

## **CHAPTER 4**

### **RESULTS**

The results of the data analyses from this study are presented in three sections. The first section demonstrates the data obtained from phase I of this study in which focus group discussions were conducted. The second section illustrates the findings from the first item analysis of the Elder Abuse Scale. The last section presents the evidence of the psychometric properties of the Elder Abuse Scale, data on prevalence, and the predictors of elder abuse, as well as the management strategies of elder abuse among Thai older adults in Chiang Mai.

#### **Phase One Results**

##### **Demographic Characteristics of the Sample**

The sample consented to take part in the phase I study consisted of 27 older adults. About 59.3 % of the participants were females. Their mean age was 73 years, with an age range from 62 to 93 years. The majority of the participants (88.9%) were Buddhist. The data indicated that more than half of the participants (59.3%) were widow or widower. Most of them (70.4%) had at least one child. The participants were not well educated with 70.4% had primary school education, and 14.8% had no schooling at all. About two-thirds of the participants (66.7%) were unemployed. Additionally, about three quarters of the participants (74.1%) had income below the poverty line of Thai people in the northern region (median = 0 Thai baht/month), and 70.4% received some financial support from others, such as children and charity. The

majority of the participants (81.5%) did not know about family income. Approximately, two-thirds of the participants (63%) perceived not having enough income for their living expense. As for the living situation, more than half of the participants (59%) lived alone, the rest lived either with children (22.2%), or with both children and spouse (14.8%), or relatives (3.7%). The majority of the participants reported not having any family history of mental illness. Only 22.2% reported having substance abuse, such as alcohol and drug in the family. Those who used drug or consumed alcohol were children (n=3), sons-in-law (n=2), and relatives (n=1). Most of them (77.8%) reported having at least one health problem (see Table 2).

### **Finding from Focus Group Discussions**

#### **Meaning of the word “*elder abuse*”**

Based on the focus group discussions, it is not surprising that elder abuse does exist in the Thai society. Interestingly, when the participants were asked about the meaning of elder abuse with the question “When you hear the term “elder abuse” what does it mean to you?”, all participants knew what it was. Most participants saw elder abuse as bad behaviors that family members acted on them which resulted in physical injuries and /or psychological distress. Some participants also mentioned that elder abuse might occur more than once and the severity of the situation depended upon the intention of the family members who did abusive behaviors. As they mentioned:

Table 2

*Demographic characteristics of the phase I study (focus group discussions) sample*

Characteristics	Number (n=27)	Percentage (%)
<b>Gender</b>		
Female	16	59.3
Male	11	40.7
<b>Age Group (<math>\bar{x} = 73.07</math>, <math>SD = 7.14</math> in years)</b>		
Young-old (60-69)	9	33.3
Old-old ( $\geq 70$ )	18	66.7
<b>Religion</b>		
Buddhism	24	88.9
Christian	3	11.1
<b>Marital Status</b>		
Single	2	7.4
Married	3	11.1
Divorced	2	7.4
Widow/widower	16	59.3
Separated	4	14.8
<b>Number of Children (<math>\bar{x} = 2.7</math>, <math>SD = 2.33</math> persons)</b>		
None	8	29.6
2	6	22.3
3	5	18.5
4	2	7.4
5	4	14.8
6	1	3.7
10	1	3.7
<b>Level of Education</b>		
No formal education	4	14.8
Primary education	19	70.4
Secondary education	4	14.8
<b>Employment</b>		
Unemployed	18	66.7
Employed	5	18.5
Business	3	11.1
Farmer	1	3.7
<b>Personal Income (Median = 0 Baht/month)</b>		
$\leq 897.4$	20	74.1
$> 897.4$	7	25.9
<b>Family Income (Median = 0 Baht/month)</b>		
Do not know	22	81.5
$\leq 897.4$	1	3.7
$> 897.4$	4	14.8

Table 2 (Continued)

Characteristics	Number (n=27)	Percentage (%)
<b>Financial Support from Others (<math>\bar{x} = 1,707.41</math>, <math>SD = 4645.75</math> Baht/month)</b>		
0	8	29.6
100-1,000	14	51.9
1,001-5,000	3	11.1
5,001-10,000	0	0
> 10,000	2	7.4
<b>Source of Financial Support</b>		
Older adults themselves	8	29.6
Children	7	25.9
Government	1	3.7
They themselves & children	1	3.7
Children & government	4	14.9
Charity	6	22.2
<b>Perception of Income Adequacy</b>		
Enough	10	37.0
Not enough	17	63.0
<b>Living situation</b>		
Living alone	16	59.0
Living with children	6	22.2
Living with spouses and children	4	14.8
Living with relatives	1	3.7
<b>Family History of Mental Illness</b>		
No	24	88.9
Yes	3	11.1
<b>Family History of Substance Abuse</b>		
No	21	77.8
Yes	6	22.2
<b>Health Problems</b>		
No	6	22.2
Yes	21	77.8

*“From my experiences, when my children scold my grandchild, sometimes they speak about me. I knew they might not intentionally speak like that, but it’s really hurt me.*

*“I knew my daughter-in-law doesn’t want me to stay with them. She usually acts and says something showing non respect to me until I can’t stay with them and run away from home.”*

*“I think the word “elder abuse” does not only mean hurting older adults’ bodies and mind or neglecting elderly people, but also mean making them do things against their will.*

#### **Components of elder abuse**

Five components were emerged from the focus group discussions: physical abuse, psychological abuse, exploitation, neglect, and violation of rights. The first component was physical abuse which is defined as the use of physical force that results in body injury. One participant shared her direct experience of physical abuse.

*“He told me to go home with him, but I said “No”. I am his mom and he shouldn’t take control over me. Since I didn’t go with him, he then slapped me. He spat on his hand and rubbed spit under his foot and then smacked on my face and neck”.*

Another participant also shared her experience of physical abuse.

*“When he wanted money and I didn’t give it to him, he beat me. He could have killed me too”.*

Psychological abuse was the second component. It is deliberate infliction of mental or emotional pain through verbal or non-verbal threats, intimidation, or lack of concern. The qualitative data supported this component were:

*“Some children and grandchildren don’t like older people even we are their own parents. They usually say and act sarcastically. It is so biting annoying that makes me run away from them.”*

*“Sometimes their biting words cause me everlasting pain. It really hurts. They’d better hit me; that hurts only once.”*

Here are more some excerpts:

*“Some children and grandchildren don’t respect me. They act as if I’m not a part of the family. They don’t ask for any advice from me. When I warn them or give them advice, they did not concern and talk back immediately or even shout at me. I feel offended, angry, and hurt inside like tear dropping in my heart.”*

*“Sometimes, they said I was old-fashioned, and Jurassic (Boran Pen Dinosaur Tao Larn Pee). I feel resent and regret. I have raised them and paid for their college, but they pay me back by blaming me.”*

The third emerging component was exploitation. It means taking advantage of an older adult’s resources for personal monetary gain or profit. One participant described her experiences related to exploitation.

*“My children and grandchildren never respect me. They don’t think I am their grandmother. They only think how to use me. They even ask me to clean their children’s cuspidor. They don’t ask their uncle or aunt, but me, their great-grandparent. They make me work as though I am just dependent on*



*them and have no place to go. Actually, if I go and work with others, I can get paid and my stomach is full. Staying with them, I got nothing."*

Other participants also revealed their experiences of exploitation.

*"In general, the elderly are fooled by their children. For example, when their children need some money, they dupe their parents to sign on the title deed or the transmission of authority letter and mortgage their house until they lose it. The elderly do not know until their house is taken. That's horrible!"*

*"Sometimes, they leave their children with me to be taken care of. I don't have enough time to rest. I know it is their necessity and they do it unintentionally but it makes me suffering."*

Neglect was the fourth component of elder abuse emerging from focus group discussions. Neglect is the deliberate or unintentional omission or carelessness of assistance vital to the performance of activities of daily living. One participant shared her experiences regarding neglect.

*"When we have money, everyone including our children pays respect and looks up to us. Without money, no one cares how we are. I know it."*

Another participant reported:

*"We just like a piece of wood without mushroom on it (Kkon mai bor mee het loog laun kor bor leal lare: meaning that having no money and properties), none of our children or grandchildren would like to take care of us."*

Other participants also described their experiences regarding neglect.

*"When I get sick, they always tell me to take the medication myself. They never take care of me. But when their own children are sick, they make such a*

*big deal like taking turns holding the babies and taking them to a doctor immediately. For me who is their mom, they never pay attention to me.”*

*“Although some children do not really abandon the elderly or turn them out of the house, what they do has always been so mean to us. Here is an example, at every meal time, they have never called their mom to join the table, although, we sit there. Finally, we can only have the leftovers.”*

The last component was violation of rights. It is actions that limit or deny an older adult's right within his or her family and community.

*“Sometimes, I feel like I am a prisoner. I can't voice my ideas. I feel distress and unhappy. I don't have a right to speak so that I leave the house.”*

*“People have their own rights, the elderly either. We have a right to do anything and give opinions. When some children start having financial stability, they buy a new house and force their parents to live with them although their parents don't want to. Finally, the olds get terribly lonely being in the house until they pass away.”*

In sum, it is very interesting that the meaning and components of elder abuse from focus group discussions were quite congruent with those in the western literature. Nevertheless, some finer details of abusive behaviors among Thai older adults are different from the western, perhaps are due to cultural differences. The findings from the focus group discussions were used in development of a cultural sensitive measurement for screening abuse which was used in the phase III study and gave the picture of abuse among the Thai older adults.



## Phase Two Results

### Demographic Characteristics of the Sample

There were 80 participants taking part in the phase II study to try out the Elder Abuse Scale. These participants were selected using convenience sampling. The majority of the participants were females (83.8%). Their mean age was 69 years, with an age range from 60 to 85 years. Almost all participants (97.5%) were Buddhist. About half of the participants (46.3%) were widow or widower. The great number of participants (95%) had at least one child, with a mean number of children of 3 children. The participants were not well educated with 77.5% had primary school education and 6.3% had no schooling at all. Approximately 57.5% were unemployed. Additionally, more than half of participants (58.8%) had income below the poverty line of the Thai people in the northern region. Median of income was 0 Thai Baht per month. About 53.8% of the participants did not know about family income. Most of them (77.5%) received some money support from others, such as children, spouses, and relatives. Approximately one-fourths of the participants (25%) perceived not having enough income for their living expense. As for the living situation, only 11.3% of the participants lived alone, the rest lived either with children (50.0%), both children and spouses 28.7%, spouses (7.5%), or relatives (2.5%). Almost all participants (98.8%) reported not having any family history of mental illness. About one-fourths (26.2%) reported having family history of substance abuse, such as alcohol and drug. Those who used drug and drank alcohol were children (n=17), grandchildren (n=3), and spouses (n=1). The majority of the participants (82.5%) reported having at least one health problem (see Table 3).

Table 3

*Demographic characteristics of the phase II study sample (n = 80)*

Characteristics	Number (n=80)	Percentage (%)
<b>Gender</b>		
Female	67	83.8
Male	13	16.2
<b>Age Group (<math>\bar{x} = 68.99</math>, <math>SD = 4.47</math> in years)</b>		
Young-old (60-69)	49	61.3
Old-old ( $\geq 70$ )	31	38.7
<b>Religion</b>		
Buddhism	78	97.5
Christian	2	2.5
<b>Marital Status</b>		
Single	1	1.3
Married	19	36.2
Divorced	6	7.5
Widow/widower	37	46.3
Separated	7	8.7
<b>Number of Children (<math>\bar{x} = 3.0</math>, <math>SD = 2.06</math> persons)</b>		
None	4	5.0
1	15	18.8
2	20	25.0
3	10	12.5
4	16	20.0
5	6	7.5
6	4	5.0
7	4	5.0
12	1	1.2
<b>Level of Education</b>		
No formal education	5	6.3
Primary education	62	77.5
Secondary education	6	7.5
College/university	7	8.7
<b>Employment</b>		
Unemployed	46	57.5
Employed	12	15.0
Business	17	21.3
Retired	5	6.2
<b>Personal Income (Median = 0 Baht/month)</b>		
$\leq 897.4$	47	58.8
$> 897.4$	33	41.2

Table 3 (Continued)

Characteristics	Number (n=80)	Percentage (%)
<b>Family Income (Median = 0 Baht/month)</b>		
Do not know	43	53.8
> 897.4	37	46.2
<b>Financial Support from Others (<math>\bar{x}</math> = 1,906.25, SD = 2,818.36 Baht/month)</b>		
0	18	22.5
100-1,000	26	32.5
1,001-5,000	30	37.5
5,001-10,000	5	6.3
> 10,000	1	1.2
<b>Financial Supporters</b>		
Older adults themselves	18	22.5
Children	29	36.3
Spouse	3	3.7
Relative	3	3.7
Government	1	1.3
They themselves & children	17	21.2
They themselves & relatives	1	1.3
They themselves & government	1	1.3
Children & spouses	6	7.4
Children & government	1	1.3
<b>Perception of Income Adequacy</b>		
Enough	60	75.0
Not enough	20	25.0
<b>Living Situation</b>		
Living alone	9	11.3
Living with spouses	6	7.5
Living with children	40	50.0
Living with spouses and children	23	28.7
Living with relatives	2	2.5
<b>Family History of Mental Illness</b>		
No	79	98.8
Yes	1	1.2
<b>Family History of Substance Abuse</b>		
No	59	73.8
Yes	21	26.2
<b>Personal Health Problems</b>		
No	14	17.5
Yes	66	82.5

### Findings from Trying out the Elder Abuse Scale

The Elder Abuse Scale was developed for the Thai older adults in order to screen abuse situations in their own families. The pool items of the Elder Abuse Scale were modified based on the qualitative data from the focus group discussions. This five rating scale consisted of 52 items and 5 components: physical abuse 7 items, psychological abuse 17 items, exploitation 8 items, neglect 12 items, and 8 items for violation of rights (see appendix D). After modifying the pool items of the Elder Abuse Scale, the content validity of the scale was investigated by a panel of five experts. Both the average interrater agreement and the average CVI were acceptable (see Appendix J and K). However, among five components, three except psychological abuse and physical abuse components were commented by the expert panel to add 2 items in each component. The two items added to exploitation were *"Your family member(s) has/have made you do labor or work without wage."* and *"Your family member(s) has/ have made you watch their house so that you couldn't go anywhere."* For the neglect, the two items were *"Your family member(s) has/have let you be hungry without providing food for you."* and *"Your family member(s) has/have let you have bad quality food or insufficient food, such as only have the leftovers, etc."* The two items added into violation of rights were *"Your family member(s) has/have forced you to do some things against your will."* and *"Your family member(s) hasn't/haven't given you a right to choose your favorite food without explaining the reason."* Additionally, the expert panel suggested adding three items in the physical abuse component. The first item was *"Your family member(s) has/have kicked you."* The second item was *"Your family member(s) has/ have*

*intended to make you fall down or have an accident, such as make slippery floor or put obstacles in your way.*" The last item was *"Your family member(s) has/have used an object such as a knife or a gun to hurt you."* For psychological component, the expert panel commented to combine item number four and item number ten together. Item number five was combined with item number nine. The expert panel criticized those four items as being redundant. For example, item number four, *"Your family member(s) has/have yelled at you."* was similar to item number ten, *"Your family member(s) has/have shouted at you."*

After revising the Elder Abuse Scale based on the expert panel's comments, the draft 59 items of the scale were tested with 80 participants who met all inclusion criteria. The researcher got good feedback from all participants. All participants accepted that all items in the Elder Abuse Scale reflected the abuse situations in the family and appropriated to use in the Thai elderly population. Moreover, the words used in the scale were readily understood. For the format of the scale, the participants responded that it was too difficult to differentiate the answer in five rating scales. From the researcher's observation, all participants automatically responded to the questions in 3 rating scale, the situation has never happened to you, the situation has sometimes happened to you, and the situation has often happen to you. Therefore, the expert in instrument development suggested to reduce the number of response categories from five to three response categories in the final edition of the scale (see Appendix O). The main reason was the number of response categories should not affect the Cronbach alpha coefficient, but it is based on item correlation (K. Schepp, personal communication, May 25, 2002).

### Item Analysis and Assessment of Normality of the Elder Abuse Scale

It is important to evaluate the characteristics of the individual items so that the suitable ones can be identified to constitute the instrument ( DeVellis, 1991). Item analysis is the technique providing a way to evaluate the quality of the items and offer a way in deciding which items to retain, revise, or delete (Allen & Yen, 1979).

First, the variability of the scores was assessed by calculating the percentage of older adults whose answers on each point of the five response categories of the Elder Abuse Scale. Answers at the first point, "*the situation has never happened to you*" ranged from 52.5% to 98.8%. Answers at the second point, "*the situation has happened to you less than once a month*" ranged from 0% to 30.3%; for the third point, "*the situation has happened to you once a month*", 0% to 6.3%. Answers at the fourth point, "*the situation has happened to you once a week*", ranged from 0% to 10%; and for the fifth point, "*the situation has happened to you everyday*", 0% to 7.5% (see Appendix P).

Second, item mean, standard deviations, kurtosis, and skewness were computed to examine the normality of each item since results of factor analysis may depend on the normality of each item (Wagner, Schnoll & Gipson, 1998). For fifty-nine items, item means ranged from 1.01 to 1.83 with the standard deviation ranging from 0.112 to 1.221. Almost all item responses (57 items) were piled up at the extreme low end of the response categories as evidenced by mean values of roughly 1.00. Two items, including psychological abuse item number 2, "*Your family member(s) has/have disputed with you.*", and item number 4, "*Your family member(s) has/have yell or shout at you.*", had mean values higher than 1.5. Concerning the



normality of each item, the value for kurtosis and skewness should be around zero if a distribution is normal (Tabachnick & Fidell, 1996; Wagner et al., 1998). All items except psychological abuse item number 2 and 4 showed an extreme non-normality since the value for kurtosis and skewness were higher than 2 and 4, respectively (Wagner et al., 1998) (see Appendix Q).

Third, Pearson's correlation coefficients were calculated for the item to item, item to sub-scale, item to total, sub-scale to sub-scale, and sub-scale to total correlations. For the physical abuse sub-scale, the ratio of the item to item correlation meeting the criteria ranged from 0/9 to 7/9. Of the ten items on the physical abuse sub-scale, all but item number 10, "*Your family member(s) has /have touched or fondled on your body without your consent.*", met the criteria for the item to sub-scale and the item to total correlation (see Appendix R).

The ratio of the item to item correlation meeting the criteria ranged from 7/14 to 13/14 for the psychological abuse sub-scale. Of the fifteen items on the psychological abuse sub-scale, thirteen except item number 1, "*Your family member (s) has/have scolded you.*", and item number 9, "*Your family member(s) has/have told you that you are burdensome.*", met the criteria for the item to sub-scale correlation, and twelve except item number 1, and 8, "*Your family member(s) has/have used inappropriate words to call you.*", and item number 9 met the criteria for the item to total correlation (see Appendix R).

For the exploitation sub-scale, the ratio of the item to item correlation meeting the criteria ranged from 0/9 to 6/9. Of the ten items on the exploitation sub-scale, six except item number 1, "*Your family member(s) has/have made you do house work you didn't want to do such as taking care of your grandchild, and cleaning up your*

house, etc.”, item number 2, “*Your family member(s) has/have made you do labor or work without wage.*”, item number 3, “*Your family member(s) has/have made you watch their house so that you couldn’t go anywhere.*”, and item number 10, “*Your family member(s) has/have made you sign some documents related to benefit without explaining or reading any detail of those documents to you.*”, met the criteria for the item to sub-scale and the item to total correlation (see Appendix R).

On the neglect sub-scale, the ratio of the item to item correlation meeting the criteria ranged from 1/13 to 4/13. Of the fourteen items on the neglect sub-scale, all items met the criteria for the item to sub-scale and the item to total correlation (see Appendix R).

Finally, the ratio of the item to item correlation meeting the criteria ranged from 0/9 to 5/9 for the violation of rights. Of the ten items on the violation of rights sub-scale, five except item number 4, “*Your family member(s) has/have force you to do some things against your will.*”, item number 5, “*Your family member(s) hasn’t/haven’t given you a right to choose your favorite food without explaining the reason.*”, item number 7, “*Your family member(s) hasn’t/haven’t allowed you to make any decision or to share any opinion relating to yourself.*”, item number 8, “*Your family member(s) hasn’t/haven’t allowed you to give your own money to charity or make a merit.*”, and item number 9, “*Your family member(s) hasn’t/haven’t allowed you to join religious or social activities against your will.*”, met the criteria for the item to sub-scale correlation, and four except violation of rights item number 3, “*Your family member(s) hasn’t/haven’t given you an opportunity to do something that you want, such as choose your favorite TV program, make a phone call, choose*

*your own clothes, dresses, or hairstyles, etc.*”, items number 4, 5, 7, 8, and 9 met the criteria for the item to total correlation (see Appendix R).

The correlation between five sub-scales met criteria ranged from 1/4 to 3/4. Of the five sub-scales on the Elder Abuse Scale, two sub-scales except psychological abuse, neglect, and violation of rights met the criteria for the sub-scale to total correlation (see Table 4).

Table 4

*Sub-scale to sub-scale correlation and sub-scale to total scale correlation of the Elder Abuse Scale (n = 80)*

Sub-scales	Sub-scale to sub-scale correlation <sup>a</sup> (r = 0.40 to 0.65)	Sub-scale to total scale correlation (r = 0.55 to 0.80)
Physical abuse	2/4	0.77
Psychological abuse	1/4	0.90 <sup>b</sup>
Exploitation	3/4	0.69
Neglect	2/4	0.92 <sup>b</sup>
Violation of rights	2/4	0.82 <sup>b</sup>

a = Ratio of correlation meeting criteria.

b = Did not meet the criterion levels of correlation.

Lastly, the Cronbach alpha coefficient was used to indicate the internal consistency of the five sub-scales and the total scale. The Cronbach alpha coefficient for the physical abuse sub-scale, psychological abuse sub-scale, exploitation sub-scale, neglect sub-scale, violation of rights sub-scale, and the total Elder Abuse Scale were, 0.90, 0.92, 0.74, 0.98, 0.75, and 0.97, respectively. Even though an alpha coefficient above 0.90 might consider shortening the scale (DeVellis, 1991), all items were remained in order to test them again in phase III study (see Table 5).

Table 5

*Cronbach alpha coefficients for the Elder Abuse Scale (n = 80)*

Scale	Numbers of items	Alpha cronbach coefficient
Physical abuse	10	0.9004
Psychological abuse	15	0.9216
Exploitation	10	0.7406
Neglect	14	0.9873
Violation of rights	10	0.7525
The Elder Abuse Scale	59	0.9679

Based on the first item analysis, since the item to item correlation of exploitation item number 1, 2, and 3 had a negative correlation, the expert suggested a revision of those three items before using the scale to collect the data in phase III study. Of these three items, the word in the statements was modified from “forced” to “made” (A. Kunapun, personal communication, June 6, 2002). For example, the statement in the exploitation item number 1 was revised from “Your family member (s) has/have *forced* you to do house work you didn’t want to do.” to “Your family member(s) has/have *made* you to do house work you didn’t want to do.”

In sum, based on the experts’ comments and the first item analysis, some items on the Elder Abuse Scale were revised as presented above. The response categories of the scale reduce from five to three response categories since older adult participants commented that they easily answered the questions with three response categories than those with five response categories. Additionally, almost all item responses (57 items) were piled up at the extreme low end of the response categories.

However, the Elder Abuse Scale still consisted of 59 items, 10 items for physical abuse, 15 items for psychological abuse, 10 items for exploitation, 14 items for neglect, and 10 items for violation of rights.

### **Phase Three Results**

#### **Demographic Characteristics of the Sample**

The sample was selected using the multistage random sampling. There were 304 participants took part in the phase III study to identify the psychometric properties of the Elder Abuse Scale and to investigate abuse prevalence and risk factors. The majority of the participants were females (75.7%). Age ranged from 60 to 87 years with the mean age of 70 years. Almost all participants (97.4%) were Buddhist. About half of the participants (46.7%) were married, and 41.8% were widow or widower. Most of them (89.5%) had at least one child with a mean number of children of 3. The data indicated that the participants were not well educated with 63.8% had primary school education and 15.8% had no formal education. Approximately 52.0% of the participants were unemployed. Additionally, more than half of the participants (59.5%) had income below the poverty line of Thai people in the northern region (median = 0 Thai Baht/month), and 70.1% received some money support from others, such as children, spouses, and relatives. Most of the participants (77.3%) did not know about family income. Approximately 14.1% of the participants perceived not having enough income for their living expenses. As for the living situation, only 8.6% of the participants lived alone, the rest lived either with children (39.7%), both children and spouses (36.8%), spouses (8.6%), or relatives (6.3%)

Almost all participants (98.0%) reported not having any family history of mental illness. Only 13.8% of the participants reported having family history of substance abuse, such as alcohol and drug. Those who used drug or drank alcohol were children (n=28), spouses (n=8), sons-in-law or daughters-in-law (n=3), relatives (n=2), and grandchildren (n=1). About two-thirds of the participants (69.4%) reported having at least one health problem. The mentioned characteristics of the sample were shown in Table 6.

### **Finding Related to Research Questions**

**Research Question 1:** What are the psychometric properties of the Elder Abuse Scale? Both the evidences for validity and reliability of the Elder Abuse Scale were tested. Results were presented below step by step.

#### **The second item analysis and assessment of normality**

In this study, the second item analysis was performed in order to evaluate the quality of each item and give the evidence to drop out some items before performing the factor analysis. First, the variability of the scores was assessed by calculating the percentage of older adults whose answers on each point of the three response categories of the Elder Abuse Scale. It was found that the prevalence of the first answer “the situation has never happened to you” ranged from 69.7% to 99.7%, for the second answer “the situation has sometimes happened to you” ranged from 0% to 23%, and for the third answer, “the situation has often happened to you” ranged from 0% to 9.9% (see Appendix S).



Table 6

*Demographic characteristics of the phase III study sample (n = 304)*

Characteristics	Number (n=304)	Percentage (%)
<b>Gender</b>		
Female	230	75.7
Male	74	24.3
<b>Age Group (<math>\bar{x} = 69.81</math>, <math>SD = 6.03</math> in years)</b>		
Young-old (60-69)	147	48.4
Old-old ( $\geq 70$ )	157	51.6
<b>Religion</b>		
Buddhism	296	97.4
Christian	7	2.3
Islamic	1	0.3
<b>Marital Status</b>		
Single	14	4.6
Married	142	46.7
Divorced	8	2.6
Widow/widower	127	41.8
Separated	13	4.3
<b>Number of Children (<math>\bar{x} = 3.22</math>, <math>SD = 2.07</math> persons)</b>		
None	32	10.5
1	31	10.2
2	58	19.1
3	62	20.4
4	35	11.5
5	42	13.8
6	24	7.9
7	11	3.6
8	7	2.3
9	2	0.7
<b>Level of Education</b>		
No formal education	48	15.8
Primary education	194	63.8
Secondary education	44	14.5
College/university	18	5.9
<b>Employment</b>		
Unemployed	158	52.0
Employed	36	11.8
Business	80	26.3
Farmer	8	2.7
Retired	22	7.2

Table 6 (Continued)

Characteristics	Number (n=304)	Percentage (%)
<b>Personal Income (Median = 0 Baht/month)</b>		
≤ 897.4	181	59.5
> 897.4	123	40.5
<b>Family Income (Median = 0 Baht/month)</b>		
Do not know	235	77.3
> 897.4	69	22.7
<b>Financial Support from Others (<math>\bar{x} = 1,426.64</math>, <math>SD = 2,063.09</math> Baht/month)</b>		
0	92	30.3
100-1,000	103	33.8
1,001-5,000	94	31.0
5,001-10,000	13	4.2
> 10,000	2	0.7
<b>Source of Financial Supporters</b>		
Older adults themselves	91	29.9
Children	123	40.5
Spouse	2	0.7
Relative	6	2.0
They themselves & children	66	21.7
They themselves & relatives	3	1.0
They themselves & government	1	0.3
They themselves & spouses	1	0.3
Children & spouses	11	3.6
<b>Perception of Income Adequacy</b>		
Enough	261	85.9
Not enough	43	14.1
<b>Living Situation</b>		
Living alone	26	8.6
Living with spouses	26	8.6
Living with children	121	39.7
Living with spouses and children	112	36.8
Living with relatives	19	6.3
<b>Family History of Mental Illness</b>		
No	298	98.0
Yes	6	2.0
<b>Family History of Substance Abuse</b>		
No	262	86.2
Yes	42	13.8
<b>Personal Health Problems</b>		
No	93	30.6
Yes	211	69.4

Second, the normality of each item was examined using item mean, standard deviations, kurtosis, and skewness. For all fifty-nine items, the item means ranged from 1.0 to 1.71, with the standard deviations ranging from 0.057 to 0.646. All item responses except the psychological abuse item number 6, "*Your family member(s) has/have said sarcastically.*", were piled up at the extreme low end of the response categories as evidenced by the mean values of approximately 1.00. Concerning the normality of each item, all items except the psychological abuse item number 2, "*Your family member(s) has/have disputed with you.*", item number 4, "*Your family member(s) has/have yelled or shouted at you.*", and item number 13, "*Your family member(s) hasn't/haven't valued you or acted as if you were not a part of the family, such as didn't ask for an advice from you, ignored your opinion, kept silence or didn't talk with you, etc.*", had the extreme values of both kurtosis and skewness (kurtosis from 3.956 to 304.000, and skewness from 2.249 to 17.436), indicating that they had non-normal distributions. The results were shown in Appendix T.

Third, Pearson's correlation coefficients were calculated for the item to item, item to sub-scale, item to total, sub-scale to sub-scale, and sub-scale to total correlations. The ratio of the item to item correlation meeting the criteria ranged from 0/9 to 8/9 for the physical abuse sub-scale. Of the ten items on the physical abuse sub-scale, all but item number 3, "*Your family member(s) has/have punched you.*", and item number 9, "*Your family member(s) has/have intended to make you fall down or have an accident, such as make slippery floor, or put obstacles in your way.*", met the criteria for the item to sub-scale correlation; and all but item number 2, "*Your family member(s) has/have slapped you.*", item number 3, and 4, "*Your family member(s) has/have pinched you.*", item number 7, "*Your family member(s) has/have*

*thrown objects to you.*”, item number 8, *“Your family member(s) has/have used an object such as a knife or a gun to hurt you.”*, item number 9, and 10, *“Your family member(s) has/have touched or fondled on your body without your consent.”*, met the criteria for the item to total correlation (see Appendix U).

For the psychological abuse sub-scale, the ratio of the item to item correlation meeting the criteria ranged from 8/14 to 14/14. Of the fifteen items on the psychological abuse sub-scale, thirteen except the psychological abuse item number 10, *“Your family member(s) has/have evicted you from home.”*, and item number 14, *“Your family member(s) has/have acted some things to make you feel they don’t want you around.”*, met the criteria both for the item to sub-scale and the item to total correlation (see Appendix U).

The ratio of the item to item correlation meeting the criteria ranged from 0/9 to 3/9 for the exploitation sub-scale. Of the ten items on the exploitation sub-scale, all but item number 1, *“Your family member(s) has/have made you do house work you didn’t want to do, such as taking care of your grandchild, and cleaning up you house, etc.”*, item number 2, *“Your family member(s) has/have made you do labor or work without wage.”*, item number 3, *“Your family member(s) has/have made you watch their house so that you couldn’t go anywhere.”*, item number 8, *“Your family member (s) has/have pestered or forced you to buy things for them that you didn’t want to do.”*, item number 9, *“Your family member(s) has/have pestered or forced you to give them an inheritance.”*, and item number 10, *“Your family member(s) has/have made you sign documents related to benefit without explaining or reading any detail of those documents to you.”*, met the criteria both for the item to sub-scale and the item to total correlation (see appendix U).

On the neglect sub-scale, the ratio of the item to item correlation meeting the criteria ranged from 0/13 to 12/13. Of the fourteen items on the neglect sub-scale, all but item number 2, "*Your family member(s) has/have let you feed yourself when you needed help.*", and item number 6, "*Your family member(s) has/have let you walk alone when you needed help.*", met the criteria both for the item to sub-scale and the item to total correlation (see Appendix U).

Finally, for the violation of rights sub-scale, the ratio of the item to item correlation meeting the criteria ranged from 1/9 to 7/9. Of the ten items on the violation of rights sub-scale, seven except violation of rights item number 3, "*Your family member(s) hasn't/haven't given you an opportunity to do something that you want, such as choose your favorite TV program, make a phone call, choose your own clothes, dresses, or hairstyles, etc.*", item number 8, "*Your family member(s) hasn't/haven't allowed you to give your own money to charity or make a merit.*", and item number 9, "*Your family member(s) hasn't/haven't allowed you to join religious or social activities against your will.*", met the criteria both for the item to sub-scale and the item to total correlation (see Appendix U).

The correlations between five sub-scale and sub-scale to total scale were performed. The correlation between five sub-scales met criteria ranged from 2/4 to 4/4. Of the five sub-scales, all but the psychological abuse and the violation of rights sub-scales met the criteria for the sub-scale to total correlation. The results were illustrated in Table 7.

In sum, based on the second item analysis, sixteen items were deleted from the Elder Abuse Scale before performing factor analysis since the item to item, item to sub-scale, and item to total correlation did not meet the criteria. Of these sixteen

Table 7

*Sub-scale to sub-scale correlation and sub-scale to total scale correlation for the 59 items of the Elder Abuse Scale (n = 304)*

Sub-scales	Sub-scale to sub-scale correlation <sup>a</sup> (r = 0.40 to 0.65)	Sub-scale to total scale correlation (r = 0.55 to 0.80)
Physical abuse	2/4	0.55**
Psychological abuse	3/4	0.90 <sup>b</sup>
Exploitation	4/4	0.72**
Neglect	3/4	0.74**
Violation of rights	2/4	0.83 <sup>b</sup>

a = Ratio of correlation meeting criteria.

b = Did not meet the criterion levels of correlation.

\*\* = Correlation is significant at the 0.01 level (2-tailed).

items, three items from the physical abuse sub-scale, item number 3, "Your family member(s) has/have punched you.", item number 7, "Your family member(s) has/have thrown objects to you.", and item number 9, "Your family member(s) has/have intended to make you fall down or have an accident, such as slippery floor, or put obstacles in your way.", were deleted; two from the psychological abuse sub-scale, item number 10, "Your family member(s) has/have evicted you from home.", and item number 14, "Your family member(s) has/have acted some things to make you feel they don't want you around."; six from the exploitation sub-scale, item number 1, "Your family member(s) has/have made you do house work you didn't want to do, such as taking care of your grandchild, and cleaning up your house, etc.", item number 2, "Your family member(s) has/have made you do labor or work without wage.", item number 3, "Your family member(s) has/have made you watch their



house so that you couldn't go anywhere.", item number 8, "Your family member(s) has/have pestered or forced you to buy things for them that you didn't want to do.", item number 9, "Your family member(s) has/have pestered or forced you to give them an inheritance.", and item number 10, "Your family member(s) has/have made you sign some documents related to benefit without explaining or reading any detail of those documents to you."; two from the neglect sub-scale, item number 2, "Your family member(s) has/have let you feed yourself when you needed help.", and item number 6, "Your family member(s) has/have let you walk alone when you needed help."; and three from the violation of rights, item number 3, "Your family member(s) hasn't/haven't given you an opportunity to do something that you want, such as choose your favorite TV program, make a phone call, choose your own clothes, dresses, or hairstyles, etc.", item number 8, "Your family member(s) hasn't/haven't allowed you to give your own money to charity or make a merit.", and item number 9, "Your family member(s) hasn't/haven't allowed you to join religious or social activities against your will.". The results of item analysis also indicated that the Cronbach alpha coefficients of five sub-scales and the total scale (43 items) were not depressed after deleting those sixteen items. Results are presented in Table 8.

### **Exploratory Factor Analysis of the Elder Abuse Scale**

Factor analysis is a significant statistical procedure often used to test the construct validity of the instrument (Munro, 2001; Nunnally & Bernstein, 1994). Although almost all items of the Elder Abuse Scale were non-normal distributed, the exploratory factor analysis (EFA) could be used to identify the evidence for the

construct validity of the scale since EFA is fairly robust against non-normal distribution, and does not require multivariate normality (Norman & Streiner, 2000).

Table 8

*Cronbach alpha coefficients for 59 items and 43 items of the Elder Abuse Scale (N = 304)*

Sub-scales	Number of items	Cronbach alpha coefficient	Number of items	Cronbach alpha coefficient
Physical abuse	10	0.7184	7	0.7200
Psychological abuse	15	0.9098	13	0.9070
Exploitation	10	0.5930	4	0.6168
Neglect	14	0.9321	12	0.9338
Violation of rights	10	0.7889	7	0.8046
The Elder Abuse Scale	59	0.9372	43	0.9376

First, before EFA with principal component was performed, the Pearson's correlation coefficient between the item to item for 43 items was investigated. The ideal inter-item correlation should be 0.3-0.7 (Ferketich, 1991). For this study, the inter-item correlations ranged from -0.04 to 0.85.

Second, Bartlett's test of sphericity was used to appraise whether a correlation matrix is appropriate for factor analysis by testing the hypothesis that the matrix differ significantly from an identity matrix (Munro, 2001; Norman & Streiner, 2000). In this study, the Bartlett's test of sphericity was significant ( $\chi^2 = 11559.91$ ,  $p = 0.000$ ),

indicating that the matrix was suitable for factor analysis and the use of factor analysis was supported (Munro, 2001).

Third, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO), an approach to evaluate that variables share common factor by comparing the zero-order correlations to the partial correlations, was performed. The KMO value was middling (0.771). Therefore, the results from the Bartlett's test of sphericity and the KMO indicated the appropriateness of conducting the exploratory principal component factor analysis with this sample and items on the scale would share common factors (Munro, 2001; Tabachnick & Fidell, 1989).

An exploratory factor analysis with principal component method was performed. Factor rotation with orthogonal rotation, Varimax method, was employed, since there were weak correlations among the factors ( $r = 0.01-0.28$ ). In this study, there were five components of elder abuse based on the literature review and data from the focus group discussions. Thus, the number of factors was indicated in five factors. Moreover, the number of factors and the number of items within each factor was determined by the eigenvalues greater than 1 and the loading factor greater than 0.3, respectively.

Based on the first exploratory factor analysis, all 43 items were remained which together accounted for 58.28% of variance. The five meaningful components were: 1) neglect, 2) psychological abuse, 3) physical abuse 4) violation of rights, and 5) exploitation. The analysis of five components was displayed (see Table 9).

The first extracted component was comprised of 14 items reflecting the perception of neglect. This component had an eigenvalue of 8.070, accounting for

18.77% of variance. Factor loadings on the first component ranged from 0.444 to 0.862.

The second component, which captured the perception about psychological abuse, was composed of 13 items. This component had an eigenvalue of 6.615 and explained 15.38% of variance. Factor loadings on the second component ranged from 0.339 to 0.805.

The third component was consisted of 9 items reflecting the perception of physical abuse. This component had an eigenvalue of 4.021, accounting for 9.35% of variance. Factor loading on the third component ranged from 0.335 to 0.879.

The fourth component, which reflected the perception of violation of rights among older adults, contained 8 items. This component had an eigenvalue of 3.788 and explained 8.81% of variance. Factor loadings on this component ranged from 0.440 to 0.761.

The last component, exploitation, was comprised of 2 items. This component had an eigenvalue of 2.567, accounting for 5.97% of variance. Factor loadings on this component ranged from 0.495 to 0.605.

Table 9

*Five-factor solution of the Elder Abuse Scale (the first rotation)*

Factor loading	Item number and description
<b>Component 1: Neglect</b>	
.862	Neglect 7: Your family member(s) has/have ignored your personal hygiene when you need help, such as taking a shower, washing mouth, wearing clothes, cleaning your room, or left you to wear dirty clothes, etc.
.847	Neglect 5: Your family member(s) has/have let you go to toilet when you needed help.

Table 9 (Continued)

Factor loading	Item number and description
<b>Component 1: Neglect (con't)</b>	
.824	Neglect 8: Your family member(s) has/have let you get medicine by yourself when you got sick and needed help.
.815	Neglect 10: Your family member(s) has/have ignored or hasn't/haven't concerned your personal health, such as didn't take you to see a doctor as appointed.
.789	Neglect 9: Your family member(s) hasn't/haven't taken care of you or has ignored you when you got sick and needed help.
.788	Neglect 13: Your family member(s) hasn't/ haven't visited you when you got sick.
.747	Neglect 1: Your family member(s) has/have let you find a meal by yourself when you needed help.
.707	Neglect 3: Your family member(s) has/have let you be hungry without providing food to you.
.694	Neglect 12: Your family member(s) hasn't/haven't taken you to join in social activities when you needed help, such as shopping, visiting your friend, going to make a merit, etc.
.606	Neglect 14: Your family member(s) has/have unreasonably left you to stay home alone.
.595	Neglect 4: Your family member(s) has/have let you have bad quality food or insufficient food, such as only have family member leftovers, etc.
.573	Neglect 11: Your family member(s) has/have ignored or not provided health care accessories that you needed, such as eye glasses, jacket, denture, and cane, etc.
.475	<b>Violation of rights 2:</b> Your family member(s) hasn't/haven't given you an opportunity to express your feelings.
.444	<b>Violation of rights 1:</b> Your family member(s) has/have refused or hasn't/haven't allowed you to share your opinion.
Eigenvalue =8.070	
Percent of variance = 18.766	
Alpha Cronbach coefficient = 0.9272	

Table 9 (Continued)

Factor loading	Item number and description
<b>Component 2: Psychological abuse</b>	
.805	Psychological abuse 6: Your family member(s) has/have said sarcastically.
.791	Psychological abuse 5: Your family member(s) has/have said biting or snidely.
.737	Psychological abuse 2: Your family member(s) has/have disputed with you.
.728	Psychological abuse 1: Your family member(s) has/have scolded you.
.711	Psychological abuse 4: Your family member(s) has/have yell or shout at you.
.697	Psychological abuse 7: Your family member(s) has/have ridiculed you.
.688	Psychological abuse 3: Your family member(s) has/have insulted you.
.613	Psychological abuse 8: Your family member(s) has/have used inappropriate words to call you.
.568	Psychological abuse 11: Your family member(s) hasn't/haven't paid respect to you.
.564	Psychological abuse 13: Your family member(s) hasn't/haven't valued you or acted as if you were not a part of the family, such as didn't ask for an advice from you, ignored your opinion, kept silence or didn't talk with you, etc.
.474	Psychological abuse 12: Your family member(s) has/have showed inappropriately behaviors to you, such as stamped their feet, walked pass you without bending their body down, and slammed the door in your face, etc.
.456	Psychological abuse 9: Your family member(s) has/have told you that you are burdensome.
.339	Physical abuse 5: Your family member(s) has/have pushed you.
Eigenvalue = 6.615	
Percent of variance = 15.383	
Alpha Cronbach coefficient = 0.9057	



Table 9 (Continued)

Factor loading	Item number and description
<b>Component 3: Physical abuse</b>	
.879	Physical abuse 8: Your family member(s) has / have used an object such as a knife or a gun to hurt you.
.823	Physical abuse 2: Your family member(s) has/have slapped you.
.694	Physical abuse 10: Your family member(s) has/have touched or fondled on your body without your consent.
.626	Physical abuse 4: Your family member(s) has/have pinched you.
.597	Physical abuse 6: Your family member(s) has/have kicked you.
.556	Physical abuse 1: Your family member(s) has/have hit or beat you.
.503	Exploitation 6: Your family member(s) has/have taken your money without permission.
.431	Exploitation 7: Your family member(s) has/have taken your belongings either to use or to possess without permission.
.335	Physical abuse 5: Your family member(s) has/have pushed you.
Eigenvalue = 4.021	
Percent of variance = 9.351	
Alpha Cronbach coefficient = 0.7597	
<b>Component 4: Violation of rights</b>	
.761	Violation of right 5: Your family member(s) hasn't/haven't given you a right to choose your favorite food without explaining the reason.
.610	Violation of right 7: Your family member(s) hasn't/haven't allowed you to make any decision or to share any opinion relating to yourself.
.570	Violation of right 4: Your family member(s) has/have force you to do some things against your will.
.563	Psychological abuse 15: Your family member(s) has/have acted to make you feel they don't want you to live with them.

Table 9 (Continued)

Factor loading	Item number and description
<b>Component 4: Violation of rights (con't)</b>	
.521	Violation of right 6: Your family member(s) hasn't/ haven't given you a chance to explain the reason for what you did.
.477	Violation of right 10: Your family member(s) has/have said or showed some behaviors that made you feel like you were not a part of the family.
.449	<b>Violation of rights 1:</b> Your family member(s) has/have refused or hasn't/haven't allowed you to share your opinion.
.440	<b>Violation of rights 2:</b> Your family member(s) hasn't/haven't given you an opportunity to express your feelings.
Eigenvalue = 3.788	
Percent of variance = 8.810	
Alpha Cronbach coefficient = 0.7778	
<b>Component 5: Exploitation</b>	
.605	Exploitation 5: Your family member(s) has/have made you take responsibility for most or all family expenses.
.495	Exploitation 4: Your family member(s) has/have borrowed your money without lending it to you.
Eigenvalue = 2.567	
Percent of variance = 5.969	
Alpha Cronbach coefficient = 0.5081	
Alpha Cronbach coefficient = 0. 0.9376	
Cumulative percent of variance = 58.280	

As seen in Table 9, although all five factors had eigenvalues greater than 1 and the factor loadings above 0.3, three items, the violation of rights item number 1, 2, and the physical abuse item number 5, were loaded onto two factors. The violation of rights item number 1 and 2 were loaded onto both the neglect component and the violation of rights component with closed factor loadings. The physical abuse item number 5 was loaded onto both the physical abuse component and the psychological abuse component. It was difficult to determine that these three items should be loaded on which component, since those three items had close factor loadings. Thus, an expert suggested dropping out all three items from the scale (A. Kunapun, personal communication, January 14, 2003).

Based on the expert's comment, the second exploratory factor analysis was conducted. All 40 items were remained which together accounted for 59.00%, with the Bartlett's test of sphericity was significant ( $\chi^2 = 10499.411$ ,  $p = 0.000$ ) and the KMO value was middling (0.760). The five meaningful components were: 1) neglect (12 items), 2) psychological abuse (12 items), 3) physical abuse (8 items) 4) violation of rights (6 items), and 5) exploitation (2 items). The analysis of five components was displayed in Table 10.

The first extracted component was comprised of 12 items reflecting the perception of neglect. This component had an eigenvalue of 11.725, accounting for 29.31% of variance. Factor loadings on the first component ranged from 0.568 to 0.868.

The second component, which captured the perception about psychological abuse, was composed of 12 items. This component had an eigenvalue of 4.904 and

explained 12.26% of variance. Factor loadings on the second component ranged from 0.462 to 0.806.

The third component was consisted of 8 items reflecting the perception of physical abuse. This component had an eigenvalue of 2.889, accounting for 7.22% of variance. Factor loadings on the third component ranged from 0.436 to 0.895.

The fourth component, which reflected the perception of violation of rights among older adults, contained 6 items. This component had an eigenvalue of 2.351 and explained 5.88% of variance. Factor loadings on this component ranged from 0.471 to 0.763.

The last component, exploitation, was comprised of 2 items. This component had an eigenvalue of 1.730, accounting for 4.33% of variance. Factor loadings on this component ranged from 0.486 to 0.611.

Table 10

*Five-factor solution of the Elder Abuse Scale (the final rotation)*

Factor loading	Item number and description
<b>Component 1: Neglect</b>	
.868	Neglect 7: Your family member(s) has/have ignored your personal hygiene when you need help, such as taking a shower, washing mouth, wearing clothes, cleaning your room, or left you to wear dirty clothes, etc.
.854	Neglect 5: Your family member(s) has/have let you go to toilet when you needed help.
.817	Neglect 8: Your family member(s) has/have let you get medicine by yourself when you got sick and needed help.
.810	Neglect 10: Your family member(s) has/have ignored or hasn't/haven't concerned your personal health, such as didn't take you to see a doctor as appointed.

Table 10 (Continued)

Factor loading	Item number and description
<b>Component 1: Neglect (con't)</b>	
.785	Neglect 13: Your family member(s) hasn't/ haven't visited you when you got sick.
.781	Neglect 9: Your family member(s) hasn't/haven't taken care of you or has ignored you when you got sick and needed help.
.746	Neglect 1: Your family member(s) has/have let you find a meal by yourself when you needed help.
.713	Neglect 3: Your family member(s) has/have let you be hungry without providing food to you.
.688	Neglect 12: Your family member(s) hasn't/haven't taken you to join in social activities when you needed help, such as shopping, visiting your friend, going to make a merit, etc.
.605	Neglect 14: Your family member(s) has/have unreasonably left you to stay home alone.
.591	Neglect 4: Your family member(s) has/have let you have bad quality food or insufficient food, such as only have family member leftovers, etc.
.568	Neglect 11: Your family member(s) has/have ignored or not provided health care accessories that you needed, such as eye glasses, jacket, denture, and cane, etc.
Eigenvalue = 11.725	
Percent of variance = 29.314	
Alpha Cronbach coefficient = 0.9338	
<b>Component 2: Psychological abuse</b>	
.806	Psychological abuse 6: Your family member(s) has/have said sarcastically.
.797	Psychological abuse 5: Your family member(s) has/have said biting or snidely.
.737	Psychological abuse 2: Your family member(s) has/have disputed with you.
.729	Psychological abuse 1: Your family member(s) has/have scolded you.
.715	Psychological abuse 4: Your family member(s) has/have yell or shout at you.
.699	Psychological abuse 7: Your family member(s) has/have ridiculed you.

Table 10 (Continued)

Factor loading	Item number and description
<b>Component 2: Psychological abuse (con't)</b>	
.690	Psychological abuse 3: Your family member(s) has/have insulted you.
.613	Psychological abuse 8: Your family member(s) has/have used inappropriate words to call you.
.577	Psychological abuse 11: Your family member(s) hasn't/haven't paid respect to you.
.574	Psychological abuse 13: Your family member(s) hasn't/haven't valued you or acted as if you were not a part of the family, such as didn't ask for an advice from you, ignored your opinion, kept silence or didn't talk with you, etc.
.479	Psychological abuse 12: Your family member(s) has/have showed inappropriately behaviors to you, such as stamped their feet, walked pass you without bending their body down, and slammed the door in your face, etc.
.462	Psychological abuse 9: Your family member(s) has/have told you that you are burdensome.
Eigenvalue = 4.904	
Percent of variance = 12.261	
Alpha Cronbach coefficient = 0.9067	
<b>Component 3: Physical abuse</b>	
.895	Physical abuse 8: Your family member(s) has / have used an object such as a knife or a gun to hurt you.
.813	Physical abuse 2: Your family member(s) has/have slapped you.
.710	Physical abuse 10: Your family member(s) has/have touched or fondled on your body without your consent.
.620	Physical abuse 4: Your family member(s) has/have pinched you.
.579	Physical abuse 6: Your family member(s) has/have kicked you.
.525	Physical abuse 1: Your family member(s) has/have hit or beat you.



Table 10 (Continued)

Factor loading	Item number and description
<b>Component 3: Physical abuse (con't)</b>	
.513	Exploitation 6: Your family member(s) has/have taken your money without permission.
.436	Exploitation 7: Your family member(s) has/have taken your belongings either to use or to possess without permission.
Eigenvalue = 2.889	
Percent of variance = 7.223	
Alpha Cronbach coefficient = 0.7484	
<b>Component 4: Violation of rights</b>	
.763	Violation of right 5: Your family member(s) hasn't/haven't given you a right to choose your favorite food without explaining the reason.
.613	Violation of right 7: Your family member(s) hasn't/haven't allowed you to make any decision or to share any opinion relating to yourself.
.562	Violation of right 4: Your family member(s) has/have force you to do some things against your will.
.560	Psychological abuse 15: Your family member(s) has/have acted to make you feel they don't want you to live with them.
.500	Violation of right 6: Your family member(s) hasn't/ haven't given you a chance to explain the reason for what you did.
.471	Violation of right 10: Your family member(s) has/have said or showed some behaviors that made you feel like you were not a part of the family.
Eigenvalue = 2.351	
Percent of variance = 5.877	
Alpha Cronbach coefficient = 0.7499	

Table 10 (Continued)

Factor loading	Item number and description
<b>Component 5: Exploitation</b>	
.611	Exploitation 5: Your family member(s) has/have made you take responsibility for most or all family expenses.
.486	Exploitation 4: Your family member(s) has/have borrowed your money without lending it to you.
Eigenvalue = 1.730	
Percent of variance = 4.326	
Alpha Cronbach coefficient = 0.581	
Alpha Cronbach coefficient of the Elder Abuse Scale (40 items) = .9298	
Cumulative percent of variance = 59.000	

### Evidence for Criterion Related Validity

To investigate the evidence for criterion related validity of the Elder Abuse Scale with the Life Satisfaction Scale and the Modified H.A.L.F. Assessment Tool, Spearman's rho correlation coefficients were conducted since the Elder Abuse Scale and the Life Satisfaction Life were non-normal distributed. The correlation between the Elder Abuse Scale and the Life Satisfaction Scale was significantly negative correlated. Thus, the more abusive score among these older adult participants, the less life satisfaction they perceived. In contrast, the Elder Abuse Scale was significantly positive correlated with the Modified H.A.L.F. Assessment Tool. Therefore, the more abused these older adult participants, the more risk of abuse they perceived. These results indicated that the evidence for the criterion related validity

of Elder Abuse Scale was satisfactory. The correlations between the scales were shown in Table 11.

Table 11

*The Spearman's rho correlation between the Elder Abuse Scale and the Life Satisfaction Scale and the Modified H.A.L.F. Assessment Tool*

Scale	Correlation
The Elder Abuse Scale and The Life Satisfaction Scale	-.880**
The Elder Abuse Scale and The Modified H.A.L.F. assessment Tool	.683**

Correlation is significant at the 0.01 level (2 tailed).

#### **Evidence for the Internal Consistency Reliability**

The evidence for the internal consistency reliability of the Elder Abuse Scale was determined using the Cronbach alpha coefficient for the five sub-scales and the total scale. The Cronbach alpha coefficients for the physical abuse sub-scale, psychological sub-scale, exploitation sub-scale, neglect sub-scale, violation of rights sub-scale, and the total scale were 0.75, 0.91, 0.51, 0.93, 0.75, and 0.93, respectively (see Table 12). The exploitation sub-scale did not meet the criterion, since the Cronbach alpha coefficient around 0.7 was considered an acceptable level (Ferketich, 1990). The main reason is that there were only two items constituted in the exploitation sub-scale because the alpha coefficient is depended on the number of items in the scale (Carmines & Zeller, 1979).

Table 12

*Cronbach alpha coefficients for the 40 items Elder Abuse Scale (n = 304)*

Sub-scales	Numbers of items	Alpha Cronbach coefficient
Physical abuse	8	0.7484
Psychological abuse	12	0.9067
Exploitation	2	0.5081
Neglect	12	0.9338
Violation of rights	6	0.7499
The Elder Abuse Scale	40	0.9298

In sum, the Elder Abuse Scale was developed based on the literature review and the data from the focus group discussions in order to screen the abuse situation among the Thai older adults within their own families. Three response categories for the scale ranged from 1, “the situation has never happened to you”, to 3 “the situation has often happened to you”. The higher the scores, the greater the abusive situations. The psychometric properties of the scale were tested. Evidence for the content validity of the scale was investigated by five experts with the average CVI of 0.915. Based on the experts’ comments, six items were added in the scale. Of the total 59 items, sixteen items were deleted, after item analysis was performed. Thus, exploratory factor analysis with principal component method was conducted to test an evidence for the construct validity of the scale. The results showed that all 40 items were loaded onto 5 components, accounting for 59.00% of variance. Evidence for criterion related validity of the Elder Abuse Scale was supported. Finally, the evidence for the internal consistency reliability of the scale was determined using the

Cronbach alpha coefficient. The alpha coefficients of the physical abuse sub-scale and the violation of rights sub-scale were satisfactory. In contrast, the alpha coefficients of the psychological abuse sub-scale, neglect, exploitation, and total scale were not satisfactory. Since an alpha coefficient of the exploitation sub-scale was less than 0.7, this sub-scale should be modified by adding some new items. The psychological abuse sub-scale, the neglect sub-scale, and the total scale had alpha coefficient above 0.90, which might indicate that these two sub-scales and the total scale should be shortened in the future.

**Research Question 2:** What is the prevalence of each type of elder abuse, including physical abuse, psychological abuse, exploitation, neglect, and violation of rights among older adults in Chiang Mai, Thailand?

Of all 304 participants, a number of abused older adults were 147. Additionally, a number of abused older adults from various types of elder abuse, psychological abuse, exploitation, violation of rights, neglect, and physical abuse, were 131, 63, 45, 39, and 26, respectively. In terms of the prevalence rate of elder abuse, it was computed as the percentage of participants who had experienced one or more of the abusive behaviors during the study time. Approximately 48.4% of the participants in this study had experienced at least one abusive behavior. The prevalence rate of various types of elder abuse was 43.1% for psychological abuse, 20.7% for exploitation, 14.8% of violation of rights, 12.8% for neglect, and 8.6% for physical abuse (see Table 13).

Table 13

*Numbers and percentage of elder abuse among Thai older adults in Chiang Mai, Thailand (n = 304)*

Elder Abuse components		The EAS 40 items	
		Numbers	Percentage
Physical abuse	Non abused	278	91.4
	<b>Abused</b>	<b>26</b>	<b>8.6</b>
Psychological abuse	Non abused	173	56.9
	<b>Abused</b>	<b>131</b>	<b>43.1</b>
Exploitation	Non abused	241	79.3
	<b>Abused</b>	<b>63</b>	<b>20.7</b>
Neglect	Non abused	265	87.2
	<b>Abused</b>	<b>39</b>	<b>12.8</b>
Violation of rights	Non abused	259	85.2
	<b>Abused</b>	<b>45</b>	<b>14.8</b>
Total elder abuse	Non abused	157	51.6
	<b>Abused</b>	<b>147</b>	<b>48.4</b>

### **Research Question 3: What are the risk factors for elder abuse?**

Crosstabulation was conducted to examine the association between the demographic characteristics, including the perception of health, attitudes toward aging, living arrangement, finance, and functional ability, and elder abuse. The associations were determined by the Pearson's chi-square ( $\chi^2$ ) and its' significant level (p-value). All demographic characteristics that might have an effect on elder



abuse were age, gender, marital status, employment, number of children, religion, level of education, personal income, financial supporters, total income, living situation, family history of mental illness, family history of substance abuse, and health problem. Other risk factors including the perception of health, attitudes toward aging, living arrangements, arrangements, finance, and functional ability were examined.

Among all demographic characteristics only perception of income adequacy, family history of mental illness, and family history of substance abuse have the statistically significant association with elder abuse. Perception of income adequacy and family history of substance abuse were statistically significant associated with elder abuse at the  $p < 0.001$  (two-tailed), whereas family history of mental illness was statistically significant associated with elder abuse at the  $p < 0.01$  (two-tailed) (see Table 14).

Table 14

*Crosstabulation of the demographic characteristics by elder abuse (n = 304)*

Demographic characteristics	Non-abused	Abused	Total
	(n = 157)	(n = 147)	(n = 304)
	Number (%)	Number (%)	Number (%)
<b>Age groups</b>			
60 - 69	84 (53.50)	63 (42.86)	147 (48.36)
≥ 70	73 (46.50)	84 (57.14)	157 (51.64)
<b>(<math>\chi^2 = 3.445</math>, <math>df = 1</math>, <math>p = 0.063</math>; Fisher's Exact Test <math>p = 0.067</math>)</b>			
<b>Gender</b>			
Male	41 (26.11)	33 (22.45)	74 (24.34)
Female	116 (73.89)	114 (77.55)	230 (75.66)
<b>(<math>\chi^2 = 0.554</math>, <math>df = 1</math>, <math>p = 0.134</math>; Fisher's Exact Test <math>p = 0.505</math>)</b>			

Table 14 (Continued)

Demographic characteristics	Non-abused (n = 157)	Abused (n = 147)	Total (n = 304)
	Number (%)	Number (%)	Number (%)
<b>Marital status</b>			
Single	8 (5.10)	6 (4.08)	14 (4.60)
Married	78 (49.68)	64 (43.54)	142 (46.71)
Divorced	5 (3.18)	3 (2.04)	8 (2.63)
Widow/widower	60 (38.22)	67 (45.58)	127 (41.78)
Separated	6 (3.82)	7 (4.76)	13 (4.28)
$(\chi^2 = 2.302^a, df = 4, p = 0.680)$			
<b>Employment</b>			
Unemployed	85 (54.14)	73 (49.66)	158 (51.97)
Employed	72 (45.86)	74 (50.34)	146 (48.03)
$(\chi^2 = 0.611, df = 1, p = 0.435; \text{Fisher's Exact Test } p = 0.491)$			
<b>Numbers of children</b>			
No children	16 (10.19)	16 (10.88)	32 (10.53)
Have at least one child	141 (89.81)	131 (89.12)	272 (89.47)
$(\chi^2 = 0.039, df = 1, p = 0.854; \text{Fisher's Exact test } p = 0.854)$			
<b>Religion</b>			
Buddhism	151 (96.18)	145 (98.64)	296 (97.37)
Other religions	6 (3.82)	2 (1.36)	8 (2.63)
$(\chi^2 = 1.795^b, df = 1, p = 0.180, \text{Fisher's Exact Test } p = 0.285)$			
<b>Level of education</b>			
No formal education	21 (13.37)	27 (18.37)	48 (15.79)
Primary education	99 (63.06)	95 (64.63)	194 (63.82)
Secondary education	24 (15.29)	20 (13.60)	44 (14.47)
College / university	13 (8.28)	5 (3.40)	18 (5.92)
$(\chi^2 = 4.428, df = 3, p = 0.219)$			
<b>Personal income</b>			
≤ 897.4 Baht	93 (59.24)	88 (59.86)	181 (59.54)
> 897.4 Baht	64 (40.76)	59 (40.14)	123 (40.46)
$(\chi^2 = 0.012, df = 1, p = 0.911; \text{Fisher's Exact Test } p = 1.000)$			

Table 14 (Continued)

Demographic characteristics	Non-abused (n = 157)	Abused (n = 147)	Total (n = 304)
	Number (%)	Number (%)	Number (%)
<b>Financial supporters</b>			
Support their own	44 (28.03)	47 (31.97)	91 (29.93)
Support from others	113 (71.97)	100 (68.03)	213 (70.07)
$(\chi^2 = 0.564, df = 1, p = 0.456; \text{Fisher's Exact Test } p = 0.456)$			
<b>Perception of income adequacy</b>			
Enough	148 (94.27)	113 (76.87)	261 (85.86)
Not Enough	9 (5.73)	34 (23.13)	43 (14.14)
$(\chi^2 = 18.920, df = 1, p = 0.000^{***}; \text{Fisher's Exact Test } p = 0.000^{***})$			
<b>Living situation</b>			
Live alone	11 (7.01)	15 (10.21)	26 (8.55)
Live with other	146 (92.99)	132 (89.79)	278 (91.45)
$(\chi^2 = 0.993, df = 1, p = 0.319; \text{Fisher's Exact Test } p = 0.412)$			
<b>Family history of mental illness</b>			
No	157 (100)	141 (95.92)	298 (98.03)
Yes	0 (-)	6 (4.08)	6 (1.97)
$(\chi^2 = 6.537^b, df = 1, p = 0.011^{**}; \text{Fisher's Exact Test } p = 0.012^{**})$			
<b>Family history of substance abuse</b>			
No	152 (96.82)	110 (74.83)	262 (86.18)
Yes	5 (3.18)	37 (25.17)	42 (13.82)
$(\chi^2 = 30.818, df = 1, p = 0.000^{***}; \text{Fisher's Exact Test } p = .000^{***})$			
<b>Health problem</b>			
No	56 (35.67)	37 (25.17)	93 (30.59)
Yes	101 (64.33)	110 (74.83)	211 (69.41)
$(\chi^2 = 3.941, df = 1, p = 0.047; \text{Fisher's Exact Test } p = 0.061)$			

a = 2 cells (20.0%) have expected count less than 5.

b = 2 cells (50.0%) have expected count less than 5.

\*\* =  $p < 0.01$ , \*\*\*  $p < 0.001$ .

The associations between six risk factors and elder abuse were investigated. The perception of health, attitudes toward aging, living arrangement, and finance were statistically significant associated with elder abuse at the  $p < 0.001$  and the impairments of functional ability, both from the Barthel ADL and the Chula ADL, were statistically significant at the  $p < 0.01$  (two-tailed) (see Table 15).

Next, univariate logistic regression was used to analyze the single association of each demographic characteristic, the perception of health, attitudes toward aging, living arrangements, finance, functional ability, and elder abuse. At this point, all demographic characteristics and selected risk factors, age, gender, the family history of mental illness and substance abuse, the perception of health, attitudes toward aging, living arrangement, finance, and functional ability, except marital status and level of education were categorized into two groups. For example, participants' gender was dichotomized into male (0) and female (1). Participants' age was grouped and recoded into 2 groups as 0 = age 60 to 69 years, and 1 = age  $\geq 70$  years. Additionally, the variable represented elder abuse was dichotomized into (0) non-abused cases and (1) abused cases.

Results of the univariate logistic regression analysis revealed that the perception of income adequacy, family history of substance abuse, health problem, and level of education were positively associated with elder abuse (see Table 16). Additionally, all selected risk factors including the perception of health, attitudes toward aging, living arrangement, finance, and the Barthel ADL and the Chula ADL were also positively associated with elder abuse (see Table 17).

Table 15

*Crosstabulation of the health, attitudes toward aging, living arrangements, finance, Barthel ADL, and Chula ADL by elder abuse (n = 304)*

Demographic characteristics	Non-abused (n = 157)	Abused (n = 147)	Total (n = 304)
	No. (percent)	No. (percent)	No. Percent
<b>Health</b>			
Healthy (score = 0 - 4)	134 (85.35)	84 (57.14)	218 (71.71)
Not healthy (score = 5 - 12)	23 (14.65)	63 (42.86)	86 (28.29)
$(\chi^2 = 29.776, df = 1, p = 0.000^{***}; \text{Fisher's Exact Test } p = 0.000^{***})$			
<b>Attitudes toward aging</b>			
Good attitude (score = 0 - 8)	138 (87.90)	56 (38.10)	194 (63.82)
Bad attitude (score = 9 - 24)	19 (12.10)	91 (61.90)	110 (38.18)
$(\chi^2 = 81.546, df = 1, p = 0.000^{***}; \text{Fisher's Exact Test } p = 0.000^{***})$			
<b>Living arrangement</b>			
Good living arrangement (score = 0 - 5)	152 (96.82)	92 (62.59)	244 (80.26)
Bad living arrangement (score = 6 - 15)	5 (3.18)	55 (37.41)	60 (19.74)
$(\chi^2 = 56.153, df = 1, p = 0.000^{***}; \text{Fisher's Exact Test } p = 0.000^{***})$			
<b>Finance</b>			
Non dependence (score = 0 - 6)	61 (38.85)	10 (6.80)	71 (23.36)
Dependence (score = 7 - 18)	96 (61.15)	137 (93.20)	233 (76.64)
$(\chi^2 = 43.567, df = 1, p = 0.000^{***}; \text{Fisher's Exact Test } p = 0.000^{***})$			
<b>The Barthel ADL</b>			
Independence (score = 20)	146 (92.99)	122 (82.99)	268 (88.16)
Dependence (score = 13 - 19)	11 (7.01)	25 (17.01)	36 (11.84)
$(\chi^2 = 7.273, df = 1, p = 0.007^{**}; \text{Fisher's Exact Test } p = 0.008^{**})$			
<b>The Chula ADL</b>			
Independence (score = 9)	147 (93.63)	123 (83.67)	270 (88.82)
Dependence (score = 1 - 8)	10 (6.37)	24 (16.33)	34 (11.18)
$(\chi^2 = 7.577, df = 1, p = 0.006^{**}; \text{Fisher's Exact Test } p = 0.006^{**})$			

\*\* p < 0.01, \*\*\* p < 0.001.

Table 16

*Summary of Univariate Logistic Regression Analysis for the statistically significant relationship between each demographic characteristic and elder abuse (n = 304)*

Risk factors	No.	No.	n	$\beta$	SE	Wald	sig	OR	95% CI	
	Non-abused	abused							Lower	Upper
<b>Perception of income adequacy</b>										
Enough	148	113	261					1.000		
Not enough	9	34	43	1.599	.395	16.375	.000	4.948	2.281	10.734
<b>Substance abuse</b>										
Non substance abuse	152	110	262					1.000		
Substance abuse	5	37	42	2.323	.492	22.265	.000	10.207	3.889	26.789
<b>Personal health problem</b>										
No	56	37	93					1.000		
Yes	101	110	211	0.500	.253	3.911	.048	1.648	1.004	2.705
<b>Level of education</b>										
College/university	13	5	18					1.000		
Secondary education	24	20	44	0.772	.607	1.618	.203	2.165	0.659	7.113
Primary education	99	95	194	0.913	.545	2.805	.094	2.493	0.856	7.259
No education	21	27	48	1.206	.601	4.023	.045	3.340	1.028	10.851

Copyright© by Chiang Mai University

All rights reserved



Table 17

*Summary of Univariate Logistic Regression Analysis for the relationship between health, attitudes toward aging, living arrangements, finance, Barthel ADL, Chula ADL, and elder abuse (n = 304)*

Risk factors	No.	No.	n	$\beta$	SE	Wald	sig	OR	95% CI	
	Non-abused	abused							Lower	Upper
<b>Health</b>										
Healthy	134	84	218					1.000		
Not healthy	23	63	86	1.478	.281	27.625	.000	4.370	2.521	7.573
<b>Attitudes toward aging</b>										
Good attitude	138	56	194					1.000		
Bad attitude	19	91	110	2.468	.298	68.667	.000	11.801	6.583	21.158
<b>Living arrangement</b>										
Good living arrangement	152	92	244					1.000		
Bad living arrangement	5	55	60	2.900	.485	35.691	.000	18.173	7.019	47.055
<b>Financial dependency</b>										
Non dependence	61	10	71					1.000		
Dependence	96	137	233	2.163	.366	34.910	.000	8.700	4.243	17.831
<b>The Barthel ADL</b>										
Independence (score=20)	146	122	268					1.000		
Dependence (score=13-19)	11	25	36	1.000	.382	6.855	.009	2.719	1.286	5.749
<b>The Chula ADL</b>										
Independence (score=9)	147	123	270					1.000		
Dependence (score=1-8)	10	24	34	1.053	.396	7.084	.008	2.867	1.320	6.226

**Research Question 4:** How much of variability in elder abuse can be explained by age, gender, family history of mental illness and substance abuse, health status, attitudes toward aging, living arrangement, financial status, and functional ability?

Multiple logistic regression, forward stepwise method, was employed to examine which risk factors affect the probability of elder abuse (Munro, 2001). All variables associated with elder abuse from the univariate logistic regression analysis were included into a multivariate logistic regression as predictor variables of elder abuse. Prior to conducting the multiple logistic regression, the multicollinearity of the selected risk factors was tested. The correlations among these risk factors were low ( $r = -0.113$  to  $0.096$ ) so that multicollinearity was not a problem in this analysis.

After entering selected risk factors that had the highest correlation with elder abuse in each step of the forward logistic regression analysis, five variables including attitudes toward aging, living arrangement, family history of substance abuse, the perception of health, and finance were retained in the final step of the analysis. All risk factors entered into this analysis except health were found to predict elder abuse with a significant of  $p < 0.001$  and a power of prediction of 78.9%. For this study, the goodness of fit of the model was tested by the Hosmer-Lemeshow  $\chi^2$ . The chi-square values were not significant ( $p > 0.05$ ) in all 5 steps indicating that the model did fit the data (see Table 18).

Among these significant predictors, the participants with family history of substance abuse were approximately seven times more likely to be abused by their family members (OR = 6.777, CI = 2.198-20.897). In addition, the participants who

perceived bad attitudes toward aging and bad living arrangement were roughly six times more likely to be abused than the participants who perceived good attitudes toward aging and good living arrangement (OR = 6.003, CI = 3.100-11.624; OR = 5.966, CI = 2.108-16.886, respectively). The participants with financial dependency were approximately four times more likely to be abused than the participants with no financial dependency (OR = 4.143, CI = 1.841-9.324). Finally, the participants who perceived as unhealthy were just about three times more likely to have abuse than participants who perceived as healthy (OR = 2.593, CI = 1.306-5.146) (see Table 18).

The summary of the logistic regression model predicting elder abuse is demonstrated in Figure 4.

---

Logistic regression model predicting elder abuse

$$\ln p_x / q_x = -2.518 + 1.914(\text{family history of substance abuse}) + 0.953(\text{health status}) + 1.792 (\text{attitudes toward aging}) + 1.786 (\text{living arrangement}) + 1.421 (\text{financial dependency})$$


---

Figure 4. Logistic regression model predicting elder abuse.

Table 18

*Summary of Multiple Logistic Regression Analysis of the risk factors for elder abuse (n = 304)*

Risk factors	$\beta$	SE	Wald	sig	OR	95% CI	
						Lower	Upper
<b>Substance abuse</b>							
Non substance abuse					1.000		
Substance abuse	1.914	0.575	11.093	.001	6.777	2.198	20.897
<b>Health</b>							
Healthy					1.000		
Not healthy	0.953	0.350	7.413	.006	2.593	1.306	5.146
<b>Attitudes toward aging</b>							
Good attitude					1.000		
Bad attitude	1.792	0.337	28.251	.000	6.003	3.100	11.624
<b>Living arrangement</b>							
Good living arrangement					1.000		
Bad living arrangement	1.786	0.531	11.323	.001	5.966	2.108	16.886
<b>Finance</b>							
Non dependence					1.000		
Dependence	1.421	.414	11.793	.001	4.143	1.841	9.324

Nagelkerke R square = .526.

Predictive power =78.9%.

**Research Question 5:** How do older adults in Chiang Mai, Thailand manage the problem?

When asked the question “What do you do when you confront the abuse situation?”, seven categories of responses were reported. The most prevalent management response was keeping silent, being patient, and being dependent upon themselves as much as they can. The second most prevalent management response was trying to run away from home and asking for help from others, such as relative and social welfare. As for the other management strategies, participants have tried to prevent the repetition of the abuse by attempting to solve and discuss the problem with abusers (see Table 19).

Table 19

*The management strategies of elder abuse among Thai older adults in Chiang Mai, Thailand (n = 147)*

Management strategies of elder abuse	Number ( % )
Keeping silent, being patient, being dependent upon themselves	117 (79.59)
Running away from home and asking others, such as relatives, and social welfare for help.	18 (12.24)
Preventing the repetition of the abuse by attempting to solve and discuss the problem with abusers	11 (7.48)
Admonishing and teaching morality	10 (6.80)
Lodging a protest with the police	4 (2.72)
Trying to commit suicide	2 (1.36)
Turning an abuser out of the house.	1 (0.68)

When asked “who and what are helpful for you in dealing with the abused situation?”, three categories of responses were reported. Helping oneself was the most prevalent response since most participants did not know who could help them to solve the problem. The second most prevalent helpful persons was other people, such as relatives, neighbors, health volunteers, head of the community, and social welfare could help them. Lastly, the Dharma and God were perceived as helpful for dealing with the abusive situations (see Table 20).

Table 20

*Persons or things that help the victim to deal with the abused situation (n = 147)*

Persons or things that can help the victim	Number ( % )
They themselves	92 (62.58)
Relatives, neighbors, health volunteers, head of the community, social welfare, and government	59 (40.14)
The dharma and God	32 (21.77)