J. of Population Studies, No.16Pp.29-52, July 1994Taipei: Population Studies Center, NTU

# The Determinants of Satisfaction with Living Arrangements for the Elderly in Taiwan

Chaonan Chen

### I. Introduction

In the last decade, a rapid increase in the proportion of one-person and two-person families among the elderly has been observed in the developing countries (Lo, 1987; Martin, 1989; Chen & Speare, 1990). Changes in this regard, raise questions about the determinants of the elderly's living arrangements, and consequences both for individuals and the country as a whole. One of the deep concerns is whether the increase reflects a change in normative desirability or is simply a result of structural changes. As a consequence, the former implies the deterioration of filial piety and is the most worrisome.

Although both of them have an impact at the country level, the focal point of this paper is whether the two types of determinants have differential consequences at the individual level. It seems safe to assume that an increase in the proportion of the elderly living apart from their children being accompanied by relevant normative support will not increase the proportion of elderly who are dissatisfied with their living arrangements. On the other hand, we suspect a change aroused by structural alteration but without a change in the societal norm to favor independent living resulting in the elderly's dissatisfaction with living apart from their children.

<sup>\*</sup> Research Fellow, The Institute of Economics, Academia Sinica.

#### II. Literature Review

It has been reported that most American elderly have chosen to live apart--that is, live alone or with their spouse only (Berosford & Rivlin, 1966). The major reason for this choice is to avoid sources of potential friction in intergenerational living, including lifestyle differences, conflicts over authority or household division of labor, and the irritating boisterousness of grandchildren (Lopata, 1973). Therefore, an ideal arrangement for the aged is to maintain an independent household not far from married children, or to maintain both their own homes and involvement with kin. This pattern of arrangement is aptly characterized as "intimacy at a distance" (Michael, Fuchs, & Scott, 1980).

A trend toward a smaller and more private household has also been observed in the United States (Laslett, 1973). For the aged, two types of reasons have been attributed to this change. One is the rising income permitting the old to purchase desired privacy in housing (Michael, Fuchs, & Scott, 1980). The other is the decline of fertility and mortality (Kobrin, 1976). The former has limited the numbers of grown offspring with whom housing might be shared. The latter has prolonged both the periods of an "empty-nest" and widowhood.

In brief, the review of literature suggests that the increase of elderly's living apart in the United States is determined by structural change and supported by the social norm. According to our hypothesis, the elderly would not suffer from living apart in such kind of circumstances. Based on the studies of Shana (n.d) and Murray (1973), Treas (1975: 96), concluded that "there is nothing to indicate that the morale of old people suffer from private living arrangement." Shana's study indicated that in 1975, older married women living with children were about as likely to report themselves as "often lonely" as were their counterparts living alone (Shanas, n.d. Table 8-12A). Similarly, Murray

(1973) found that those married men and single women living with kin were actually less likely to report themselves "happy."

Taiwan's situation is rather different from that of the United States. Although Taiwan has also experienced a rapid increase in the proportion of the elderly living apart, its norm in regard to family structure remains unchanged. Previous research pointed out that to co-reside with children remained the norm of the elderly (Greenhalgh, 1984; Speare, 1978; DGBAS, 1982; Wei and Reischel, 1987). The proportion of stem households remained unchanged, but there was a steady trend toward nuclear households resulting from the breakup of joint-stem and joint units. (Freedman et al, 1978; 1982; Lai and Chen, 1980; Weinstein et al, 1990: Chi. 1991). The observed increase of elderly's living apart is simply a result of structural change. It has been suggested that there were four mechanisms responsible for the increase. They were differential mortality, differential attitude toward living arrangement, selectivity of 1950's migration from mainland China, and selectivity of migration in the 1980's (Chen & Speare, 1990). It implies that the increase of elderly's living apart in Taiwan was mainly determined by structural change rather than normative change. We thus suspect that a substantial proportion of the elderly may suffer from living apart under such circumstances.

In this paper, one of our foci is to find out differentials in satisfaction with the current living arrangement for the aged. Moreover, we feel it is more fundamental to know the determinants of satisfaction with the current living arrangement. Here we assume that satisfaction with the current living arrangement reflects a rational evaluation over factors in choosing living arrangement. Therefore, a review of literature in determinants of living arrangement for the aged is helpful.

Kobrin and Goldscheider (1982) proposes that there are three sets of constraints on residential arrangements for the elderly. They are demographic availability, economic feasibility and normative desirability. A similar but more extensive suggestion is made by Soldo (1981). She

arrangements at the older ages are appropriately suggests "living of а complex as outcome process involving conceptualized the socio-demographic, psychological, economic, and health-related characteristics. The relationships among these factors is circumscribed by the specific societal context in which aging occurs" (Soldo, 1981: 495). It seems to us that the constraints or characteristics imply differential rational needs. When basic needs are fulfilled, the elderly will be satisfied with their living arrangements. In other words, we feel that for the elderly the choice of living arrangement is not limited to the fulfillment of their housing need. Rather, it must meet their daily living needs. In the context of a modern Chinese society we assume that the basic living needs for the elderly includes economic security, health status, and kin companionship.

### III. Method and Data

The conceptual frame for this study is derived from the literature review stated above and shown in Figure 1. In Figure 1, the outer frame noted with "specific cultural situation" indicates that it is not a general model. The degree of satisfaction with living arrangement may vary with a cluster of factors associated with the tradition of the society and its stage of economic development. The relevant cultural features of Taiwan society in the late 1980s can be briefly summarized as follows. It has been experienced a rapid economic development in the past three decades. Meanwhile population transition has been completed. consequence, there are drastic structural change and attitudinal change in living arrangements for the elderly among different cohorts. The proportion of the elderly aged 65 and above who live either alone or with their spouse only has increased from 8.97% in 1976 (Lo, 1987) to 33.22% in 1991 (DGBAS, 1992). Nevertheless, there was a discrepancy between

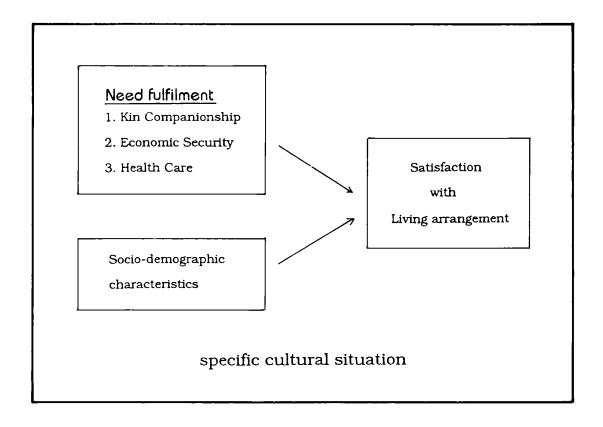


Figure 1: Hypothetical Determinants of Satisfaction with Living
Arrangement

ideal and actual living arrangement. In 1991, only 21.36% of the elderly take living alone or with their spouse only as an ideal living arrangement (DGBAS, 1992). But to live apart from children in later life stage is becoming more salient among the younger generation. It has been shown that there was a sharp decline in expecting to live with sons in old age among married wives aged 20-39. The proportion decreased from 94% in 1965 to 54% in 1973 (Coombs and Sun, 1981). The trend of declining was continued in the first half of the 1980s. The proportion of not expecting to live with adult children in old age increased from 15% in 1980 to 32% in 1986 (Chang, 1988). Their favorable attitude toward living apart may

have influence on their interaction with their aged parents and their satisfaction with living arrangement.

Under the specific cultural situation, we suppose that there is a substantial proportion of the elderly being unsatisfied with their living arrangement. The feeling is affected by two types of factors. One is fulfillment of basic living needs. It can be further divided into three sub-dimensions, i.e. kin-companionship, economic security and health care. The other is socio-demographic characteristics of the elderly. Here, they are mainly taken as indicators of elderly's attitude toward living arrangement.

The primary source of data for this study is from the December Monthly Labor the Force Survey conducted by Directorate-General of Budget, Accounting, and Statistics (DGBAS) in Taiwan in 1988. The survey is intended to be representative of the non-institutional population aged 15 and above in Taiwan and involves a two stage stratified sample design. In the first stage, village level units (with the surname of Tsun or Li) were selected from a list stratified according to degree of urbanization and industrial composition. indicated in the household registration data. In the second stage, households were systematically selected within the sample Tsun's and Li's. In total 515 Tsuns or Lis and about 18,600 households were selected, which is equivalent to an overall sampling fraction of 4 per thousand (DGBAS, 1989).

In this survey, subjects are divided into four groups by age, i.e. 15-24, 25-49, 50-64 and 65 and above. Each group is addressed with different questions in order to provide information for policy planning in education, vocational training and welfare for the elderly. In this study, only those aged 65 and above are selected for analysis. In total, there are 5,046 cases interviewed. Each of them has been given a weight which enables the sample population to be inflated to the total population of Taiwan. These weights were adjusted to match the population by age and

sex as recorded in the household registers (DGBAS, 1989). Throughout this paper, weighted results will be presented with the only exception in logit analysis. Therefore, it is important to check the representatives of the sample.

As shown in Table 1, 52.3% of the sampled elderly are male which do not significantly differ from the household registration data for Taiwan Area. However, significant differences are observed for the distributions of age and education. The sample consists of 72.2% of cases aged 65-74 which is 1.5% greater than its counterpart for the Taiwan Area. Nevertheless, we find that age has no significant influence on the proportion of being satisfied with current living arrangement (see Table 2). On the other hand, the sample has a greater proportion in the two

Table 1: Test of differences between study sample and household registration data

	Sample	Taiwan area	Chi-square
ex			
Male	2,640	602,869	
	(52.3)	(52.8)	. 42
Female	2,406	538,878	
	(47.7)	(47.2)	
ge			
65-74	3,643	806,794	
	(72.2)	(70.7)	5.70*
75+	1,403	334,953	
	(27.8)	(29.3)	
ducation			
No formal	2,834	596,335	
	(56.2)	(52.2)	
Primary	1,396	351,671	
	(27.7)	(30.8)	84.96**
Junior hi.	301	73,062	
	(6.0)	(6.4)	
Senior hi.	255	77,963	
	(5.0)	(6.8)	
College+	260	42,716	
	(5.2)	(3.8)	

Significant at .05 level.

<sup>••</sup> Significant at .01 level.

Table 2: Characteristics and proportion of being satisfied with living arrangement for elderly in Taiwan

Distribution	Satisfaction	Distribution	Satisfaction
lge		Living arrangement	
65-74 72.5	74.9	Alone 13.	7 48.3
75÷ 27.5	74.0	With spouse 15.	0 65.2
Total 100.0	74.6	With children 67.	9 82.8
N 1,143,289	853,388	With others 3.	4 59.6
Chi-square	1.2 (1)	Total 100.	
		N 1,143,	289 853,388
		Chi-square	345.8 (2)••
Sex		Health	
Male 52.8	74.8	Good 62.	7 79.1
Female 47.2	74.4	Fair 31.	8 67.9
Total 100.0	74.6	Poor 5.	4 62.8
N 1,143,289	853,388	Total 100.	0 74.6
Chi-square	.04 (1)	N 1,143,	289 853,388
		Chi-square	80.5 (2)
Marital status		Living cost	
Single 4.5	50.6	Self 34.	9 72.5
Married 56.4	78.1	Children 61.	8 77.7
Divorce 2.0	61.3	Others 3.	3 40.4
Widow 37.1	73.0	Total 100.	0 74.6
Total 100.0	74.6	N 1,143,	289 853,388
N 1,143,289	853,388	Chi-square	126.6 (2)
Chi-square	93.2 (3)**		
Education		Household size	
No formal 55.4	73.6	1 13.	7 52.9
Primary 27.5	74.3	2 20.	8 67.5
Junior hi. 6.2	73.4	3+ 65.	5 81.5
Senior hi. 5.2	80.5	Total 100.	0 74.6
College+ 5.7	82.6	N 1,143,	289 853,388
Total 100.0	74.6	Chi-square	270.9 (2)
N 1,143,28	9 853,388		
Chi-square	19.5 (4) • •		

<sup>••</sup> Significant at .01 level.

The Chi-square values are calculated with unweighted case numbers.

Figures in parentheses are degrees of freedom.

extreme educational categories, no formal and college and above. The difference, however, is offset to a certain degree by the fact that there is a positive relationship between education and satisfaction of living arrangement (see Table 2). The negative effect of lower education on satisfaction with living arrangement is cancelled by the positive effect of higher education. It thus reduces the bias in the estimation of overall proportion of satisfaction with living arrangement for the Taiwan Area.

### IV. Differentials in Satisfaction of Living Arrangement

Table 2 shows the distributions of the weighted sample by selected characteristics and proportions of being satisfied with current living arrangement for each of the sub-categories. The Chi-square values indicate if there are differences in the distributions of satisfaction between sub-categories. We find that age and sex do not have an influence on satisfaction with living arrangement, but other characteristics do have.

When the sample is weighted to inflate to total elderly in the Taiwan Area, we find that slightly over one-half of them are married and another one-third are widows or widowers. These two groups have greater proportions satisfied than the single and divorced groups. In total, 74.6% of the elderly feel satisfied. For the single category, the proportion is as low as 50.6% (see Table 2). As mentioned above, education has a positive effect on attitude toward current living arrangements. About 80% of elderly with senior high school and above are satisfied with their current living arrangement. However, the overwhelming majority of the elderly have junior high school or less education. Their overall proportions of being satisfied are thus close to 74.6%.

Table 2 indicates that about two-thirds of the elderly currently live with their children (spouse included). Those living alone and with spouse account for 13.7% and 15.0%, respectively. And only a small proportion live with others. It also shows living with children is much preferred. Of

them 83% feel satisfied with the arrangement. Those living with spouse ranks second. Among them, 65.2% are satisfied. The proportions for those living with others and alone are 59.6% and 48.3%, respectively.

Generally speaking, the majority of the elderly in Taiwan are in good shape. 62% of the sample report that they are in good health and rarely get sick. Another 31.8% indicate their health condition is fair and they do not need assistance in daily activities. Only 5.4% of elderly suffer from some chronic diseases, such as stroke, malignant tumor, heart disease and senile dementia, and need assistance in daily activities. We find that health condition does have an influence on satisfaction of living arrangement. 79.1% of those elderly in good health feel satisfied. For those in a fair or poor health status, the proportion declines to some 60% only.

In Taiwan, most elderly are still supported by their children. 61.8% of the sample report that their living cost in the last three months came from their children. Meanwhile 34.9% of the elderly support themselves and only 3.3% rely on others. It is interesting to note that those supported by children have a slightly greater proportion of being satisfied with their current living arrangement than those supported by themselves (77.7% & 72.5%). On the other hand, only 40.4% of the elderly who are supported by others feel satisfied.

Of household size, a majority (65.5%) of the sample live in household with three or more persons. This group has the largest proportion (81.5%) satisfied with their living arrangement. Those who live in a one-person and two-persons household account for 13.7% and 20.8%, respectively. Their proportions of being satisfied are as low as 52.9% and 67.5%, respectively.

In brief, we find the satisfaction of living arrangement may vary in terms of marital status, education, living arrangement, health status, source of living cost and household size. Since living arrangement is directly related to the satisfaction of living arrangement, it is controlled in this study to examine the effects of other variables and the results are shown in Table 3. We find that companionship is highly valued by the elderly in Taiwan and living with children is much preferred. As a whole, 83% of those elderly living with children are satisfied. When other factors are added, the lower end of the proportions is 72%, and the other extreme is as high as 91% (see Table 3). Of those living with their spouse, the satisfied proportion ranks second (65%) to those living with offspring. It may vary between 43% and 86%, when other factors are controlled. For those living with others, its overall ratio is 60%. It varies from 46% to 72%, when other factors are simultaneously considered. About one-half of the elderly are satisfied, when they have companions in the household.

On the other hand, the elderly who live alone are more sensitive to the shortage of other needs. It seems that economic security is crucial for the feeling of satisfaction for the elderly. For instance, those elderly who economically rely on others have a very low proportion of being satisfied with current living arrangements (22%). It is also interesting to note that, in fact, the elderly prefer economic independence. Of the elderly who are economically independent, they feel slightly better than those who must rely on their children (53% vs. 50%). This observation is also true for those elderly living with others. Among those living with spouse and others, the proportions of being satisfied are 68% vs. 62% and 71% vs. 52% for with or without economic independence, respectively. But there is no difference between the counterpart proportions of those elderly living with children.

The effect of health on those living alone is also very striking. Those elderly with fair health has a very low proportion satisfied with their living arrangements (35%). On the other hand, the elderly living with children still has a rather high proportion satisfied (70%), when they are in poor health status.

Table 3: Proportion of being satisfied with current living arrangement by living arrangement and other characteristics

Living Arrangement						
	[Alone]	[With spouse]	[With children]	[With others]		
Source o	f living cos	st				
Self	. 53	. 68	. 83	.71		
	(80,993)	(99,798)	(201,502)	(16,464)		
Children	n .50	. 62	. 83	. 52		
	(58,598)	(68,668)	(568,896)	(10,598)		
Others	.22	•	.72	. 50		
	(17,352)		( 5,711)	(11,858)		
Health						
Good	. 55	.73	. 86	. 72		
	(105,041)	(106,307)	(485,310)	(20,330)		
Fair	. 35	. 54	. 79	. 46		
	(49,592)	(56,113)	(243,854)	(14,574)		
Poor	•	. 43	.70			
		( 8,897)	( 46,945)			
Marital s	status					
Single	. 45			.51		
	(35,458)			(11,844)		
Married	, 60	. 65	. 85	. 63		
	(34,914)	(169,326)	(430,402)	(10,695)		
Divorce	. 44	*	. 82			
	(11,754)		(10,091)			
Widow	. 45	:	. 80	. 65		
	(74,817)		(331,516)	(16,062)		
Degree						
Junior	. 46	.61	. 82	. 56		
high	(134,675)	(135,076)	(716,567)	(32,434)		
Senior	. 54	. 76	.91	•		
high	(10,105)	(14,590)	( 32,347)			
College	.65	. 86	. 88			
	( 12,163)	( 21,651)	( 27,195)			
Total	. 48	. 65	. 83	. 60		
	(156,943)	(171,317)	(776,109)	(38,920)		

Figures in parentheses are weighted case numbers.

<sup>•</sup>Unweighted case number is less than 20.

The effect of marital status is less striking. Those elderly who live alone and are not currently married have a moderate proportion satisfied (45%). Meanwhile, more than 63% of the married elderly are satisfied, regardless of their living arrangements, and this is also true for the effect of education. Those living alone and with a junior high or less education also have a moderate proportion feeling satisfied (46%).

Before we go further into examining the effects of those characteristics with more variables controlled, we would like to know who are satisfied with living alone. We suppose that as a society proceeds along the road of modernization, a substantial proportion of its people may become Westernized. It must be especially true for those with a higher social status and they may prefer independent living when they get old.

Table 4 shows the comparisons between those elderly satisfied with living alone and the total elderly sample. We find that the former consists of more young-old (i.e. age 65-74), male, unmarried, and better educated elderly. It also has a greater proportion in good health. The proportion of being economically independent is also larger.

In the near future, we expect the proportion of elderly living alone to decrease as those elderly who moved from mainland China in the 1950's and had remained single become fewer and fewer. On the other hand, the proportion of elderly living with their spouse shall increase with the increase of life expectancy and migration selectivity in the 1980's. Therefore, it is also important to know the characteristics of those elderly who are living with their spouse and are satisfied with the living arrangement. Similarly we find that they differ from the elderly as a whole in many aspects. They are younger, married, with more males, and better educated (see Table 4). The proportions of being economically independent and healthy are greater too.

We are also interested in knowing the difference between those living with their spouse and those living alone. We wonder if those living with

Table 4: Test of differences between those elderly who are satisfied with living alone and with spouse and total elderly

	Satisfie	d & livi	ng Total	Sa	tisfied	& living	Total
	[Alone] [	With spor	use] sample	[ A l	one] [	With spous	se] sample
	(1)	(2)	(3)	(	1)	(2)	(3)
Age				Education			
65-7	4 78.1	82.4	72.2	Junior-h	i.82.2	75.3	89.8
75+	21.9	17.6	27.8	Senior-h	i. 7.4	9.6	5.1
Tota	1 100.0	100.0	100.0	College+	10.4	15.1	5.1
N	338	511	5,045	Total	100.0	100.0	100.0
Chi-	square S:	(1/2)	2.6(1)	N	338	511	5,045
(1/3) 5.6(1)*		Chi-square \$: (1/2) 6.6(2)					
			4.2(1)**			(1/3) 21.	.2(2)**
(=, =, = ::= (*)		(2/3) 103.5(2)••					
Sex				Health			
Male	65.7	63.0	52.3	Good	76.3	70.8	63.1
Fema	le 34.3	37.0	47.7	Fair	23.1	25.4	31.2
Tota	1 100.0	100.0	100.0	Poor	0.6	3.7	5.7
N	338	511	5,045	Total	100.0	100.0	100.0
Chi-	square S	: (1/2)	0.5(1)	N	338	511	5,045
	•	(1/3)	22.8(1)**	Chi-square \$: (1/2) 3.0(1)			
		(2/3)	21.7(1)••	(1/3) 9.7(1 (2/3) 12.7(1			l)**a
							(1)**
Marital status			Living cost				
Sing	le 21.3		4.6	Self	56.2	59.5	34.9
_	ied 27.5	98.6	55.8	Children	38.8	39.1	61.7
	гсе 7.4	0.2	1.9	Others	5.0	1.4	3.4
	w 43.8	1.2	37.8	Total	100.0	100.0	100.0
Tota	1 100.0	100.0	100.0	N	338	511	5,045
N	338	511	5,045	Chi-square S: (1/2) 9.7(2).			
Chi-	-square S:	(1/2) 4	95.4(1)••	•		1/3) 70.0	
	•		50.0(3)**			2/3) 127.0	
			54.6(1)**		,	•	• •

<sup>•.</sup> Significant at .01 level; •• Significant at .025 level.

Figures in parentheses are degrees of freedom.

a. Based on a 2x2 table.

S. (1/2) indicates comparison between distributions 1&2;

<sup>(1/3)</sup> between 1&3; and (2/3) between 2&3.

their spouse are composed mainly of those elderly in the empty-nest stage, while those living alone are in the widowhood stage. Thus, living alone is perhaps merely an extension of living with their spouse. If this is true, we suppose those living with their spouse must be younger and have a higher proportion of males. However, Chi-square tests show that there are no differences between the two groups with the exception of marital status, and education. Our failure in observing differences in sex and age distributions is probably due to the contamination effect caused by selectivity of migration from mainland China in the 1950's. In the next section, we will check to see if those who feel satisfied all have more modernized characteristics.

## V. Determinants of Satisfaction with Living Arrangement

In order to assess the effect of the determinants of satisfaction with living arrangements, a series of logit analyses have been performed. In the analyses, the dependent variable is the satisfaction of the living arrangements. Those elderly who feel satisfied are assigned a code of 1; if not, they are assigned a code of 0. Based on the conceptual frame stated above, seven explanatory variables are selected to be included in the models. The variable of "living arrangement" is chosen to indicate kin companionship. Several ways of coding are tried in different models to reflect different types of kin companionship. "Source of living cost" is to indicate the fulfillment of economic needs. The elderly who rely on social welfare or sources other than their family members are considered as in short of economic security. On the other hand, the economic need of the elderly are met, if they are supported by their children, spouse or themselves. The third need regarding health is rather difficult to measure. Here a self-rated health status is taken as its proxy. When an elderly is in good shape, we suppose his health need is met.

contrary, both elderly who are disabled and need assistance from others and who are not disabled but suffer from chronic diseases are taken as in need of health care. In addition, four demographic variables, i.e. age, sex, marital status and education, are alternatively included in the models. The seven independent variables are all dichotomized. Code 1 is assigned to those elderly who live with children, are in good health, supported by their children or themselves, married, male, with an educational attainment of senior high school or above, and age 65 to 74. The elderly with other characteristics are given a code of 0.

Results of the logit analyses are shown in Table 5. In model 1, "living arrangement" is divided into two types. One is living with children; and the other, not living with children. We find that living arrangements, health, source of living cost, education, and marital status have significant effects on being satisfied living arrangements, when other variables are controlled. It is also noted that arrangements have the largest coefficient or are the influential in attitude towards living arrangements. The coefficients for sources of living costs and health status rank second and third. results support our hypothesis that fulfillment of basic living needs for elderly including economic security, good health. companionship, is critical for their feeling towards living arrangements.

Although marital status and education are less influential, they play a supplementary role to the elderly's feeling toward living arrangements. According to the results not reported here, we find that when either the variables of marital status or education are added to the basic model which includes the factors of living arrangements, health status, and source of living costs, their likelihood ratio Chi-squares become significant at the .05 level. Here, we suppose that better education implies a more modernized attitude towards independent living and being married indicates the companionship of their spouse. We are inclined to conclude that in addition to the information about fulfillment of basic living

Table 5: Results of logit analysis about satisfaction with living arrangement by elderly in Taiwan

	model 1	model 2	model 3	model 4
Constant	36	15	. 21	36
	(-7.71)	(-2.55)	(3,69)	(-7.63)
Living arrangement	. 33			. 32
	(17.90)			(17.70)
Living alone		33•	40	
		(-17.99)	(-16.77)	
Living with			27	
spouse			(-10.81)	
Living with		13	20	<del>-</del> -
others		(-2.55)	(-4.42)	
Health status	. 15	. 15	. 16	. 15
	(8.46)	(8.66)	(8.87)	(8.42)
Source of	. 18	. 25	. 20	. 18
living cost	(4.24)	(5.60)	(4.52)	(4.20)
Marital status	. 09	. 10	. 06	. 09
	(5.17)	(5.61)	(2.74)	(5.10)
Education	. 14	. 13	. 14	. 14
	(5.36)	(5.12)	(5.38)	(5.38)
Sex				01
				(59)
Age				.00
				(.16)
Likelihood ratio				
Chi-square	57.85	78.80	84.69	128.42
$d \cdot f$ .	26	38••	47••	95••
P	.001	.001	.001	.013
N	5,045	5,045	5,045	5,045

Code 1 is assigned to each dummy variable as follows:

living arrangement: living with children; health status: good health; source of living cost: children or selves; education: senior high+; marital status: married; sex: male; age: 65-74; living alone: living alone; living with spouse: living with spouse; living with others: living with others.

Figures in parentheses are z scores.

- · Including living alone and with spouse.
- \*\* With empty categories, the d.f. may not be correct.

needs, the inclusion of either spouse companionship or an attitude towards independent living will enable us to predict the elderly's response to their living arrangements with confidence.

In model 4, the variables of sex and age are added. We find that they do not have significant effects on satisfaction of living arrangements for the elderly. The coefficients for other variables remain unchanged.

Still we are interested in knowing the effects of different types of living arrangements. Thus, living arrangements is recorded in two different ways. In model 2, two dummy variables are created. One is entitled "living apart," but placed in the position for living alone. We assign code 1 to those elderly living alone or with their spouse; otherwise code 0. The other is entitled "living with others;" we give code 1 to those living with others, and otherwise code 0. In other words, the reference group for the two dummy variables are those who are living with children. We find that both of them have negative effects on the elderly's response towards living arrangements. The coefficient for "living apart" is much larger than that for "living with others," and equal to that for "living arrangement" as shown in model 1. It seems that those living apart from children suffer the most.

In model 3, three dummy variables are created to substitute for "living arrangement." They are "living alone," "living with spouse," and "living with others." Code 1 is given to those living alone, living with spouse, and living with others for the counterpart dummy variables. Otherwise, they are given code 0. Again, the reference group for the three dummy variables are those living with children. We find that all of them have a significant effect on the elderly's feeling towards living arrangements. The coefficient for "living alone" is the smallest and slightly smaller than that for "living apart" as shown in model 2. Or those living alone suffer most. Although the coefficient for "living with spouse" is greater than that for "living alone," its absolute size is larger than the rest of the variables. So it is the second most important factor.

In this paper, we have found that the elderly who live alone account for 13.7% of the total sample. The proportion may decrease because the effect of migration selectivity of the 1950's is fading away. On the other hand, the proportion living with their spouse may increase due to the increase in life expectancy or the prolonged effect of migration selectivity of the 1980's. If these suspicions are true, we expect the proportion satisfied with living arrangement for the elderly as a whole may increase slightly, due to the differential reactions in terms of living arrangement.

#### VI. Conclusion

In this paper, conceptually we find that when the elderly are asked about their response to their current living arrangements, their evaluation is not limited to their housing needs. Rather, the criteria of evaluation include those basic living needs such as economic security, health status, and kin companionship. In the context of experiencing a drastic structural change without a concomitant normative change, the elderly with economic support from either their children or are content themselves. However, mere co-residence with their children does not meet the needs of the elderly. In general, they feel satisfied when they are accompanied by both children and spouse, in good health, and with economic security. Therefore, pension system and health insurance for the elderly are critical to the welfare for the elderly.

In addition, we find that a substantial proportion of the elderly are satisfied with living alone, or with their spouse. They are characterized as being younger, better educated, male, in good health, and economically independent. We feel that they belong to the more modernized section of the society. We thus suppose this is the result of modernization.

In the near future, living alone or with their spouse only remain the most important and negative determinants for satisfaction with living

arrangement. Still, the specific cultural situation for Taiwan may be subject to change. The evidence regarding migration selectivity in the 1980s suggest that the proportion living with their spouse only will increase and become the major component of the group who are dissatisfied with their living arrangement. An alternative to promote their welfare is to change their attitude toward living arrangement. Studies to design effective educational program to change the attitude of the elderly who have no choice but living with their spouse only are thus badly needed.

#### REFERENCES

Berosford, J. C. & A. M. Rivlin

1966 "Privacy, Poverty, and Old age." <u>Demography</u>, 3(1): 247-258. Chang, M. C.

"Changing Social Network and Social Welfare in Taiwan, " in Conference on Economic Development and Social Welfare in Taiwan, January 6-8, 1987 (Taipei, Academia Sinica, Institute of Economics, Vol.II: 459-482).

Chen, Chaonan and Alden Speare, Jr.

1990 "The Impact of Modernization Process on Elderly's Living Arrangements — The Case of Taiwan," pp. 535-551 in the Proceeding of Conference on Population Transition and Socio-economic Development. Taipei, (in Chinese)

Chi, Peter S.K.

1991 "Economic Development, Women's Status and Changing Family Structure in Taiwan." Paper presented at 1991 PAA annual meeting, Washington, D.C. March 21-23, 1991.

Coombs, L. C. and T. H. Sun

1981 "Familial Values in a Developing Society: A Decade of Change in Taiwan." Social Forces, 59(4): 1229-1255.

DGBAS

A Survey Report on Attitude Toward Family Life and Social

Environment. Directorate-General of Budget, Accounting, and
Statistics, Republic of China. (in Chinese)

Report on the Youth and the Old Survey in Taiwan Area,

Republic of China, 1988. Directorate-General of Budget,

Accounting, and Statistics, Republic of China. (in Chinese)

Report on the Old Status Survey, Taiwan Area, Republic of China. Directorate-General of Budget, Accounting and Statistics, Executive Yuan.

Freedman, R. et al.

1978 "Household Composition, Extended Kinship, and Reproduction in Taiwan: 1973-1980." <u>Population Studies</u>, 32 (1): 65-80.

Freedman, R. et al.

"Household Composition, Extended Kinship, and Reproduction in Taiwan, 1973-1980." Population Studies, 36(2): 395-411.

Greenhalgh, Susan

1984 "Networks and Their Nodes: Urban Society in Taiwan." China Quarterly, 99: 529-552.

Kobrin, F. E.

1976 "The Fall in Household Size and the Rise of the Primary Individual in the United States." <u>Demography</u>, 13(1): 127-138.

Kobrin, F. E. and C. Goldscheider

1982 "Family Extension or Nonfamily Living: Life Cycle, Economic and Ethnic Factors." Western Sociological Review, 13(1): 103-118.

Lai, T. H. and K. J. Chen

"Historical and Demographic Perspective of the Chinese Family Size." Chinese Journal of Sociology, 5: 25-40. (in Chinese)

Laslett, P.

1971 The World We Have Lost. London: University Paperbacks.

Lo, Joan

1987 "Changes of Elderly's Household Structure in Taiwan: 1976-1985."

Taiwan Economic Forecast, 18(2). (in Chinese)

Lopata, H. Z.

1973 Widowhood in An American City. Cambridge, Mass.: Schenkman.

Martin, Linda

"Living Arrangements of the Elderly in Fizi, Korea, Malaysia, and the Philippines." Demography, 26(4): 627-643.

Michael, R. T. et al.

1980 "Changes in the Propensity to Live Alone." <u>Demography</u>, 17(1): 39-53.

Murray, J.

1973 <u>Family Structure in the Preretirement Years.</u> Retirement History Study Report no.4. Washington, D. C.: U.S. Department of Health, Education, and Welfare.

Shanas, E.

n. d. National Survey of the Aged. Final Report, Grant no. HEW OHP 90-A-369. Unpublished manuscript.

Soldo, Beth J.

1981 "The Living Arrangements of the Elderly in the Near Future."

In S. B. Kiesler, J. N. Morgan and V. K. Oppenheimer (eds.),

Aging: Social Change. New York: Academic Press.

Speare, Alden Jr.

1974 "Migration and Family Change in Central Taiwan." Pp 303-434. in Mark Elvin and G.W. Skinner (eds.), <u>The Chinese City Between Two Worlds.</u> Standford University Press.

Treas, Judith

"Aging and the Family." Pp 94-109. in D. S. Woodruff and I. E.
 Birren (eds.), <u>Aging-Scientific Perspectives and Social Issues</u>,
 2nd edition. Monterey, Cal.: Brook/Cole Publishing Company.

- Wei, H.C. and L. Reischl
  - 1983 "Impact of Industrialization on Attitude toward Parents and Children in Contemporary Taiwan." <u>Industry of Free China</u>
    July, 1983: 1-19.
- Weinsten, M., T.H. Sun, M.C. Chang and R. Freedman
  - 1990 "Household Composition, Extended Kinships, and Reproduction in Taiwan: 1965-1985." Population Studies, 44: 217-239.

### 台灣地區老人居住安排滿意與否之 影響因素

陳肇男\*

### (中文摘要)

本研究取材自行政院主計處一九八八年十二月份勞動力調查中之5,046名65歲以上老人之訪問資料,分析結果顯示老人被詢及對目前居住安排之觀感時,他們的評價並不侷限於對居住之需求。事實上,評價的範圍涵蓋基本的生活需求包括經濟保障,健康狀況及親屬爲伴。在台灣這種現代化中國社會,經濟來源是子女供養或自己的資源,老人都會覺得滿意。不過,祇與子女同居,並不符合老人的需求。一般而言,與子女及配偶同居,健康狀況良好,也有經濟保障,老人就會滿足於目前的居住安排。

我們也發現,相當高比例的獨居或祇與配偶同居的老人,他們也對目前的居住安排 感到滿意,此類老人大都比較年輕,教育程度較高,男性,健康狀況良好,也具有獨立 的經濟能力。我們認爲這是較現代化的一群,是社會現代化的產物。