Core Self-evaluation, Generativity, and Religious Experiences as Predictors of Social Support Giving and Its Relation to Happiness in Thai Elderly

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Abstract

The older population in the 21st century usually live a longer and healthier life. This pinpoints the necessary and sufficient factors for their empowerment and sustainability. Therefore, this study aims at investigating possible antecedents of social support giving behavior of elderly and its relation to Buddhist type of happiness. A group of 395 older adults with ages range from 59 to 90 years old responded to a set of questionnaires. Multiple regression analysis reveals that having role models, Buddhist belief and practice, elderly school attendance, and generativity trait were the important predictors of social support giving behavior. Predictive power in the total sample was 39.74%, and between 33.66% to 53.82% in subgroups. In addition, social support giving behavior is related to greater Buddhist happiness, and higher core self-evaluation. Suggestions for enhancing empowerment and sustainability living of the older rural population are offered.

Keywords: Thai elderly, Core self-evaluation; Generativity; Buddhist belief and practice, Social support giving, Buddhist happiness

1. Introduction

Social support has long been studied across the ages. Moreover, the world aging population is rapidly growing. Many researchers in aging research emphasized on receiving social support (Chaitawittanun, Bhanthumnavin, Bhanthumnavin, Meekun, Peungposop, & Pimthong, 2020; Xiang, Teng, Li,Chen, & Guo,

2020). Based on Erikson's theory of psychosocial development (1950), these older adults can still contribute to the next generations in many ways. One of the contributions could be giving certain types of social support. In this study, antecedents in terms of psychological characteristics and situational factors of social support giving in elderly were investigated. Furthermore, the relationship between giving social support and Buddhist happiness was also examined.

2. Literature Review

2.1 Definition of Social Support

Several scholars have defined social support in at least five different aspects. First, it is a multidimensional construct (Winemiller, Mitchel, Sutiff, & Cline, 1993). Second, there are at least 3 important dimensions of social support (Bhanthumnavin, 2001), namely, emotional, informational, and material. Third, these dimensions are interrelated (Fenlason & Beehr, 1994). Fourth, there are at least two-way directions of support: receiving and giving (House, 1981). Fifth, the antecedents of social support should concern person and environment (Sarason, Sarason, & Pierce, 1994).

In this study, giving social support by elderly was defined as consisting of two important groups of verbal and physical actions, namely, emotional and informational. Emotional support emphasizes showing interest and concern in others' well-being, encouraging positive feelings, and being a good listener. Informational support consists of offering suggestions for problem solving and giving good examples from one's life experience.

2.2 Antecedents of Social Support Giving

The Interactionism model (Endler & Magnusson, 1976) indicated that researchers studying human behaviors should take person characteristics and environment factors into account. Several scholars in aging research (Iwarsson, 2005; Kahana, Lovegreen, Kahana, & Kahana, 2003; Wahl,2006) agreed with this approach.

Person characteristics of elders in this study consisted of five constructs. First, generativity from Erikson's theory of psychosocial development (1950). It is the stage of "establishing and guiding the next generation" (Erikson, 1950, p. 267). Thus, the person in this stage focuses on issues, needs or motivations to do things for next generation in order to preserve what is good or to make better (McAdams & St.Aubin, 1992). During a few past decades, relationship between generativity and elderly behaviors were found, e.g. work behavior and well-being at work (Doerwald, Zacher, Van Yperen, & Scheibe, 2020), and prosocial behavior (Wenner & Randall, 2016). Second, core self-evaluation based on Judge, Erez, Bono and Thoresen (2003) was also found to link to social support (Jiang,Wang, Jing, Wallace, Jiang, & Kim, 2017; Song, Kong, & Jin, 2013). Third, religious belief and practice is one of the factors that could affect social behaviors (Baloch, Chhachhar, & Singutt, 2014; Bhanthumnavin, 1997). Fourth, it has long been accepted that health stress is one of the important concerns of older adults (Wu & Li, 2016) that could affect prosocial behavior. Fifth, depression is feeling of empathy, hopelessness, and helplessness which could lead to social isolation in older adults (Luo, Guo, Thapa, & Yu, 2021).

Situational or situational factors have played significant roles in affecting behaviors. In this study, four

possible situational factors were investigated. First, elderly schools are set up by the Thai government located in Buddhist temples all around the country for lifelong learning and increasing well-being of older adult population. Previous studies relating to project evaluation found that participants in the project compared to non-participants indicated more desirable behaviors relating to the project, especially health project school (Promlakkano, 2006) and environmental project school (Suwandee, 2000). Second, family relationship is one of the most important social organizations for older adults. It was found that relationship in family has great impact on elderly behavior (Guven & Sener, 2010), e.g. health behavior (Thanakwang & Soonthorndhada, 2008), social behavior (Sipiyarak,2009). Third, role model involves perceptions of thought, feeling, or action of significant others that one might comply or imitate. Fourth, social network in terms of neighbors, community members, and formal or informal local leaders also influence a person's activities especially in Asian countries (Choi, Kwon, & Kim, 2018; Kratzer & Ammering, 2019).

Based on the literature review above, hypothesis 1 can be generated as follows.

Hypothesis 1: All 9 psychological and situational factors together predict social support giving behavior with at least 30% of accuracy.

2.3 Social Support Giving and Happiness

Well-being have long been in the focus of aging study which is one of the ultimate goals of living. One of the important well-being in older adults is happiness. Most scholars agreed that happiness is associated with life satisfaction, self-esteem, and commitment to do good things (Luchesi, de Oliveira, de Morais, de Paula Pessoa, Pavarini, & Chagas, 2018; Sato & Yuki, 2014). In the past, there are some evident that prosocial behaviors lead to happiness (Aknin & Whillan, 2020; Sumonta, Bhanthunavin, Bhanthumnavin, Vajirakachorn, Peungposop, & Phimthong, 2020).

Based on the literature review above, hypothesis 2 can be generated as follows.

Hypothesis 2: Social support giving behavior is positively and significantly related to Buddhist happiness in elderly.

3. Research Methodology

3.1 Samples

Samples were elderly aged 50 years and over, who lived in Chiang Rai Province, Thailand. Multi-Stage Quota Random Sampling was employed to obtain the samples. Although 639 samples filled out the questionnaires, the data from only 515 samples were usable. The data of 515 samples were divided into two groups namely, 120 samples for analyzing quality of items and measurement, and 395 samples for hypotheses analysis.

The total number of 395 samples consisted of 200 male elderly (50.60%) and 195 female elderly (49.40%). One hundred and ninety-nine elderly were attended in elderly project schools in five locations in Chiang Rai Province (50.40%), and the rest (49.60%) were living in the similar locations but did not attend the school. Age range was between 59 years old to 90 years old with the average of 69.60 years old, median of 68.00 years old, and standard deviation as 6.42 years old.

3.2 Measures

Most of the measures in this study were summated rating scale and were constructed by the researchers. Each measure consisted of 8-16 items. Each item was accompanied by 6-point Likert scale ranging from "absolutely not true" to "absolutely true". The item quality and measurement quality are shown in Table 1 (See more details in Wichienthano, 2021).

Social support giving behavior (SGB) based on House (1981) and Bhanthumnavin (2001) was assessed in two dimensions, namely, emotional support and informational support. Happiness (HAP) based on important Buddhist concepts of optimism and hopefulness, emotional calmness, and accepting one's own conditions, less worries as well as readiness to meet final stage of life.

Situational condition consisted of 4 variables. First, elderly school attendance (ESA) was defined as being (or not being) a membership in elderly school project. Data were collected from two types of elders living in the same area: attending elderly school vs. not attending the school. Second, family relation (FR) was defined as interactions of elderly person with his or her family members, e.g., being taken care by them, being frustrated because of them. Role model (RM) was defined as having and observing more or less incidents of support giving from relatives, friends, and significant others (e.g., celebrity, favorite actors/actresses). Fourth, social network (SN) involved social groups that the elderly interacts and socializes with, e.g., neighbor, community members, monks, far away relatives.

Psychological characteristics consisted of 5 variables. First was Buddhist belief and practice (BBP). It was based on Bhanthumnavin (1997) which involved in religious belief (e.g., belief in heaven and hell, next life) and practice (e.g., pray, religious rules observeance). Second, Core self-evaluation (CSE) was based on Judge, Erez, Bono and Thoresen (2003), consisting of 4 dimensions, namely, self-esteem, generalized self-efficacy, neuroticism, and locus of control. Third, Generativity (GEN), based on Erikson's stage of psychosocial development theory (1950) which reveals amount of social adjustment of the elderly that results in social responsibility more than self-concern. The measure integrated various scales (e.g., Schoklitsch & Baumann, 2011; McAdams, & de St. Aubin,1992; Ochse & Plug, 1986), involved concerning about social requests, caring for young generations and community. Fourth, health stress (HS) concerned health deterioration which affected physical tensions (e.g., physical changes, knee pain) and psychological tension (e.g., worry, fear, discourage). Fifth, depression (DEP) involved the feeling of hopelessness, helplessness, not enjoying living, and having suicidal thought.

Table 1. The item quality and measurement quality

	Measures	item constructed	item used	item discrimination	Reliability (∝)	Confirmatory Factor Analysis					
						Chi-square	df	p-value (p>0.05)	RMSEA (≤0.06)	CFI (≥0.95)	TLI (≥0.95)	SRMR (≤0.06)
1	SGB*	20	12	2.15 - 8.58	0.76	58.47	46	0.102	0.052	0.95	0.929	0.08
2	HAP*	18	12	2.55 - 8.96	0.73	54.78	40	0.059	0.061	0.947	0.912	0.085
3	BBP	20	15	2.12 - 9.12	0.72	89.559	82	0.266	0.028	0.973	0.966	0.064
4	CSE	12	8	2.15 - 11.63	0.66	19.078	18	0.387	0.022	0.989	0.983	0.046
5	GEN	18	12	3.06 - 4.90	0.56	35.992	38	0.563	0.000	1.000	1.013	0.057
6	HS*[a]	16	16	2.83 - 9.62	0.75	87.934	84	0.363	0.02	0.991	0.987	0.072
7	DEP*[a]	16	12	3.31 - 15.05	0.87	58.534	46	0.102	0.048	0.975	0.964	0.051
8	FR*	20	15	2.39 - 9.09	0.82	84.17	65	0.055	0.054	0.953	0.924	0.077
9	RM*	18	15	2.04 - 5.73	0.63	82.901	72	0.179	0.036	0.976	0.965	0.085
10	SN*	24	13	2.38 - 8.79	0.77	74.699	61	0.112	0.043	0.962	0.951	0.057

Note: * Constructed or adapted by the researchers. [a] high score signifies less problems.

3.3 Statistical Approaches for Analysis and Data Collection Process

Two statistical approaches were employed for the two hypothesis testing, namely, Pearson's Product Moment Correlation Coefficient and Multiple Regression Analysis. For item quality, item discrimination (t-ratio) was calculated. For measurement quality testing, reliability in terms of alpha coefficient, as well as construct validity from confirmatory factor analysis were computed (Table 1).

The researchers asked for permission from local government and school administrators in each location for data collection. The elders of both types in each location were asked to meet at the school. Five schools were used. All of them were Buddhist religious centers managed by Buddhist monks and local laypersons. Some facilities (e.g., transportation, oral reading) were available for the ones needed. Before, they were asked to fill out questionnaires, they were informed about the objectives of the study and their rights to withdrawn at any time.

4. Results

4.1 Correlational Results

Results from correlational matrix (Table 2) indicated that 1) among these situational variables, the highest correlation coefficient was found between family relationship and role model (r = 0.671, p < 0.01) 2) among the five psychological variables, health stress and depression was the pair with the highest correlation coefficient (r = 0.612, p < 0.01), 3) elderly school attendance (ESA) seemed to related to social support giving behavior (r = 0.163, p< 0.05). Even though it may be more depressive to the participants (r = -0.110, p<0.05), and 4) as can be expected, the elderly persons who were less depressive and had low health stress were the ones who reported more social support giving behavior and high Buddhist happiness (r from 0.292 to 0.531 with p<0.01). Furthermore, it was found that social support giving behavior and Buddhist happiness were positively and significantly correlated (r = 0.474, p<0.01).

Table 2. The correlation matrix among the variables

	Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1	ESA[a]	-	-	1									
2	FR	62.68	9.80	0.029	1								
3	RM	62.97	7.74	0.014	.671**	1							
4	SN	45.72	8.85	-0.045	.584**	.606**	1						
5	BBP	57.49	9.15	0.063	.538**	.495**	.595**	1					
6	CSE	29.04	5.86	-.133**	.498**	.495**	.566**	.480**	1				
7	GEN	47.22	7.79	-0.028	.324**	.456**	.469**	.400**	.587**	1			
8	HS	55.24	9.66	0.003	.408**	.412**	.406**	.340**	.459**	.292**	1		
9	DEP	42.15	9.03	-.110*	.557**	.478**	.546**	.492**	.558**	.438**	.612**	1	
10	SGB	50.83	7.53	.163**	.506**	.528**	.458**	.478**	.372**	.377**	.292**	.414**	1
11	HAP	44.91	7.61	0.016	.622**	.515**	.555**	.426**	.527**	.321**	.438**	.531**	.474**

Note: * $p<.05$; ** $p<.01$; N = 395. ; [a] not elderly school attendant = 1, school attendant = 2.

4.2 Regression Results on Social Support Giving Behavior

Results from the total sample in Table 3 revealed that using 9 psychological and situational factors 4 to 5 of them could significantly predict social support giving behavior in these elderly with 39.74% accuracy. The important predictors in descending order were role model, family relation, Buddhist belief and practice, attending elderly school project, and generativity. The range of predictive percentages from these factors in four subgroups were between 33.66% to 53.82% which show that gender and age period were moderators.

Table 3. Results of Multiple Regression Analysis on Social Support Giving Behavior from 9 predictors

Groups	N	R^2	Predictors	Beta
Total	395	39.74	RM, FR, BBP, ESA, Generativity	0.24,0.20,0.19,0.15,0.13
Male	200	53.82	SN, BBP, Generativity, RM, CSE	0.29,0.28,0.23,0.23, -0.16
Female	195	33.66	RM, ESA, CSE, BBP	0.30,0.21,0.18,0.16
Young ≤68y	198	43.57	RM, BBP, ESA, FR	0.30,0.23,0.23,0.18
Old >68y	197	38.78	RM, BBP, Generativity, DEP	0.28,0.20,0.17,0.15

Note: all betas were significant at $p<.05$.; EPA = elderly school attendance, RM = role model, FR = family relationship, SN = social network, BBP = Buddhist belief and practice, CSE = core self-evaluation, DEP = depression.

5. Discussion and Recommendations

This study examined the important predictors in terms of psychological and situational of social support giving in elderly. The hypothesis 1 was supported in total sample and all subgroups. In general, situational factors, as role model was the most important predictors of this behavior, followed by family relationship. Previous studies also found that good exemplar from significant others had great effect on behaviors in adolescents (Lee, 2011; Schuler, Tucker, Pedersen, D'Amico, 2019) adults (Mayberry, Berg, Greevy,

Walston, 2019) and elderly (Wu & Sheng, 2019).

Furthermore, results in many subgroups indicated differently that the second important predictor was Buddhist belief and practice. More specifically, the findings from females and younger respondents revealed that attending elderly school project was also an important predictor of social support giving behavior. Thus, participating in different types of religious activities may stimulate the local Thai elders to give emotional and informational supports to younger generations. Recent studies also revealed the importance of religion to adults' desirable behavior (Sumonta, et al, 2020; Schlenk, Sereika, Martire, & Shi, 2021)

It should also be pointed out that generativity was the important predictor of social support giving behavior in elderly, especially in males and elderly with the age of more than 68 years old. According to McAdams and St. Aubin (1992: p. 1004) generativity involves needs, thoughts, or motivations of a person in late life to provide for the next generations. It is possible that males and older elderly feel more capable of giving social support to others in the realms of religious suggestions as measured in this study.

Core self-evaluation was one of the important predictors of social support giving in both males and females. However, the beta coefficients in these subgroups were in the different directions. The negative correlation was found in males, but not in females. In elderly females, the high self-evaluation may give them more confidence and readiness to give help and advice. But in elderly males, their social role in leading others may be useful to heighten their low self-evaluation. Several studies reported that low self-esteem, or less self-efficacy persons may try to increase self-worth by displaying more prosocial behavior (McKay & Fanning, 1998; Napp, 2013). Thus, it should be investigated in future study of the relationship between core self-evaluation and prosocial behavior using gender and age as moderators.

Hypothesis 2 was supported by the positive and significant correlation between social support and happiness. Similar finding was found in several previous studies (Chan & Lee, 2006; Hsu & Chang, 2015; Moeini, Barati, Farthadian, and Ara, 2018).

For implications, role model still has great effect on elderly's prosocial behavior. Religion, especially in Thailand is one of the important embedded social institutions, especially for rural elderly. With their cooperation with the government, many public projects to support elderly population can be done which could increase the well-being of the elderly. Generativity from Erikson's theory should be investigated as one of the possible antecedents of other types of elderly's behaviors. Limitation of this study is its research design. The correlational study cannot verify causality. Experimental trainings should be carried out by giving more appropriate role models from monks and peers. The training should heighten Buddhist belief and practice for the empowerment and sustainability of the future elderly.

6. References

Aknin, L., and Whillan, A., 2020, "Helping and happiness: A review and guideline for public policy", Social Issues and Policy Review, 15(2), 3-34.

Baloch,G., Chhachhar, A.R., and Singutt, W.V., 2014, "Influence of religion on life style and social behavior in Christianity perspective of Malaysian Christian students", Journal of Basic and Applied Scientific Research, 4(4)300-307.

Bhanthumnavin, D., 1997, "Buddhist Religious Belief and Practice in Thai People: Socialization and Quality of Life", Research report, National Institute of Development Administration, Thailand.

Bhanthumnavin, D., 2001, "Importance of supervisory social support and its implications for HRD in Thailand", Psychology and Developing Societies, 12(2), 155-166.

Chaitawittanun, N., Bhanthumnavin, D., Bhanthumnavin, D.E., Meekun, K., Peungposop, N., and Pimthong, S., 2020, "Psycho-situational path model of ambidextrous preparation for quality aging in college students", International Journal for Innovation Education and Research, 8(8), August, 2020, 841-852.

Chan, Y.K., and Lee, Y.K., 2006**,** "Network size, social support and happiness in later life: A comparative study of Beijing and Hong Kong", Journal of Happiness Studies 7(1), 87-112.

Choi,Y., Kwon, Y., and Kim, J., 2018, "The effect of the social networks of the elderly on housing choice in Korea", Habital International, 74, April 2018, 1-8.

Doerwald, F., Zacher,H., Van Yperen,N.W., and Scheibe,S., 2020, "Generativity at work: A meta-analysis", Journal of Vocational Behavior, 125, March 2021, 103521.

Endler, N. S., & Magnusson, D. (Eds.), 1976, Interactional psychology and personality. Hemisphere.

Erikson, E. H.,1950, Childhood and society, New York, Norton.

Fenlason, K. J.,and Beehr, T. A., 1994, "Social support and occupational stress: Effects of talking to others", Journal of Organizational Behavior, 15(2), 157–175.

Guven, S, and Sener,A., 2010, "Family relations in aging", International Journal of Business and Social Science, 1(3), 47-52.

House, J. S. (1981). Work stress and social support. Reading, MA, Addison-Wesley.

Hsu, H.C., and Chang,W.C., 2015, "Social connections and happiness among the elder population of Taiwan", Aging and Mental Health 19(12),1-7.

Iwarsson, S., 2005, "A long-term perspective on person-environment fit and ADL dependence among older Swedish adults", The Gerontologist, 45(3), 327-338.

Jiang, Z.,Wang,Z., Jing,X., Wallace,R., Jiang,X., and Kim, D., 2017, "Core self-evaluation: Linking career support to life satisfaction", Personality and Individual Differences, 112, July 2017, 128-135.

Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J., 2003, "The Core Self-Evaluations Scale: Development of a measure", Personnel Psychology, 56(2), 303–331.

Kahana,E., Lovegreen,L., Kahana,B., and Kahana,M.J., 2003**,**"Person, environment, and person-environment fits as influences on residental satisfaction of elders", Environmental and Behavior, 35(3),434-453.

Kratzer, A.,and Ammering, U., 2019, "Rural innovations in biosphere reserves – A social network approach", Journal of Rural Studies, 71, October 2019, 144-155.

Lee, K., 2011, "The role of media exposure, social exposure and biospheric value orientation in the environmental attitude-intention-behavior model in adolescents", Journal of Environmental Psychology, 31(4), December 2011, 301-308.

Luchesi, B.M., de Oliveira, N.A., de Morais, D., de Paula Pessoa, R.M., Pavarini, S.C.I., and Chagas,

M.H.N., 2018, "Factors associated with happiness in the elderly persons living in the community", Archives of Gerontology and Geriatrics, 74, 83-87.

Luo,F., Guo,L., Thapa,A., and Yu,B., 2021, "Social isolation and depression onset among middle-aged and older adults in China: Moderating effects of education and gender differences", Journal of Affective Disorders, 283, March 2021, 71-76.

Mayberry, L.S., Berg, C.A., Greevy, R.A. Jr, Wallston, K.A., 2019, "Assessing helpful and harmful family and friend involvement in adults' type 2 diabetes self-management", Patient Education and Counseling, 102(7), Mar 2019, 1380-1388.

McAdams, D.P., & de St. Aubin, E., 1992, "A theory of generativity and its assessment through self-report, behavioral acts, and narrative themes in autobiography", Journal of Personality and Social Psychology, 62, 1003-1015.

Mckay, D., and Fanning, N., 1998, "Evaluation of cognitive behaviour therapy", Behaviour Research and Therapy, 45, 56-60.

Moeini, B.,Barati,M., Farthadian, M., and Ara, M.H., 2018, "The association between social support and happiness among elderly in Iran", Korean Journal of Family Medicine, 39(4), 260-265.

Napp, A., 2013, "The effect of self-esteem and prosocial tendencies on helping behavior in the bystander effect", Thesis, New York, USA.

Ochse, R., and Plug, C., 1986, "Cross-cultural investigation of the validity of Erikson's theory of personality development", Journal of Personality and Social Psychology, 50(6), 1240-1252.

Promlukkano, D., 2006, "Antecedents and consequences concerning student health behavior of late adolescents in health promoting school project", Thesis, National Institute of Development Administration.

Sarason, I. G., Sarason, B. R., and Pierce, G. R., 1994, "Social support: Global and relationship-based levels of analysis", Journal of Social and Personal Relationships, 11(2), 295–312.

Sato,K., and Yuki,M., 2014, "The association between self-esteem and happiness differs in relationally mobile vs. stable interpersonal contexts", Frontier in Psychology, 5(352), 1113.

Schlenk, E.A.,Sereika,S.M., Martire,L.M.,and Shi,X., 2021, "Older adults' social network and support and its association with physical activity", Geriatric Nursing, March-April 2021, 42(2), 517-523.

Schoklitsch, A., and Baumann, U., 2011, "Measuring generativity in older adults: The development of new scales", The Journal of Gerontopsychology and Geriatric Psychiatry, 24(1), 31-43.

Schuler, M,S., Tucker, J., Pedersen,E.R., and D'Amico, E.J., 2019, "Relative influence of perceived peer and family substance use on adolescent alcohol, cigarette, and marijuana use across middle and high school", Addictive Behavior, 88, 99-105.

Sipiyarak, W. 2009, "Psycho-social correlates of self-independent behavior of older adults", Thesis. National Institute of Development Administration, Thailand.

Song,G., Kong,F., and Jin, W., 2013, "Mediating effects of core self-evaluation on the relationship between social support and life satisfaction", Social Indicators Research, 114(3), December 2013, 1161-1169.

Sumonta, N., Bhanthunavin,D.E., Bhanthumnavin,D., Vajirakachorn,S., Peungposop,N., and Phimthong, S., 2020, "Psychological, situational, religious, and behavioral factors influencing happiness in

living: An SEM approach", International Journal for Innovation Education and Research, 8(4), April 2020, 42-50.

Suwandee, L., 2000, "Psycho-social correlates of waste minimization behavior of students in Rung Arun Project's schools", Thesis. National Institute of Development Administration, Thailand.

Thanakwang, K., and Soonthorndhada, K., 2008, "Family relations and health-promoting behavior among older people in Nan Province", Journal of the Medical Association of Thailand, 91(7), 1102-1108.

Wahl, H., 2006, Introduction: The person-environment perspective in aging research. The Many Faces of Health, Competence and Well-Being in Old Age, Germany, Springer, pp.3-6.

Wenner, J., and Randall, B.A., 2016, "Predictors of prosocial behavior: Differences in Middle aged and older adults", Personality and Individual Differences, 101, October 2016, 322-326.

Wichienthano, S., 2021. "Psycho-social factors as correlates of successful Buddhist aging in attendees of elderly school project. Ph.D. Dissertation, National Institute of Development Administration, Thailand.

Winemiller, D. R., Mitchell, M. E., Sutliff, J., and Cline, D. J., 1993, "Measurement strategies in social support: A descriptive review of the literature", Journal of Clinical Psychology, 49(5), 638–648.

Wu,F., and Sheng,Y, 2019, "Social support network, social support, self-efficacy, health-promoting behavior and healthy aging among older adults: A pathway analysis", Archives of Gerontology and Geriatrics, 85, November-December 2019, 103934.

Wu, D., and Li, Y., 2016, "Online health information seeking behaviors among Chinese elderly", Library & Information Science Research, 38(3), July 2016, 272-279.

Xiang,G., Teng,Z., Li,Q.,Chen,H., and Guo,C., 2020, "The influence of perceived social support on hope: A longitudinal study of older-aged adolescents in China", Children and Youth Service Review, 119, December 2020, 105616.