of family and friends.

Social support was the most highly associated factors with resilience in older adults.^{11,14} Resilience can assist older adults in overcoming adversity and adapting positively, especially in rural areas where strong social networks exist. Other factors associated with resilience were depression, health behaviors, and health perceptions.^{11,13-15} Other studies revealed that social support could not be shown to be associated with resilience.¹⁶ This inconsistency emphasized the need to examine the effect of social support and other factors, such as health behaviors, health perceptions, and depression, on resilience among older adults.

Objective

This study aimed to examine the social support and other factors on resilience among older adults in Thailand.

Conceptual Framework of the Study

The conceptual framework of this study was adapted from literature reviews. Several studies found that social support, health behaviors, health perceptions, and depression were associated with resilience among older adults.^{11,14,17-19} Both independent and dependent variables in this study were shown in this conceptual framework. (Figure 1)

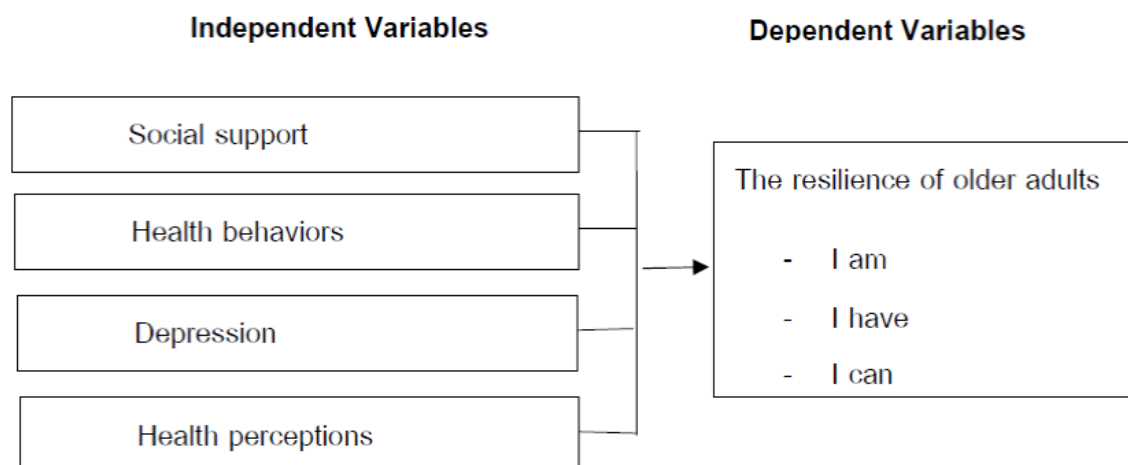


Figure 1 Conceptual framework

Methods

Research Design

A cross-sectional analytical study was conducted in Nakhon Ratchasima province, in the northeast region of Thailand, between November 2021 and January 2022.

Samples

The samples consisted of 440 older adults aged 60 years and older. Samples were calculated using Krejcie and Morgan's formula.²⁰ The researchers managed to obtain sufficient samples in dropout cases, thus adding 10% to 40 people selected from 5 districts using stratified random sampling. The following inclusion criteria were assumed: 1) 60 years of age and over; 2) being able to understand and communicate in Thai. Older adults who were unable to give informed consent were excluded.

Measurement and Data Collection

A structured questionnaire included sociodemographic conditions: gender, age, marital status, education, economic factors

(sufficiency of monthly income), alcohol consumption, and smoking.

The dimension of the social support variable questionnaire was defined as the perception of those regarding the quality, frequency, and suitability of the support provided, considering their needs. This instrument includes 20 items and has a reliability of .92. This questionnaire is responded to by a five-point Likert-type scale ranging from 1 (absolutely disagree) to 5 (absolutely agree). The minimum score is 20 points, and the maximum is 100 points. High scores are a sign of more social support.

The health behaviors variable comprises ten items measured by a four-point Likert scale ranging from 1 (never) to 4 (Practice regularly).

The depression variable questionnaire was developed by the Department of Mental Health, Ministry of Public Health, Thailand.²¹ This questionnaire included nine questions measured on a four-point Likert scale ranging from 0 (not at all) to 3 (nearly every day).

The health perceptions variable questionnaire consisted of 20 items. The reliability was .92. This questionnaire was responded to on a five-point Likert scale ranging from 1 (absolutely disagree) to 5 (absolutely agree).

The resilience variable questionnaire was developed after a literature review by the researcher based on Grotberg²². The three components of resilience included "I AM," "I HAVE," and "I CAN," which were used as the initial concept. The elements were described as follows: "I AM" refers to belief in one's inner strength to get through difficult times physically and mentally. "I HAVE" refers to an elderly person's view of having social support. "I CAN" refers to the capacity to sustain social connections and problem-solve in adversity. This resilience scale measures levels of individual resilience, consisting of 30 items that were measured on a five-point Likert scale ranging from 1 (absolutely disagree) to 5 (absolutely agree). The minimum resilience score for this scale was 30 points, and the maximum resilience score was 150 points, which evaluates to 3 levels: low level (5-76), moderate level (77-119), and high level (120-150). Scores above 120 reveal more resilience. Cronbach's Alpha Coefficient was used to evaluate the internal consistency of the social support scale, health behaviors scale, depression scale, health perceptions scale, and resilience scale before analyses. The reliability was .92.

Ethical Considerations

The research project was submitted for evaluation and approval by the Research Ethics Committee of Vongchavalitkul University and received support under number 003/2564. The dates covered in the study ranged from January 29, 2021, to January 29, 2022.

Data Analysis

The data were inspected for outliers, skewness, and homogeneity of variance to ensure the appropriateness of parametric statistical tests. Both dependent and independent variables were examined for their distribution, outliers, and missing data before analysis. Potential outliers were removed if values were $\geq$ three standard deviations from the group mean. Descriptive statistics were used to examine the characteristics of the subject and the measured variables. In addition, Pearson correlations and analysis of variance (ANOVA) described a bivariate relationship between social support, health perceptions, depression, resilience, and health behaviors. Here, resilience was the outcome. Multivariate linear regression analysis was used to evaluate the effects of each variable on the resilience scale. A p-value of $<.05$ was considered statistically significant.

Results

The demographics variable of older adults showed the most sample were male (67.30%), aged 60-69 years old (60.70%), married (66.10%), completed primary education (86.1%), sufficient income (51.60%), older adults with underlying diseases (62.30%), not drinking alcohol (82.50%) and no smoking (89.30%).

Descriptive statistics of variables found that health behaviors was high level ($M = 3.15$, $SD = 0.87$). Social support was high level ($M=3.92$, $SD=0.75$). Health perceptions was high level ($M=3.75$; $SD=1.36$). Depression was very low level ($M=5.11$, $SD=3.03$). Resilience was high level ($M=112.58$, $SD=12.04$). (Table 1)

Table 1 Distribution of means, standard deviation, min, max, and Level of health behaviors, social support, health perceptions, depression, and resilience level (n=440)

Variable	<i>M</i>	<i>SD</i>	MIN, MAX	Level
Health behaviors	3.15	0.87	1, 4	High
Social support	3.92	0.75	1, 5	High
Health perceptions	3.75	1.36	1, 5	High
Depression	5.11	3.03	0, 15	very low
Resilience	112.58	12.04	30, 150	High

The correlation between social support, other variables, and resilience found that social support and health perceptions were significantly positively correlated with

resilience ($r=0.23$, $p<.001$; $r=0.71$, $p<.001$; $r=0.33$, $p<.001$, respectively). Meanwhile, depression was negatively correlated with resilience ($r=-0.15$, $p<.001$). (Table 2)

Table 2 Correlation coefficient between health behaviors, social support, health perceptions, depression, and resilience in older adults. (n=440)

Variable	X_1	X_2	X_3	X_4	X_5
Health behaviors (X_1)	1				
Social support (X_2)	0.32**	1			
Health perceptions (X_3)	-0.01	0.23**	1		
Depression (X_4)	-0.07	-0.18**	-0.12**	1	
Resilience (X_5)	0.23**	0.71**	0.33**	-0.15**	1

** $p<.001$

Multiple linear regression analysis was conducted on the significant variables from the univariate analysis in Table 3. The results revealed that both social support and health perceptions could predict resilience

with 54.0% ($R^2=0.54$, $p<.001$). The social support could predict resilience ($Beta=0.67$), followed by health perceptions ($Beta=0.18$). (Table 3)

Table 3 Linear regression of Social Support, health perceptions, and Resilience in older adults. (n=440)

Variable	b	SE	Beta	t	p
Social support (X_2)	17.89	0.89	0.67	20.04	<.001
Health perceptions (X_3)	4.79	0.92	0.18	5.23	<.001
(Constant)	24.88	4.27		5.83	<.001

$R = .73$, $R^2 = .54$, $R^2 \text{ adj} = .53$, $F = 253.02$, $\text{Sig of } F < .001$

Constant $24.89 + 17.89 (X_2) + 4.79 (X_3)$

$Z(y) = 0.67 (X_2) + 0.18 (X_3)$

The results showed that the health perceptions were stable, and the social support score increased by 1 point, making the resilience in older adults score 17.89 points higher. Meanwhile, the social support was stable, and the health perceptions score increased by 1 point, making the resilience in older adults score 4.79 points higher when controlling other variables.

Discussion

The results found that levels of resilience in older adults were high. Social support and health perceptions could predict the resilience of older adults in Thailand. However, health behaviors and depression were not associated with resilience.

Older adults aged between 60 and 69 and married had high levels of resilience,

similar to other countries.^{3,16,23} Resilience levels may remain stable or even increase based on their experience in overcoming challenges; thus, further research is required to support this assertion¹¹.

Factors Affect Resilience

This study found that in regression analysis, health perceptions and social support were significantly associated with resilience among older adults. However, other factors, including health behaviors and depression, did not affect the resilience of the older adults. The results of the study can be described as follows:

Social support was the decisive factor associated with resilience among older adults living in rural areas with strong social networks.^{11,14,17,18} Positive interactions with network members help an older adult remain

safe and cope with adversity. Several studies have recognized social support as an interpersonal process that promotes thriving in the face of adversity.³ Emotional support, information, advice, and tangible assistance are all available forms of support. Support comes from social support, including family, friends, colleagues, and others, play a significant role in relationships that enable older adults to deal with their problems effectively.¹³ Conversely, Silva Júnior et al.¹⁶ argued that social support was not associated with resilience.

The second factor relating to resilience was health perceptions. The study found that this factor could significantly predict resilience in older adults.^{11,14,19} The health perceptions of older adults may be an internal factor used to evaluate their health condition. Therefore, the degenerative nature, health, and illness may become crucial concerns for older adults.

Conclusion and suggestion

Conclusion

These findings indicated that social support and health perceptions can predict the likelihood of resilience in older adults. The study suggests that health team personnel should promote social support and improve health perceptions among older adults to enhance their resilience.

Suggestion

Future research should confirm the findings on a broader scale by collecting data covering the entire country to enhance the generalizability of the results.

Secondly, longitudinal studies should be conducted to confirm and be beneficial for establishing causal relationships more definitively.

Finally, future studies should consider the theoretical framework's diversity and may explore various resilience measurement scales for a comprehensive understanding of the construct.

Acknowledgments

The authors sincerely thank Vongchavalitkul University for the financial support provided for this research.

References

1. Akatsuka E, Tadaka E. Development of a resilience scale for oldest-old age (RSO). *BMC Geriatr.* 2021;21(174):1-9. doi.10.1186/s12877-021-02036-w.
2. National Institutes of Health. An aging world: 2015. [Internet]. 2016 [cited 24 Jun 2020]. Available from: <https://www.nih.gov/news-events/news-releases/worlds-older-population-grows-dramatically>.
3. MacLeod S, Musich S, Hawkins K, Alsgaard K, Wicker ER. The impact of

- resilience among older adults. *Geriatr Nurs.* 2016;37(4):266–72. doi: 10.1016/j.gerinurse.2016.02.014. SE.2016.02.014.
4. Aldwin C, Igarashi H. An ecological model of resilience in late life. *Annu Rev Gerontol Geriatr.* 2012;32(1):115–30. doi: 10.1891/0198-8794.32.115.
5. Merchant RA, Aprahamian I, Woo J, Vellas B, Morley JE. Editorial: resilience and successful aging. *J Nutr Health Aging.* 2022;26(7):652-56.
6. Callegari C, Bertu L, Caselli I, Isella C, Ielmin M, Bonalumi C, et al. Resilience in older adults: influence of the admission in nursing home and psychopathology. *Neuropsychiatry.* 2016;6(4):117-23.
7. Fernandez AC, Fehon DC, Treloar H, Ng R, Sledge WH. Resilience in organ transplantation: an application of the connor–davidson resilience scale (CD-RISC) with liver transplant candidates. *J Pers Assess.* 2015;97(5):487–93. doi: 10.1080/00223891.2015.1029620.
8. Tecson KM, Wilkinson LR, Smith B, Ko JM. Association between psychological resilience and subjective well-being in older adults living with chronic illness. *Proc (Bayl Univ Med Cent).* 2019;32(4): 520-24. doi:10.1080/08998280.2019.162 5660.
9. Laird KT, Lavretsky H, Paholpak P, Vlasova RM, Roman M, St Cyr N, et al. Clinical correlates of resilience factors in geriatric depression. *Int Psychogeriatr.* 2019;31(2):193-202.
10. Gao Y, Yuan L, Pan B, Wang L. Resilience and associated factors among Chinese patients diagnosed with oral cancer. *BMC Cancer.* 2019;19(1):1-9. doi: 10.1186/s12885-019-5679-0.
11. Timalisina R, Songwathana P, Sae-Sia W. Resilience and its associated factors among older disaster survivors. *Geriatr Nurs.* 2021;(42):1264-274.
12. Dullius AAS, Fava SMCL, Ribeiro PM, Terra FS. Alcohol consumption/dependence and resilience in older adults with high blood pressure. *Rev Lat Am Enfermagem.* 2018;9(26): e3024. doi: 10.1590/1518-8345.2466.3024.
13. Laird KT, Lavretsky H, Paholpak P, Vlasova RM, Roman M, St. Cyr N, et al. Correlates of resilience factors in geriatric depression. *Int Psychogeriatr.* 2019;31(2):193-202. doi: 10.1017/ S1041610217002873.
14. Parayat C, Kangchai W, Somanusorn S. Predictive factors of resilience among elderly. *The Journal of Faculty of Nursing Burapha University.* 2016;24(2): 97-106. (in Thai).
15. Chunsorn N, Kangchai W, Rattanajarana S. Predictive factors of resilience among nursing elderly with diabetes. *Journal of nursing and Health Sciences.* 2018;12(2): 12-23. (in Thai).
16. Junior EGS, Eulalio MC, Souto RQ, Santos KL, Melo RLP, Lacerda AR. The capacity for resilience and social support in the urban elderly. *Cien Saude Cole.*

- 2019;24(1):7-16. doi: 10.1590/1413-81232018241.32722016.
17. McClain J, Gullatt K, Lee G. Resilience and protective factors in older adults. [Internet]. 2018 [cited 2022 May 18]; Available from: <https://doi.org/10.33015/dominican.edu/2018.OT.11>.
18. Toonsiri C, Hengudomsub P, Chaimongkol N, Photihung P. Factors influencing resilience among community-dwelling older adults with chronic illness: A Causal Model Testing. The Journal of Faculty of Nursing Burapha University. 2019;27(1):78-88. (in Thai).
19. Jermthaisong S, Chaisena Dallas J, Hengudomsub P. Predictive factors on resilience among older adults with depression Bang Nam Piao district, Chachoengsao province. Vajira Nursing Journal. 2019;21(2):51-66. (in Thai).
20. Krejcie RV, Morgan DW. Determining sample size for research activities. Educ Psychol Meas. 1970;30(3):607-10.
21. Department of Mental Health, Ministry of Public Health, Thailand. Depression assessment (9Q). [Internet]. 2021 [cited 2022 May 18]; Available from: <https://dmh.go.th/test/download/view.asp?id=22>. (in Thai).
22. Grotberg EH. Resilience for today: gaining strength from adversity. Santa Barbara: Praeger Publishers/Greenwood Publishing Group; 2003.
23. Mohan M, Deb R. Factors associated with resilience among people with spinal cord injury in the community setting. Iranian Rehabilitation Journal. 2023; 21(1):157-66.
24. Feeney BC, Collins NL. A new look at social support: a theoretical perspective on thriving through relationships. Pers Soc Psychol Rev. 2015;19(2):113-47. doi:10.1177/1088868314544222.
25. Wagnild GM, Young HM. Development and psychometric evaluation of the resiliency Scale. Journal of Nursing Measurement. 1993;1(2):165-78.