

**Living Apart from One's Children  
in Later Life\***  
**— The Case of Taiwan —**

Chaonan CHEN\*\*

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\*\* Research Fellow, The Institute of Economics, Academia Sinica

### (ABSTRACT)

This study is based on a survey of 5,046 elderly persons residing in Taiwan in 1988. It focuses on the following three objectives:

- (1) To examine the mechanisms for the increase of living apart from children.
- (2) To find out the reaction of the elderly toward living apart.
- (3) To investigate the impact of living apart on the elderly.

Our analysis confirms that there are four mechanisms responsible for the rapid increase of living apart in later life. They are migration selectivity in the 1950s, migration selectivity in the 1980s, differential attitude toward living arrangements, and differential mortality. It has also been shown those elderly who live apart from children were in better status. Or they were married, younger, with better education and male. Nevertheless, they were less satisfied with the function of the living arrangement. We have found that the satisfaction was affected by the function of living arrangements. If the arrangement can fulfill the elderly's living needs, they feel satisfied. Our analysis also indicates that those elderly who live apart receive less financial support and physical care from their children than elderly living in other types of living arrangements.

keywords: living arrangement, aging, life satisfaction

To live apart from children in later life is not valued highly in Chinese tradition. Yet a steady and rapid increase in the proportion of those living either alone, or with a spouse only, among the elderly in Taiwan has been observed in the last two decades. At the same time, Taiwan has also experienced drastic industrialization and urbanization. We thus may easily link this family nucleation in later life with industrialization and urbanization. We, nevertheless, feel that it is even more important to find out how industrialization and urbanization affect the family system as claimed by Goode (1963, p2). It is equally important to know how the elderly are reacting to the profound social changes. Are they satisfied with their current arrangements? Do they suffer any adverse effects by living apart from their children?

This paper is aimed to synthesize the questions stated above. While it is important to examine the individual questions in depth, it is also important to synthesize them. The synthesis has the advantage of presenting the whole picture concisely by linking how the questions occur and what are the consequences. Their implications can thus be fully explored. In brief, this paper focuses on the following three subjects.

- (1) What are the mechanisms for the increase of living apart from children.
- (2) How the elderly react toward living apart from children.
- (3) What is the adverse impact of living apart from children on the elderly.

## I. The Literature Review

Kobrin and Goldscheider (1982) propose that there are three sets of constraints on residential arrangements for the elderly. They are: demographic availability; economic feasibility; and normative desirability. Or the choice of living arrangements is circumscribed by the availability of relatives, monetary costs and the issues of family norms and preferences. In Taiwan, it appears that demographic availability is not the cause for the increase of living apart from the children. It has been shown that the influence of demographic availability decreased. The proportion who had parents to potentially live together with increased from 73.5% in 1973 to 85.4% in 1980 (Freedman et al., 1982). Obviously, the increase was the results of aging of the population and of decreasing of the then "young" soldiers who moved from mainland China to Taiwan in the 1950s. We may expect that the proportion who have parents living will further increase, when the 1950s baby-boom cohort reaches old age.

The interpretation of empirical results of economic feasibility is not as straightforward as it may appear. It has been shown that income has a negative effect on cohabiting with children (Lo, 1987). In other words, the elderly with high income have a greater probability to live apart from children. One alternative for interpreting the negative effect of income on living with children is the increase of ability to purchase privacy (Michael et al., 1980) or the prevalence of intimacy at a distance (Soldo, 1981). However, it

is contradictory to the prevalent normative value of cohabiting with children (Speare, 1974; DGBAS, 1982; Chen, 1986; Wei and Rescheil, 1987). Also, there is the proposition that "income sets realistic limits on the number and kinds of housing options available to the elderly" (Soldo, 1981). In view of the high mobility rates experienced in Taiwan, we think the second interpretation is more meaningful. For example, when the younger generation decides to move in search of economic benefit, higher income does allow these elderly more options either to move with their children or not.

Normative desirability includes not only attitude toward co-residence but also socio-demographic variables such as education, occupation, and residence in urban or rural areas. As mentioned before, studies of various scales consistently point out that the overwhelming majority of the elderly wish to live with their children. Other studies also disclose one way of compromising ideality with reality. They indicate that the custom of beginning married life in the home of the husband's parents appears to have changed little in the past three decades (Speare, 1974; Freedman et al, 1978, 1982). However, the problem is that there is a particularly sharp increase in termination rates for extended family in the most recent marriage cohort (Freedman et al., 1982). Most likely, this is the result of rapid urbanization and industrialization. This speculation is substantiated by Lo's study (1987). In her study, most of the so-called socio-demographic variables have significant effects on co-residence with children. Nevertheless, the important ques-

tion of how industrialization and urbanization affect living arrangements of the elderly is left to be answered. It has been suggested that an alternative toward rapid industrialization and urbanization is the increase of "quasi-coresidence," (Hu, Chow, and Pai, 1992). Adult children may choose to live near parents residence, which is similar to Shanas' (1979) observation or Sussman's (1965) "modified extended family."

Based on the clues provided by the previous research, four specific mechanisms have been identified to show how industrialization and urbanization affects living arrangements of the elderly. They are migration selectivity in the 1950s, migration selectivity in the 1980s, differential mortality, and differential attitude toward living arrangements (Chen and Speare, 1990). In the 1950s there were one million Chinese mainlanders who moved to Taiwan. This included a large amount of soldiers who were young and unmarried at that time. By the early 1980s, a substantial portion of them remained single and lived alone. So selectivity of migration in the 1950s had a positive effect on living apart from children.

Meanwhile, it has also been found that the elderly who were better educated and lived in rural areas had the greatest probability to live apart from children. This reflects that the younger generation of this group of elderly moved to urban areas for economic benefit. However, the elderly preferred, and were able to afford, to live in rural areas. So this type of increase in living apart from children is simply the result of positive migration selectivity in the 1980s.

On the contrary, differential mortality might have had a negative effect on the increase of living apart. In the 1980s, females in Taiwan outlived males by about five years. In general, widows were more inclined to live with their children than widowers. So the trend toward living apart from children was checked only by differential mortality.

But differential attitude toward living arrangements indicated that those better-educated, and higher-income elderly were in favor of living apart. We suppose that this group was Westernized. They had adopted Western norm that independent living might 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, pp 114-123). The increase in the elderly's income and education level thus has a positive effect on the trend of living apart from children.

It has been further suggested that the four mechanisms are dynamic in nature. The influence of the 1950s male migrants will disappear in the next 20 years. Meanwhile, migration in Taiwan will transit from late transitional society to advanced society as hypothesized by Zelinsky (1974). The volume of rural to urban migration will be reduced and thus will decrease its influence on the elderly's living arrangements. On the other hand, education of the elderly will be greatly improved in the future. This will have a positive effect on the proportion of living apart from children. The functioning of the four mechanisms is thus left to be examined

from time to time.

Thus far, the review of literature suggests that the increase in the elderly's living apart in Taiwan in the early 1980s was determined by structural change. However, there was no concomitant change in norm to favor independent living. This may make the elderly suffer from living apart from children and thus deserves our attention and concern. It is also important to find out how the elderly respond to the structural change.

Basically, we are inclined to assume that satisfaction with current living arrangements reflects a rational evaluation of factors in choosing living arrangements. As mentioned before, Kobrin and Goldscheider (1982) propose that there are three sets of constraints on residential arrangements for the elderly. A similar, but more extensive suggestion, is made by Soldo (1981). She suggests "living arrangement at the older ages are appropriately conceptualized as the outcome of a complex process involving 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, p495). 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 arrangements is not limited to the fulfillment of their housing needs. In the context of a modern Chinese society such as Taiwan, it has been shown that the elderly are satisfied with their living arrange-

ments, when their basic living needs--including economic security, health status, and kin companionship--are fulfilled (Chen, 1991).

In fact, co-residence plays a crucial role in providing economic security and kin companionship for the elderly. From the perspective of the elderly, the increase in the proportion living apart means an increase in a new family nucleation with old couples in separate households. It reflects not only the increase in residential distance but also an increase in independent economic units. It has been noted that distance is an important mediator of exchanges. It is especially important for exchanges which require face-to-face interactions such as child care or the performance of household tasks. However, financial support to the elderly appears less affected by distance from kin (Lee, 1980; Litwak and Kulis, 1987). We nevertheless cast doubt on its applicability in Eastern societies.

In the context of Chinese society, to lead an independent economic life is a profound change to the traditional way of life for the elderly. Historically, the older generation maintained control over the family unit and resources as long as they were able to organize and direct its operation (Gallin, 1966). When they passed the organization on to the younger generation, they remained the final authority over it and enjoyed support from it. In the transition to the modern economy, young offspring increasingly work outside the family. During the early years of this change, they remained very much a part of the family and contributed substantial portions of their earnings to their parents (Gallin and Gallin,

1982; Diamond, 1979). As society continues to change, young people increasingly live in their own dwellings and apart from parents. In this case, they are less and less expected to contribute to the parental household (Thornton et al., 1984; Coombs and Sun, 1981). Empirical studies have also found that living with children does have positive significant independent effects on financial support to the elderly (Lo, 1988; Hermalin, 1990). Another study indicated that the overwhelming majority (87%) of young married couples reported giving money to the husband's parents in Taiwan in 1985 (Weinstein et al., 1990). Although the amounts of money involved are most likely not very large in most cases, they are used for regular living expenses by about half of the older generation. Therefore, economic support from children is very critical for the elderly. Nevertheless, it has been shown that the majority of the elderly must rely on themselves or their spouses once they live apart from children (Chen, 1992).

## II. The Data

The primary source of data for this study is from the December round of monthly labor force survey conducted by the Directorate-General of Budget, Accounting and Statistics (DGBAS) in Taiwan in 1988. The survey was intended to be representative of the non-institutional population aged 15 and above in Taiwan and involved a two stage stratified sample design. In the first stage, village level units (Tsuns and Lis) were selected from a list strati-

fied according to degree of urbanization and industrial composition, as indicated in the household registration data. In the second stage, households were systematically selected within the sample Tsuns and Lis. In total, 515 Tsuns or Lis and about 18,600 households were selected, which was equivalent to an overall sampling fraction of 4 per thousand (DGBAS, 1989).

In this survey, subjects were divided into four groups by age, i.e. 15-24, 25-49, 50-64 and 65 and above. Each group was 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 were selected for analysis. In total, there were 5,064 cases interviewed. Each of them was 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.

### **III. The Determinants of Living Apart From One's Children**

In the last one and a half decades, there was a steady increase in the proportion of the elderly who live apart from their children. In 1976, it accounted for only 9%, while the overwhelming majority (84%) of the elderly were living with their spouse and children (see

Table 1). By 1989, it was drastically increased to 31%. So only about two-thirds of the elderly were living with their children.

**Table 1. Living Arrangements for the Elderly in Taiwan, 1976-1989**

Year	Living Arrangement			
	Alone	W/Spouse	W/Spouse & Children	W/Others (non.family)
1976	8.97	--	83.68	7.53
1977	9.34	--	84.95	5.71
1978	8.90	--	85.12	5.98
1979	11.78	--	82.65	5.60
1980	12.79	--	81.60	5.61
1981	13.24	--	81.40	5.36
1982	12.80	--	81.89	5.31
1983	14.16	--	80.48	5.36
1984	15.40	--	79.16	5.44
1985	17.28	--	78.31	4.41
1986	11.58	14.01	70.24	4.17
1987	11.49	13.42	70.97	4.12
1988	13.73	14.98	67.88	3.41
1989	12.90	18.17	65.65	3.28

Sources: (1) The data for 1976-1985 are derived from Lo's (1987) work entitled "Changes of Elderly's Household Structure in Taiwan: 1976-1985." Taiwan Economic Forecast 18(2): 83-108. The percentages for living alone are in fact for those who live alone and with spouse alone.

(2) The data for 1986-1989 are from "The Report on the Old Status Survey, Taiwan Area, ROC," by DGBAS, 1990.

Why was there such a drastic social change? Using survey data collected in 1983, Chen and Speare (1990) have suggested that there were four mechanisms responsible for the profound change. They include differential mortality, differential attitude toward living arrangements, selectivity of migration both in the 1950s and the 1980s. With 1988 survey data, we have found that the four forces were still in work. As shown in Table 1, slightly more than 50% of those living apart from their children were those who lived with a spouse only. On the one hand, it indicates that selectivity of migration in the 1980s still had an effect on structures of living arrangements in the late 1980s. As there was a substantial amount of rural young people who left homes to find jobs in cities, it thus enlarged the proportion of the elderly who were in the so-called "prolonged empty nest" stage. On the other hand, the substantial proportion of living alone suggests the effect of migration selectivity in the 1950s. Or it reflects there were substantial amount of single veterans, who moved to Taiwan in the 1950s, in the late 1980s.

Evidences shown in Table 2 confirm that migration selectivity in the 1950s still has an effect on living arrangements, although its influence is declining. We have found that there were 51 thousand single elderly in 1988. Out of them, 69% lived alone. Or there were 35 thousand single elderly who lived alone, a sharp decline from 100 thousand in 1983 (Chen and Speare, 1990). It has been suggested that the overwhelming majority of the group were soldiers who moved to Taiwan in the 1950s (Lo, 1987).

Table 2. Percentage Distributions of Living Arrangements by SES

	Living Arrangements				Total	N	Chi-square (df)
	Alone	W/Spouse	W/Spouse & Children	W/Others			
<u>Sex</u>							
male	16.1	17.8	62.4	3.7	100.0	604,638	94.21**
female	11.1	11.8	74.0	3.1	100.0	539,066	(3)
<u>Age</u>							
65-69	13.9	18.5	64.3	3.4	100.0	497,881	36.42**
70+	13.6	12.3	70.6	3.4	100.0	645,823	(3)
<u>Education</u>							
primary-	12.6	12.5	71.9	3.0	100.0	948,355	186.59**
Junior Hi+	19.1	26.9	48.4	5.6	100.0	195,349	(3)
<u>Martial status</u>							
single	69.0	--	8.0	23.0	100.0	51,402	1724.24**
married	5.4	26.2	66.7	1.7	100.0	645,752	(6)
other	19.4	0.4	76.5	3.7	100.0	446,550	
<u>Urbanization</u>							
rural	14.1	15.0	67.8	3.1	100.0	721,037	6.05
urban	13.0	15.0	67.9	4.1	100.0	422,667	(3)
<u>Health status</u>							
good	14.7	14.8	67.7	2.8	100.0	716,988	41.29**
fair	13.6	15.4	67.0	4.0	100.0	364,133	(6)
poor	3.7	14.2	75.0	7.1	100.0	62,583	
<u>Total</u>	13.7	15.0	67.9	3.4	100.0	1,143,704	

Source: December 1988 Labor Force Survey, DGBAS.

\*\*Significant at .01 level.

Table 2 also indicates that social economic characteristics and health status of the elderly have effects on their living arrangements. The elderly who were male, younger, better educated and with better health were more inclined to live apart from their children. This implies that among the elderly there is a differential attitude toward living arrangements. To gain a better understanding in this aspect, two other steps are taken. At first, the four social characteristics are controlled to find out if they have cumulative effect on the probability of living apart from children. Secondly, logit analysis is performed to find out if each of them has a net effect.

In Table 3, we find that the elderly with different characteristics have a wide range of probabilities for living apart from children (including living alone, with a spouse only, or with others). The young, unmarried and better educated males had the greatest probability (.72) in this respect. Conversely, the older, unmarried and less educated females had the lowest probability (.17). The results thus suggest that the social characteristics have a cumulative effect on living arrangement.

On the other hand, Table 4 shows that most of the selected variables did have an independent effect on living arrangement. Male, younger, not married, better educated and rural elderly had a greater probability to live apart from children.

It is difficult to show the effect of differential mortality straightforward. Here we assume that married elderly are more inclined to live with children. Nevertheless when spouse passed away, male have a greater probability to live alone. To prove

this, we must correlate various data. In Table 3, we show that unmarried elderly men had much higher proportions of living apart than females, regardless of age. When the single elderly were eliminated, 70% of widowers lived with children, but the counterpart proportion for widows was 81% (DGBAS, 1989, Pp. 82-84). Contrastingly, the proportions of living alone were 26% and 15% for widowers and widows respectively. By 1988, females outlived males by about 5 years, so differential mortality had a favorable effect on living with children.

**Table 3. Proportions of a person's Living Apart from one's Children, by Age, Sex, Education and Marital Status**

	Male Aged		Female Aged	
	65-69	70+	65-69	70+
<u>Not Married</u>	0.60 (68,514)	0.43 (115,476)	0.24 (90,251)	0.18 (223,711)
Primary education-	0.55 (48,844)	0.37 (95,923)	0.22 (83,471)	0.17 (216,326)
Junior Hi education+	0.72 (19,670)	0.67 (19,553)	0.49 (6,780)	0.60 (7,385)
<u>Married</u>	0.32 (211,543)	0.33 (209,105)	0.37 (127,573)	0.32 (97,531)
Primary education-	0.29 (145,797)	0.27 (153,543)	0.34 (113,419)	0.30 (91,032)
Junior Hi education+	0.40 (65,746)	0.50 (55,562)	0.55 (14,154)	0.58 (6,499)
<u>Total</u>	0.39 (280,057)	0.36 (324,581)	0.32 (217,824)	0.22 (321,242)

Source: December 1988 Labor Force Survey, DGBAS.

Note: Figures in the parentheses are weighted total cases.

Table 4. The Results of Logit Analysis of Living Apart from Children

	Coef.	S.E.
Constant	0.23 (11.17)**	0.02
Marital Status	-0.03 (-1.84)	0.02
Education	0.22 (10.81)**	0.02
Sex	0.11 (6.52)**	0.02
Age	0.05 (3.41)**	0.02
Urbanization	-0.03 (-2.04)*	0.02
Likelihood Chi-square		181.44
D.F.		26
P		0.00
N		5,045

(1) \*\* Significant at 0.01 level. \* Significant at 0.05 level.

(2) A code of 1 is assigned to elderly who are married, male, aged 65-69, with junior high or above education, and live in an urban setting.

#### IV. The Views of the Elderly Regarding their Living Arrangements

Upon the impingement of a drastic change in living arrangements of the elderly but without a concomitant change in normative values, we are of course concerned with the response of the elderly. Our analysis shows that companionship was highly valued

by the elderly in Taiwan and living with spouse and children was much preferred. As a whole, 83% of those elderly living with spouse and children were satisfied. When other factors were added, the lower end of the proportions was 70%. And the other extreme was as high as 91% (see Table 5). Of those living with a spouse only, the satisfied proportion ranked second (65%). It varied between 43% and 86%, when other factors were controlled. For those living with others, its overall ratio of being satisfied was 60%. It varied from 46% to 72%, when another factor was simultaneously considered. Or about one-half or more of the elderly were satisfied, when they were not alone in the household.

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

Table 5. Proportion of Elderly who Reported Being Satisfied with Current Living Arrangement, by Living Arrangement and Other Characteristics

	Living Arrangement			
	Alone	with Spouse	with Spouse & Children	with Others
<u>Source of Living Cost</u>				
Self	.53 (80,993)	.68 (99,798)	.83 (201,502)	.71 (16,464)
Children	.50 (58,598)	.62 (68,668)	.83 (568,896)	.52 (10,598)
Others	.22 (17,352)	--* --	.72 (5,711)	.50 (11,858)
<u>Health</u>				
Good	.55 (105,041)	.73 (106,307)	.86 (485,310)	.72 (20,330)
Fair	.35 (49,592)	.54 (56,113)	.79 (243,854)	.46 (14,574)
Poor	--* --	.43 (8,897)	.70 (46,945)	--* --
<u>Marital Status</u>				
Single	.45 (35,458)	-- --	--* --	.51 (11,844)
Married	.60 (34,914)	.65 (169,326)	.85 (430,402)	.63 (10,695)
Divorced	.44 (11,754)	--* --	.82 (10,091)	--* --
Widowed	.45 (74,817)	--* --	.80 (331,516)	.65 (16,062)
<u>Degree of Education</u>				
Junior Hi-	.46 (134,675)	.61 (135,076)	.82 (716,567)	.56 (32,434)
Senior Hi	.54 (10,105)	.76 (14,590)	.91 (32,347)	--* --
College+	.65 (12,163)	.86 (21,651)	.88 (27,195)	--* --
Total	.48 (156,943)	.65 (171,317)	.83 (776,109)	.60 (38,920)

Note: Figures in parentheses are weighted case numbers.

\*Unweighted case number is less than 20.

Source: December 1988 Labor Force Survey, DGBAS.

The effect of health on those living alone was also very significant. Those elderly with fair health had a very low proportion satisfied with their living arrangements (35%). On the other hand, the elderly living with spouse and children still had a rather high proportion satisfied (70%), even they were in poor health status.

The effect of marital status was less striking. Those elderly who lived alone and were not currently married had a moderate proportion of being satisfied (45%). Meanwhile, more than 63% of the married elderly were satisfied, regardless of their living arrangements. A similar result was also observed for the effect of education. Those living alone and with junior high or less education had only a moderate proportion feeling satisfied (46%). Otherwise, a greater proportion of the elderly with other living arrangements felt happy.

In order to assess the effect of the determinants of satisfaction with living arrangement, a series of logit analyses have been performed. In the analyses, the dependent variable was satisfaction of the living arrangements. Those elderly who felt satisfied were assigned a code of 1, otherwise 0. Of the seven independent variables included in the analyses, they were all dichotomized. Code 1 was assigned to those elderly who lived with spouse and children, were in good health, supported by their children or themselves, married, male, with junior high and above education, and aged 65 to 74. The elderly with other characteristics were given a code of 0.

Results of the logit analyses are shown in Table 6. In model

1, we have found that living arrangements, health, source of income for living costs, education, and marital status had significant effects on being satisfied with living arrangements, when other variables were controlled. It was also noted that living arrangements had the largest coefficient or it was the most influential variable in attitude toward living arrangements. The coefficients for sources of income for living costs and health status ranked second and third. These results support the hypothesis that fulfillment of basic living needs for the elderly including economic security, good health, and kin companionship are critical to their feeling toward living arrangements.

Although marital status and education were less influential, they played a supplementary role to the elderly's attitude toward living arrangements. According to the results not reported here, we found that when either the variables of marital status or education were added to the basic model, which included the factors of living arrangements, health status, and source of living costs, their likelihood ratio Chi-Squares became significant at the 0.05 level. Here, we suppose that better education implies a more modernized attitude toward independent living and being married indicates the companionship of the spouse. We are thus inclined to conclude that in addition to information about fulfillment of basic living needs, the inclusion of either spouse companionship or a favorable attitude toward independent living will enable us to predict the elderly's response to their living arrangements with confidence.

**Table 6. Results of Logit Analysis about Taiwanese Elderly People's Satisfaction with Their Living Arrangement**

	Model 1	Model 2	Model 3	Model 4
Constant	-.36 (-7.71)	-.15 (-2.55)	.21 (3.69)	-.36 (-7.63)
Living Arrangement	.33 (17.90)	-- --	-- --	.32 (17.70)
Living alone	-- --	-.33* (-17.99)	-.40 (-16.77)	-- --
Living with spouse	-- --	-- --	-.27 (-10.81)	-- --
Living with others	-- --	-.13 (-2.55)	-.20 (-4.42)	-- --
Health Status	.15 (8.46)	.15 (8.66)	.16 (8.87)	.15 (8.42)
Source of Living cost	.18 (4.24)	.25 (5.60)	.20 (4.52)	.18 (4.20)
Marital Status	.09 (5.17)	.10 (5.61)	.06 (2.74)	.09 (5.10)
Education	.14 (5.36)	.13 (5.12)	.14 (5.38)	.14 (5.38)
Sex	-- --	-- --	-- --	-.01 (-.59)
Age	-- --	-- --	-- --	.00 (.16)
Likelihood Ratio				
Chi square	57.85	78.80	84.69	128.42
D. F.	26	38**	47**	95**
P	.001	.001	.001	.013
N	5045	5045	5045	5045

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: junior 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.

Source: December 1988 Labor Force Survey, DGBAS.

\* Including living alone and with spouse.

\*\* With empty categories, the D.F. may not be correct.

In Model 4, the variables of sex and age were added. We found that they did not have significant effects on satisfaction of living arrangements for the elderly. The coefficients for other variables remained unchanged.

We are still interested in knowing the effects of different types of living arrangements. So living arrangement was recoded in different ways. In Model 2, two dummy variables were created. One was named as "living apart", which was narrowly defined and placed in the position for living alone. We assigned code 1 to those elderly living alone or with a spouse only, otherwise they were given a code 0. The other was entitled "living with others"; we gave code 1 to those living with others, and otherwise a code 0. In other words, the reference group for the two dummy variables were those who were living with spouse and children. We have found that both of them have negative effects on the elderly's response toward living arrangements. The coefficient for "living apart" was much larger than that for "living with others" in absolute size. It seems that those living apart from children suffered the most.

In Model 3, three dummy variables were created to substitute "living arrangement". They were "living alone", "living with a spouse only" and "living with others". Code 1 was given to those living alone, living with a spouse only, and living with others for their counterpart dummy variables. Otherwise, we gave a code 0. Again, the reference group for the three dummy variables were those living with spouse and children. We found that all of them had a significant effect on the elderly's feeling toward living

arrangements. The coefficient for "living alone" was the smallest and slightly smaller than that for "living apart" as shown in Model 2. Thus, those living alone suffered the most. Although the coefficient for "living with a spouse only" was greater than that for "living alone", its absolute size was larger than the rest of the variables. So it was the second most important factor.

In brief, we have found that when the elderly are asked about their response to current living arrangements, their evaluation is not limited to their housing needs. Rather, the criteria of evaluation cover those basic living needs such as economic security, health status and kin companionship. In the context of a modern Chinese society such as Taiwan, the elderly are content with economic support from either their children or 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.

## **V. The Impact of Living Arrangements on Financial Support and Physical Care for the Elderly**

Traditionally, extended family structure has the function of supporting the elderly. As there are more and more elderly who live apart from their children, we wonder if they can routinely acquire financial support from children. In the countries where there are no pension systems, support from their children is very

critical to the middle or lower level of elderly. In addition, we also wonder who can take care of the elderly when they become sick or even disabled. In the case of separate living, distance may become a serious barrier for the care of the elderly. In brief, two types of impacts are discussed in this section. One is financial support and the other is physical care.

#### A. The Impact on Financial Support

To find out the impact of living arrangements on financial support for the elderly, an attempt was made to derive types of financial support for the elderly. In this survey, respondents were questioned about their sources of income for living costs. Each of them were requested to report at least their primary source of income for living costs, but they could also cite secondary and tertiary sources also. Since only a small proportion of respondents had tertiary sources, we used only primary and secondary sources to derive types of economic support for the elderly. When primary and secondary sources were cross-tabulated, we found that 43.3% of respondents solely rely on their children for living costs (Chen, 1992). This group was thus named the "dependent" type. On the other hand, some other elderly totally relied on themselves or their spouses. This accounted for 15.0% of total respondents and was entitled the "independent" type. The third group were those who primarily relied on themselves or spouses but were supplemented by their children for living costs. We called this group the "supplementary" type. This had a share of 18.6%. The fourth

group were those who mainly depended on their children but partially supported themselves. This group was named the "semi-dependent" type. Still yet, there were five small groups involving non-familial sources. In total, they accounted for less than 10%. Since we were concerned with intergenerational transfer, we selected only the four types of economic support to the elderly for further analysis. Thus, only 4,625 cases were included in the following analyses. The dependent type had a share of 47.2%; the semi-dependent type, 16.2%; the supplementary type, 20.0%; and the independent type, 16.6% (see Table 7).

We feel that this typology gives us a refined measurement on dependency and independency. We know that about one-third of the elderly lead an independent economic life, while about two-thirds of them depend on their children. With the inclusion of secondary sources, we can further differentiate the dependent type from the semi-dependent type and the independent type from the supplementary type. We thus further know that the majority (3/4) of those who depend on children for living costs solely rely on this source. Among the two independent types, only 45% of them are completely independent. The social economic characteristics of the four types should cast light on why there is such kind of differentiation.

Secondly, it offers a better way to record the transition of economic support to the elderly. If we take this study as baseline information, later surveys with similar questions and analysis should tell us how the transition is occurring.

Table 7. Types of Economic Support and Main Provider of Care for the Elderly, by Living Arrangements

	Living		Arrangements		Total
	Alone	w/Spouse	w/Spouse & Children	w/Others	
<u>Types of Economic Support</u>					
Independent	37.6	27.9	9.4	55.5	16.6
Supplementary	19.9	32.4	17.6	12.1	20.0
Semi-dependent	12.2	17.1	16.8	10.0	16.2
Dependent	30.4	22.6	56.2	22.5	47.2
Total	100.0	100.0	100.0	100.0	100.0
Number	126,314	162,216	741,908	21,758	1,052,196
Chi-square			656.40**		
DF			9		
<u>Care Provider<sup>a</sup></u>					
Family Member	5.3	81.7	96.5	39.4	87.3
Others	94.7	18.3	3.5	60.6	12.7
Total	100.0	100.0	100.0	100.0	100.0
Number	2,310	8,897	46,945	4,016	62,168
Chi-square.			109.26**		
DF			3		

Source: December 1988 Labor Force Survey, DGBAS.

Notes: a. limited to those elderly who are in poor health.

\*\* Significant at .01 level.

It has been suggested that sex, social class and health variables are primary determinants for the direction of intergenerational wealth flow (Troll, 1971). Poor health, female sex and middle-class parents received more financial aid. In this study, we have found that both living arrangements and social-demographic variables are related to types of economic support. As shown in Table 7, we have noted that the elderly who were living with children had greater proportions in dependent types. But elderly who

lived alone were more inclined to be economically independent.

To check if living arrangement had an independent effect when other variables are controlled, a polytomous logit analysis was performed. In the analysis, we assigned code 1 to the elderly who were married, with junior high or above education, living with children, male and aged 65-69; otherwise, code 0.

The analytical results shown in Table 8 suggest the existence of the main effects. The elderly who were male, younger, married, better educated, in good health and living apart from children have greater probabilities to be independent than dependent. Among these dichotomous variables, age has the largest coefficient, followed by living arrangements and education. It thus suggests that age is the most important determinant for the elderly being economically independent rather than dependent. Living arrangements ranks second and education third.

On the other hand, the effect of the variables on probability being supplementary rather than dependent are reversed with only one exception. Of the elderly who are living with children, are female, older, in poor health, with less education and not married have greater probabilities to be supplementary rather than dependent. Among them, living arrangement is the most important variable which has the largest coefficient. Moreover, a similar pattern is also observed for their effects on the probability of being semi-dependent rather than dependent. But living arrangement did not have a significant effect.

Table 8. The Results of Polytomous Logit Analysis of Types of Economic Support for the Elderly

	Independent	Supplementary	Semi-dependent
	Dependent	Dependent	Dependent
Constant	0.71 (18.78)**	-0.19 (-4.12)**	-0.14 (-3.14)**
Marital Status	0.30 (12.14)**	0.06 (1.70)	-0.31 (-9.09)**
Education	0.29 (8.15)**	-0.46 (-12.80)**	0.01 (0.14)
Living Arrangement	-0.23 (-6.22)**	0.47 (10.34)**	-0.01 (-0.21)
Sex	0.20 (7.60)**	-0.31 (-7.97)**	0.00 (0.13)
Age	0.29 (11.02)**	-0.27 (-7.97)**	-0.09 (-3.03)**
Health Status	0.12 (4.37)**	-0.10 (-2.76)**	-0.06 (-1.94)
LA x Sex	-0.06 (-2.31)	0.02 (0.40)	0.03 (0.78)
LA x Education	-0.06 (-1.69)	0.09 (2.59)**	-0.03 (-0.78)
LA x Age	-0.08 (-3.02)**	0.11 (3.30)**	-0.05 (-1.56)
LA x Health	-0.01 (-0.24)	0.07 (1.91)	-0.06 (-1.99)*
Likelihood Ratio			
Chi-square		255.13	
D.F		159	
P		0.0001	
N		5,046	

1. Source: December 1988 Labor Force Survey, DGBAS.

2. A code of 1 is assigned to the elderly who are married, with junior high and above education, living with children, male, with good health and aged 65-69.

3. Figures in parenthesis are Z scores.

The interaction effects as shown in Table 8, render support for the hypothesis that living arrangements play a role of specification. We have found that the direction of interaction effects is

similar to that of living arrangements. It is also noted that the coefficients of interaction variables are much smaller than that of the main effects. In fact, interaction effects are derived from the effect of "living arrangement". We have found that "living arrangement" has the largest coefficient when the logit model includes only main effects. When interaction effects are introduced into the model, it decreases sharply. These phenomena reflect that the interaction variables have the function of enhancing the effect of living arrangements.

Generally speaking, we feel that society is in transition from economic dependence on offspring in old age, to more or less being independent from children. The better-off elderly in fact have a greater probability being independent than dependent. Even those elderly who are in relatively poor status try to be supplementary or semi-dependent types.

## B. The Impact on the Physical Care of the Elderly

In the literature, it has been suggested that the spouse and adult daughters are the key providers of physical care to the elderly (Stroll, 1983; Spitze and Logan, 1990). In this survey, the data fail to distinguish whether the service is provided by the spouse or adult daughters. Instead, it focusses on whether the service is from family members or other persons or institutes. In Table 7, we have found that the majority of the elderly who live with spouse or with spouse and children were taken care of by their family members. But, elderly who were single or living

either alone or with others had very low percentages of receiving care from family members. It implies that demographic availability and physical feasibility are the key factors in receiving care from family members.

To assess whether living arrangements have independent effect, a logit analysis was performed. Code 1 was assigned to the elderly who were married, living with children and aged 65-69. Table 9 shows that both marital status and living arrangements did have an independent effect. The coefficient for the latter was greater than the former. It implies that the effect of living arrangements is stronger than marital status, since both are dummy variables.

**Table 9. The Results of Logit Analysis of Who Takes Care of the Elderly**

	Coef.	S.E.
Constant	-0.85 (-7.76)**	0.11
Marital Status	0.43 (3.67)**	0.12
Living Arrangement	0.73 (6.53)**	0.11
Age	-0.17 (-1.51)	0.12
Likelihood Chi-square.		11.48
D.F.		4
P		0.022
N		288

Source: December 1988 Labor Force Survey, DGBAS.

Notes: \*\* Significant at .01 level.

A code of 1 is assigned to the elderly who are married, living with spouse and children, and aged 65-69; otherwise, a code of 0 is assigned.

## VI. Conclusion

As Taiwan is aging and becoming modernized, there are more and more elderly who live alone or with a spouse only. In this paper, we tried to explore this problem fully. We briefly examined how it occurred and what the consequences are. Our analysis has shown that those elderly who were living apart from their children were better off, or they were married, younger, with better education, and male. Nevertheless, they were less satisfied with the living arrangements. We have also found that their level of satisfaction was affected by the functioning of their living arrangements. If the arrangement fulfilled their daily living needs, more elderly were likely to feel satisfied. Moreover, our analysis indicated that those elderly who were living apart received less financial support and physical care from their children than elderly who lived in other types of arrangements.

In brief, changes in living arrangements imply that family has gradually lost its function in taking care of the elderly. We believe that there are roles that government can play to take the place of family. We feel at least there are two tasks which are urgently needed to be implemented by the government. Firstly, we need a pension system. It may protect those elderly who failed to save enough money in the past and now not live with their children. Secondly, we need a better health service system for the elderly. Although, our national health insurance system will be extended to cover every citizen by 1994, the elderly still have no

access to acquire needed services at home. Systems to provide home care, day care and care for chronic diseases are still left to be established.

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# 晚年離子獨居—台灣例子

陳肇男 \*

## 中文摘要

本研究取材自行政院主計處之 1988 年台灣地區青少年與老人調查之 5,046 個老人資料。分析目的有三，即

- (1) 檢討老人獨居比例遽升的原因
- (2) 探討老人對獨居之反應
- (3) 探究獨居對老人之影響

分析結果再度肯定老人獨居比例快速成長之機轉有四，即(1) 1950 年代的選擇性遷徙，(2) 1980 年代之選擇性遷徙，(3) 居住安排之分化態度與(4) 分化的死亡率。分析結果也顯示獨居老人之社經狀況較一般為佳，以已婚、年輕、男性及教育程度較高者居多數。進一步結果指出居住安排之功能會影響老人之滿意與否。如果居住安排能滿足老人之需求，老人就覺得滿意。最後，分析結果也發現，獨居老人比其他居住類型之老人更少從子女處取得財務與起居照顧。

關鍵字：居住安排，老人，生活滿意。

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\* 中央研究院經濟研究所研究員