Kinship and living arrangements in later life: the case of Taiwan¹

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Abstract

This article examines living arrangements in later life in Taiwan from the perspective of adult children. It focusses on the question of which adult child co-resides with his/her parents. It is hypothesized that the choice of living arrangement is primarily circumscribed by economic feasibility which varies during stages in the life cycle. Parents may live with children who are single or divorced, or who need their help. When all the children are married, they choose to live with those who are financially better off. Middle-aged children who have their own families are least likely to co-reside with parents. The article further addresses the question whether filial piety is abandoned by children who do not live with parents. A trend of declining frequency of visiting parents has been observed. Nevertheless, it has been found that children who have the greatest probability of living away from their parents tend to visit them most frequently.

This article examines living arrangements in later life in Taiwan from the perspective of adult children. The research focusses on which children are selected to co-reside with parents. This appears to be an area which has received little attention in Taiwan. In the past two decades, most debate in the study of the family has addressed the trend of family nuclearization in Taiwan (e.g. Freedman et al., 1978, 1982; Weinstein et al., 1990; Shu & Lin, 1989; Lo, 1987; Chen, 1986; Lai & Chen, 1980). A branch of this mainstream theory is a pragmatic-oriented discussion on the causes and consequences of living arrangements for the elderly (Lo, 1988; Chen & Speare, 1990; Chen, 1991, 1992a,b; Hermalin et al., 1990, 1992). Most of these studies employ partial models which examine the questions according to parental characteristics. The question remains as to which children are selected to live with their parents. By 1989, 65,6 % of the elderly in Taiwan still co-resided with their children (Chen, 1992b). Since parent-adult children co-residence was and still is the major type of living arrangement in Taiwan, it is important to find out the determinants for the selection of which children to live with.

Another question concerns the activities of children who do not live with their parents. It is a matter of great concern whether filial piety is abandoned by these children because of a distance barrier (Martin, 1989). On the other hand the children may visit their parents frequently to render emotional support. Unfortunately, a trend of declining frequency of visits is observed. Better understanding in this regard is thus needed.

This article has the following two objectives:

- (1) To identify the determinants of the choice of children with whom to live
- (2) To examine the variation in frequency of children visiting parents.

Literature review

Kobrin and Goldscheider (1982) propose that there are three sets of constraints on residential arrangements for the elderly. These constraints are demographic availability, economic feasibility and normative availability. Conversely, the choice of living arrangements is circumscribed by the availability of relatives, monetary costs, and the matters of family norms and preferences. When the framework is applied in Taiwan, four mechanisms have been identified to explain the rapid increase in the proportion of elderly persons living apart from children. The mechanisms are migration selectivity in the 1950s, migration selectivity in the 1980s, differential mortality, and differential attitude toward living arrangements (Chen & Speare, 1990).

In the 1950s a million Chinese mainlanders moved to Taiwan. The immigrants included a large number of soldiers who were young and unmarried at the time. By the early 1980s, a substantial proportion of the immigrants remained single and lived alone. Meanwhile, it has been found that these elderly who are better educated and who live in rural areas have the greatest probability to live apart from children. This reflects the phenomenon 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. This type of increase in living apart from children is therefore simply the result of positive migration selectivity in the 1980s.

However differential mortality may 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 were widowers. The trend toward living apart from children was therefore checked only by differential mortality. However differential attitude toward living arrangements indicated that the better educated and higher-income elderly favoured living apart from their children. This group was presumably Westernized: they had adopted the Western norm of independent living which might avoid sources of potential friction in intergenerational living, including life-style differences, conflict over authority or household division of labour, and the

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irritating boisterousness of grandchildren (Lopata, 1973: 114-23). The increase in the elderly's income and education level thus has a positive effect on the trend of living apart from children.

When discussing the selection of children to co-reside with aged parents, demographic availability is not applicable. The availability of both children and at least one of their parents becomes a necessary precondition. A study sample therefore needs to be limited to subjects aged 25-49 years, who have at least one parent available with whom to reside. Such a sample can enable an examination of the question of which children are selected, from the perspective of the children.

It has been suggested that birth order, inheritance rules, and the assumption of filial obligation are relevant to norms and values which may govern the selection of children for coresidence. It has been reported that in many parts of Japan the eldest sons are expected to co-reside with their aged parents. In the case of having no living sons, the elderly tend to live with their eldest daughter and son-in-law. Children who coreside with parents inherit most of the parents' property, including land and the house (Kojima, 1987).

In past tradition, Chinese society featured a lack of primogeniture regarding the division of property; property was usually divided among sons. In contemporary Taiwan society, equal right to parents' property has been expanded by law to include daughters. In practice, more than 68 % of surveyed elderly agree that it is important for old people nowadays to keep some property to ensure respect and support from family members (Li, 1992).

On the other hand the principle of equal inheritance leads to the conception of equal sharing of the responsibility of supporting parents. "Meal rotation", a common practice in Chinese families (Hsieh, 1985), is an example of this principle. Not only meals are provided but also spending money, housing and other concrete forms of support for parents. Nevertheless, meal rotation has declined since 1951 for two possible reasons (Chen, 1969: 97-99, cited in Hsieh, 1985: 73). One is the breakdown of norms. Another is that aged parents fear negative attitudes of their daughters-in-law. Furthermore, massive rural-to-urban migration by young couples makes meal rotation inconvenient or unfeasible.

The constraint of norms is inevitably weakened in urbanized societies, while economic feasibility becomes crucial in the decision of living arrangements. In the course of the life cycle, co-residence is commonly equated with dependency. The co-residence of unmarried, divorced, or unemployed adult children with aged parents is attributed to the continued dependency of children on parents. On the other hand coresidence of elderly parents with their married adult children is taken as parents' dependency on children. It has been shown that parents provide a home for unmarried children and meet their needs (Aquilino, 1990). However there is little evidence in the United States that adult children living in a parental household provide care for their parents. It would seem that symbiosis is more possible than dependency in Eastern societies. While parents provide the home and money, married adult children take care of the housekeeping and fulfil their parents' emotional and physical-care needs.

As a result of limited data, this article will focus on a test of children's dependency on parents. Only the children's characteristics and the current living arrangements of their parents are available for analyses. Family composition, family structure, the parents' characteristics and norms about co-residence are either not available or are too difficult to trace. It is hypothesized that the choice of living arrangement by the elderly is primarily circumscribed by economic feasibility which is affected by stages of the life cycle. The elderly

may live with children who are single or divorced, or who need help. When the children are all married, they choose to live with those who are better off. In the case of married children who are not well-off, meal rotation is a preferred arrangement. The middle-aged children who have their own children are least likely to co-reside with their aged parents.

The behaviour of children who do not live with their parents is also of great interest. This factor reflects a general sociological concern about the effect of societal and technological change on the family. Specifically, it has been speculated that urbanization results in the destruction of the tightly-knit extended family (Cohler, 1983), or that older people become alienated from their families (Shanas, 1979). Reviewing studies in the 1960s, Troll (1971) concluded that older people were not alienated. A similar finding was iterated in a review of studies conducted in the United States in the 1970s (Mancini & Blieszner, 1989). Most studies in the 1970s reported that more than 70% of older parents have face-to-face contact with a child on a weekly or semi-weekly basis.

In this article, frequent visits to parents is taken as an indicator of the continuation of filial piety. It is hypothesized that frequent visits are compensatory for not co-residing with parents by those who are better off. It is further hypothesized that if the children's dependency need is not met, they become distant from their parents, or visit parents infrequently.

The data

The primary source of data for this study is from the December round of the monthly labour force survey conducted by the 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 years and older in Taiwan, and involves a two-stage stratified sample design. In the first stage, village level units (known as Tsuns or Lis) were selected from a list stratified 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 sampled Tsuns and Lis. In total, 515 Tsuns or Lis and about 18 600 households were selected, which is equivalent to an overall sampling fraction of four per thousand (DGBAS, 1989).

In some cases, the results of this survey are compared with findings of other surveys conducted by DGBAS in other years. The comparisons are aimed at finding out if there are any patterns of change. In this survey, the subjects were divided into four age groups: 15-24 years, 25-49 years, 50-64 years, and 65 years and older. Different questions were addressed to each group in order to gather information that could be used for policy planning in education, vocational training and welfare for the elderly. In this study only those aged 25-49 years and who had parents living in Taiwan were selected for analysis. A total of 24718 cases were included. Each case was given a weight which enabled 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). Weighted results are given, except in the logit analysis.

Who lived with their parents

The trend of living arrangements

In the four-year period from 1986 to 1989, the distribution of the parents' living arrangements was found to be rather stable. A majority (86 %) of the parents lived with their children (see Table 1). Among them, about a third stayed with the survey respondents and two-thirds with their siblings. These figures

show that most parents had more than one child with whom to co-reside. This situation is probably a result of the babyboom which occurred in the late 1940s. Meal rotation as a type of living arrangement (i.e. in 1986 and 1989) was found to be no longer as common. It accounted for only 7.5 % of cases and was disproportionately related to living with respondents and with siblings. Massive rural-to-urban migration caused by industrialization and urbanization could be a main reason for its relative rarity.

The share of the elderly who had living children but lived alone was again rather stable in the four-year period. The proportion remained at about a 13 % level. On the contrary a rapid increase was noted in the proportion of elderly persons who either lived alone or with a spouse only, when the elderly who had never married and had no living children were included and the data were analysed in the context of the total elderly population. In 1986 the proportion was 25,6 %. By 1988 it had increased to 28,7 % and in 1989, to 31,1 % (Chen. 1992b). The contrast between the two types of statistics implies that the increase in the elderly who have low family support is the source of the overall increase in the proportion of elderly living alone. If this is the case, government intervention or social support is needed. Nevertheless, Table 1 indicates that the proportions of elderly living with relatives or in institutions were insignificant.

Table 1Parents' living arrangements, 1986-89: percentage distribution

	With respon- dent	With siblings	Rotating	With relatives	Alone	Institu- tion	Total	N (1 000s)
Male								
1986	43,2	31,3	10,3	0,7	14,4	0,0	100,0	3 023
1987	49.8	37,0		0,6	12,5	0,0	100,0	3 131
1988	48,4	37,2	-	0,6	13,8	0,0	100,0	3 251
1989	42,9	30,8	10,5	0,4	15,1	0,1	100,0	3 340
Female	е							
1986	10,6	71.9	4.7	0,5	12,2	0,0	100,0	2 935
1987	12,3	76,2	-	0,6	10,7	0,0	100,0	3 054
1988	12.4	75,6	_	0,9	11,1	0,0	100,0	3 169
1989	12,2	70,8	4,4	0.4	12,2	0,0	100,0	3 256
Total								
1986	27,1	51,3	7,6	0,6	13,3	0,0	100,0	5 958
1987	31,3	56.4	_	0,6	13,4	0,1	100,0	6 185
1988	30,6	56.1		0,7	12,5	0,0	100,0	6 420
1989	27,7	50.5	7,5	0.4	13.7	0.1	100,0	6 596

Source: Report on the Youth and the Old Survey in Taiwan area, Republic of China. 1987-89. DGBAS. Report on the Old Status Survey, Taiwan area, Republic of China. 1990. DGBAS.

Sex differentials are shown in Table 1. Since Taiwan is a patriachic society, it is understandable that some 70 % of parents stay with siblings of female respondents. However it is surprising to note that 12 % of the elderly stayed with daughters and sons-in-law. In addition, about 5 % of the female subjects participated in meal rotation. As Taiwan's fertility level has been under the replacement level, a change in sex preference or willingness to live with daughters and sons-in-law is needed. Otherwise, the elderly who have no sons have no choice but to live alone.

Among the male respondents, 85 % had parents who lived with one of the sons. Some 40 % of the male respondents reported that they co-resided with their parents. The proportion staying with the respondent's siblings was 10 % less than the proportion living with a respondent, since some elderly

may have only one son. In addition only 10 % engaged in meal rotation, or actually followed the principle of equal inheritance and equal sharing in supporting their parents.

However differences in the proportions of elderly living alone, with relatives or in institutional care between the two sexes are insignificant: 12.2 to 15.1 % of the respondents let their parents live alone. Less than 1 % had their parents stay with relatives or in institutions.

Table 2Parents' living arrangement by SES: percentage distribution

	With respon- dent	With respon- dent's siblings	Rotating I	With relatives	Alone	Institu- tion	Total	Chi- square
Sex								
Male Female	42,9 12,2	30.8 70.8	10,5 4,4	0,5 0,4	15,1 12,2	0,1 0,1	100,0 100,0	4653,62 ⁶ (5)
Marital:	status							
Single Marned		17,1 58,5	2,7 8,7	0,3 0.5	9,4 14,7	0,0 0,1	100,0 100,0	5066,52 ⁴ (10)
Other	25,1	54,7	6,6	0,7	12,7	0,3	100.0	
Educati	ion							
Primary Junior-	16,1	60,8	10,2	0,5	12,3	0,1	100.0	1025,12 ^t (5)
high+	33,7	45,2	6,2	0,4	14,4	0,1	100,0	
Reside	nce							
Rural Town-	26,0	51,7	7,0	0,4	14,7	0,1	100,0	157,08 (10)
ship Urban	32,9 28.5	50,2 48,2	6,4 9,4	0,4	10,1 13,4	0,0	100,0	()
Orban	20,3	40,2	3,4	0,5	13,4	0,1	100,0	
Age gro								
25-29	45,1	39.4	3.5	0.5	11,4	0,1	100,0	
30-34 35-49	27,0 17,1	51,3 57,2	6,2 10,8	0,4	15,0 14,3	0,0	100,0	(10)
Total	27,7	50,5	7,5 (496 476)	0,4 (29 191)	13,7	0,1	100,0 a	

Source: Report on the Old Status Survey, Taiwan area, Republic of China. 1989. DGBAS.

- Weighted case numbers are not available in the computer output because of overflowing.
- b Significant at 0,01 level.
- () Figures in parentheses are weighted number of cases, or the degree of freedom

The determinants of living arrangements

In Table 2 it is seen that parents' living arrangements are affected not only by sex but also by other socio-economic variables. Seventy per cent of the single adults stayed with their parents, while slightly more than half the adults of other marital status reported that their parents lived with their siblings. Regarding education, better educated adults had a greater probability of co-residing with parents. About a third of the adults with junior-high or higher education lived with parents, while the counterpart ratio was about a sixth for adults with primary or lower education. Significant differences in terms of residence were also observed. Township adults were more inclined to live with parents than adults in rural and urban areas. It is surprising to note that meal rotation is most common in urban areas, where it accounts for 9,4 % of parents' living arrangements. Finally, it was found that the probability of co-residing with parents sharply declined with an increase in age. Forty-five per cent of the age group 25-29 years stayed with parents. This percentage decreased to 27 % for the age group 30-34 years and to 17,1 % for the age group 35-49 years. Nevertheless, a positive correlation was observed between meal rotation and age: only 3,5 % of the

youngest age group (25-29 years) participated in meal rotation. This percentage increased to 6,2 % for the age group 30-34 years and to 10,8 % for those aged 35-49 years.

It is highly possible that some socio-economic variables are correlated and confound the effect of each other. Two other questions regarding the effect of socio-economic variables are therefore addressed. First, there is a need to know whether the variables have cumulative effects. Second, there is a need to know whether each of the variables has an independent effect. Table 3 shows the probabilities of elderly persons staying in various types of living arrangement (with the exception of living with relatives and in an institution) with a different combination of four SES characteristics (i.e. age, sex, education and marital status). For example, parents of married males aged 25-29 years and with a junior-high or higher education had a probability of 0,55 of living with their married sons; 0,23 of living with the son's siblings; 0,06 of participating in meal rotation; and 0,14 of living alone. A closer look at Table 3 reveals some patterns of joint effect. The joint effect of marital status and sex is decisive in probabilities of living with a subject. The greatest probability of married daughters living with their parents amounted to only 0,04. Instead, an overwhelming majority of the parents stayed with the daughter's siblings (0,77 to 0,81). Parents were most inclined to live with unmarried children regardless of their sex, with the exception of females aged 30-49 years. The probability of co-residing with unmarried children ranged from 0,53 to 0,72 (excluding the aforementioned exception). Since it is difficult for unmarried persons to maintain a home, the co-residence of unmarried adults with their parents is considered beneficial for unmarried adults. This finding thus supports the hypothesis of children's dependency on parents.

The probability of co-residing with parents was followed by one of living with younger married sons and then with older married sons. The age difference reflects that most sons began their married life in the parents' house (Freedman et al., 1978). Here the effect of education was also observed. Better-educated married sons had a greater probability of living with parents than less-educated married sons. In general, when sex and marital status are held constant, a rank order was observed. The younger and better-educated adults were most likely to live with their parents, while older and less-educated ones were least likely to do so. Again, the results give support to the dependency hypothesis. The younger and better-educated adults are favoured by parents. They are therefore selected to live with parents and receive more favours from parents. On the other hand less educated children are less favoured by parents according to Chinese tradition. When these children grow older and start their own family, they become a burden to parents and are requested to be independent or to set up a separate household.

It is interesting to note that the cumulative effects of the selected socio-economic variables on living with siblings are opposite to the effects of living with subjects. This finding further supports the dependency hypothesis.

Regarding which persons are more likely to participate in meal rotation. Table 3 indicates that older married men with less education had a probability of 0,19 of participating in meal rotation. They are followed by married, older and better-educated men, and then by married, younger and less-educated men. Their probabilities of participating in meal rotation were 0,12 for the former and 0,11 for the latter. Adults with other characteristics had a probability of less than 0,1 of participating in meal rotation. The results imply that those children who are most likely to participate in meal rotation are those who are less well-off, thus allowing the responsibility of supporting their parents to be shared.

Table 3
Probabilities of various living arrangements, by sex, age, marital status and education

	M!	ale	Fe	male
	25-29 years	30-49 years	25-29 years	30-49 years
With respondent Married				
Primary Junior-high+	0,43 0,55	0,28 0,30	0,03 0,04	0,02 0,03
Other Primary Junior-high+	0,66 0,71	0,58 0,67	0,55 0,72	0,18 0,53
With respondent's Married	siblings			
Primary Junior-high+	0,29 0,23	0,37 0,39	0,81 0,80	0,80 0,77
Other Primary Junior-high+	0,13 0,16	0.23 0,19	0,35 0,18	0.66
Rotating Married				
Primary Junior-high+	0,11 0,06	0,19 0,12	0,03 0,03	0,06 0,04
Other Primary Junior-high+	0,07 0,02	0,03 0,08	0,01 0,02	0,06
Alone Married	0,02	0,00	5,52	3,00
Primary Junior-high+	0,14 0,14	0,14 0,19	0,12 0,12	0,11 0,15
Other Primary	0,13	0,11	0,09	0,09
Junior-high+ Case numbers	0,10	0,11	0,08	0,10
Married Primary Junior-high+	32 274 348 676	708 318 1 346 387	131 528 492 342	1 115 640 969 794
Other Primary	38 723	101 520	26 913	90 547
Junior-high+	529 561	234 484	286 961	148 248

Source: Report on the Old Status Survey, Taiwan Area, Republic of China. 1989. DGBAS.

Probabilities of living with relatives and in an institution are excluded.

The study was also concerned about which children leave their parents living alone. Table 3 shows that married children had a greater probability of letting their parents live alone. This was especially true for older married males with better education, who had the highest probability (0,19). It is presumed that migration was the main cause for this type of living arrangement for parents. Some parents were not willing to move with their children to an urban area; they preferred to live alone in a rural area. On the other hand unmarried daughters had the lowest probability of letting their parents live alone: the probability ranged from 0,08 to 0,10. The finding suggests that this group was in need of help from the parents.

To find out if each of the selected socio-economic variables has an independent effect, a polytomous logit analysis (Aldrich & Nelson, 1984) was performed. Parents' living arrangements were divided into six categories, i.e. living with the respondent, living with siblings, meal rotation, living with relatives, living alone, and living in an institution. Living with

a respondent was taken as the reference group. The independent variables were all dichotomized. Code 1 was assigned to children who were male, married, aged 30-49 years, had a senior-high or higher education, and lived in urban areas. The remainder of the cases were given a code of 0.

Table 4 shows the results of the logit analysis. It was found that all the independent variables and some of their interaction had significant effects on the probability of parents' co-residing with the respondent's siblings relative to living with the respondent. Basically, the finding confirms the results shown in Table 3 and indicates their relative importance. Sex and marital status were found to be decisive factors in whether parents lived with the respondent's siblings, rather than with the respondent. Females and respondents who were not married, rather than married respondents, were significantly more inclined to live with their parents than were respondents' siblings. Their co-efficients were the largest among the selected independent variables. In addition, the co-efficients for their interaction ranked third. Unmarried females were more inclined to live with their parents relative to parents living with their siblings. Again the finding supports the dependency hypothesis. In a patriachic society, at least one son is expected to live with the parents, and parents are regarded as having a responsibility to take care of their single, divorced or widowed children, regardless of their sex.

Table 4
Results of the polytomous logit analysis of parents' living arrangements

	Sibling	Rotating	Relatives	Alone	Institution
	Respon-	Respon-	Respon-	Respon-	Respon-
	dent	dent	dent	dent	dent
Constant	1,96	2,31	0,36	-2,04	1,16
	(32,35) ^b	(38,68) ^b	(5,23) ⁵	(-15,94) ^b	(18,52) ^b
Sex	-0,52	0,56	-0,14	0,02	0,07
(male)	(-9,00) ^b	(9,78) ^b	-2,15	(0,17)	(1,19)
Marital status	0,84	-0,29	-0,30	0,18	-0,13
(married)	(15,82) ^b	(-5,57) ^b	(-4,88) ^b	(-1,45)	(-2,29) ^a
Education	-0,23	0,01	0,17	-0,01	-0,11
(Junior-high+)	(-4,90) ^b	(0,14)	(3,65) ^b	(-0,06)	(-2,46) ^a
Urbanization	0,15	0,06	0,15	0,06	0,00
(urban)	(3,41) ^b	(1,37)	(3,16) ^b	(0,71)	(0,05)
Age	0,25	-0,08	-0,23	0,18	-0,05
(30-49 years)	(4,73) ^b	(-1,51)	(-3,82)	(1,78)	(-0,91)
Marital status	0,41	-0,22	0,06	-0,18	-0,14
by sex	(7,78) ^b	(-4,22)b	(0,92)	(-1,51)	(-2,46) ^a
Education by sex	-0,13	0,05	-0,04	-0.08	0,04
	(-2,80) ^b	1,20	(-0,82)	(-0,86)	(0,79)
Age by sex	0,02	0,06	0,01	-0,10	-0,02
	(0,40)	(0,97)	(0,10)	(-0,99)	(-0,40)
Chi-square DF P N			587,50 115 4.0E-32 24 718		

Source: Report on the Old Status Survey, Taiwan area, Republic of China. 1989. DGBAS.

- Significant at 0,05 level.
- b Significant at 0,01 level.
- () Figures in parentheses are Z values.

The influence of age and education was next to that of marital status and sex. Middle-aged subjects (30-49 years) who had their own families had a greater probability of living away

from parents and letting their parents live with their younger siblings. However education had a negative effect; better-educated subjects had a greater probability of having their parents live with them rather than with their siblings. This is especially true for better-educated males as indicated by the interaction of the variables education and sex. This finding is contradictory to the stated child-dependency hypothesis. It is likely that parents who are not well-off are supported by better-educated children. The findings suggest that there is a type of parent-child co-residence arrangement in which parents are supported by a better-off child.

Finally, it was found that urbanization has a significant positive effect. Respondents living in urban areas had a greater probability of living away from their parents and letting their siblings live with the parents. As mentioned before, this phenomenon is a function of the rapid urbanization which occurred in the last two decades.

The types of parent-adult child co-residence

In brief, the significant effects of the selected variables seem to suggest the existence of various types of parent-adult child co-residence in contemporary Taiwan society. If this is true, some typical parent-adult child co-residence types can be identified as follows:

- · Parents and unmarried children of both sexes
- Parents and younger married children
- · Parents and better-educated male children
- Parents and children living in rural areas.

Only the first two types support the hypothesis of children's dependency on parents. In contrast, the last two types suggest the possibility of parents' dependency on children. However no data are available to confirm this argument.

The second column of Table 4 shows that three variables had effects on the probability of participating in meal rotation, rather than living with subjects. Sex was the most important factor in a meal-rotation arrangement. Males were more likely than females to participate in meal rotation than to live with parents. Married respondents had a greater probability of having parents live with them, rather than participate in meal rotation. However the interaction of sex and marital status has a negative effect on participating in meal rotation. The findings suggest that males are assumed to be responsible for supporting parents. Moreover, meal rotation does not appear to be a popular choice of living arrangement for parents.

The third column shows the effects of the selected variables on the probability of letting parents live with relatives rather than with respondents. Male, married and middle-aged respondents were more likely to live with parents than to allow parents to live with relatives. However respondents with a better education and living in an urban area had a greater probability of having their parents live with relatives than with them. Again the finding confirms the effects of migration.

In the last column of Table 4, three variables are shown to have had negative effects on the probability of parents' living in an institution rather than with respondents. The respondents who were not married, who were less educated, or who were married males, were more likely to arrange for parents to enter an institution rather than live with them. It seems that children who were less well-off or who had family burdens, were more inclined to let their parents live in an institution.

Although the study was concerned about an increase in the number of parents living alone, it was found that the selected variables failed to have effects on the probability of living alone rather than living with the respondents. The finding suggests that the question should be pursued from the perspective of the parents.

Frequency of visiting parents

The trend of frequency of visiting parents

A trend of a steady decline in the frequency of visiting parents was observed in the period 1986-89. In 1986, the percentages of children who did not live with their parents but visited their parents daily or weekly were 12,2 % and 18,6 %, respectively (Table 5). The counterpart proportions decreased to 8,7 % and 16,3 % in 1989. A decline was observed for both sexes. Among males, daily visiting declined about a third, from 19,6 % in 1986 to 13,7 % in 1989, while weekly visiting decreased from 22,1 % in 1986 to 19,5 % in 1989. In general, females visited their parents less often than did males; they showed a similar decline in the frequency of visiting parents. Daily and weekly visiting accounted for 8 % and 16,4 %, respectively, in 1986. The figures were reduced to 5,9 % and 14,4 %, respectively, in 1989.

Table 5Frequency of visiting parents, 1986-89: percentage distribution

Daily	Weekly	Monthly	Quar- terly	Bi- annually	Yearly+	Total	N (1 000s)
19,6	22,1	24,8	14,4	10,0	9,0	100,0	1 405
15,8	21,5	21,4	22,8	9,8	8.6	100.0	1 573
14,5	20.7	22,7	24,6	10,1	7.4	100,0	1 677
13,7	19,5	24,9	25,5	9,6	6,9	100,0	1 554
8,0	16,4	24,2	20,2	14,5	16,5	100,0	2 485
6,1	15,0	21,3	28,3	14,1	15,2	100,0	2 676
6.0	13.9	22,6	29,9	13,7	13,8	100.0	2 775
5,9	14.4	24.5	30,7	12,5	12,0	100,0	2 716
12,2	18,6	24.4	18,1	12.9	13,8	100,0	3 890
9.7	17,4	21,4	26,2	12,5	12.8	100,0	4 250
9,2	16,5	22,7	27,9	12.4	11,4	100,0	4 452
8.7	16.3	24.6	28.8	11.4	10.1	100.0	4 269
	19,6 15,8 14,5 13,7 8,0 6,1 6,0 5,9 12,2 9,7 9,2	19,6 22,1 15,8 21,5 14,5 20,7 13,7 19,5 8,0 16,4 6,1 15,0 6,0 13,9 5,9 14,4 12,2 18,6 9,7 17,4 9,2 16,5	19,6 22,1 24,8 15,8 21,5 21,4 14,5 20,7 22,7 13,7 19,5 24,9 8,0 16,4 24,2 6,1 15,0 21,3 6,0 13,9 22,6 5,9 14,4 24,5 12,2 18,6 24,4 9,7 17,4 21,4 9,2 16,5 22,7	19,6 22,1 24,8 14,4 15,8 21,5 21,4 22,8 14,5 20.7 22,7 24,6 13,7 19,5 24,9 25,5 8,0 16,4 24,2 20,2 6,1 15,0 21,3 28,3 6,0 13,9 22,6 29,9 5,9 14,4 24,5 30,7 12,2 18,6 24,4 18,1 9,7 17,4 21,4 26,2 9,2 16,5 22,7 27,9	19,6 22,1 24,8 14,4 10,0 15,8 21,5 21,4 22,8 9,8 14,5 20,7 22,7 24,6 10,1 13,7 19.5 24,9 25.5 9,6 8,0 16,4 24,2 20,2 14,5 6,1 15,0 21,3 28,3 14,1 6,0 13,9 22,6 29,9 13,7 5,9 14,4 24,5 30,7 12,5 12,2 18,6 24,4 18,1 12,9 9,7 17,4 21,4 26,2 12,5 9,2 16,5 22,7 27,9 12,4	terly annually 19,6 22,1 24,8 14,4 10,0 9.0 15,8 21,5 21,4 22,8 9.8 8.6 14,5 20,7 22,7 24,6 10,1 7.4 13,7 19,5 24,9 25,5 9,6 6,9 8,0 16,4 24,2 20,2 14,5 16,5 6,1 15,0 21,3 28,3 14,1 15,2 6,0 13,9 22,6 29,9 13,7 13,8 5,9 14,4 24,5 30,7 12,5 12,0 12,2 18,6 24,4 18,1 12,9 13,8 9,7 17,4 21,4 26,2 12,5 12,8 9,2 16,5 22,7 27,9 12,4 11,4	19,6 22,1 24,8 14,4 10,0 9,0 100,0 15,8 21,5 21,4 22,8 9,8 8,6 100,0 14,5 20,7 22,7 24,6 10,1 7,4 100,0 13,7 19,5 24,9 25,5 9,6 6,9 100,0 8,0 16,4 24,2 20,2 14,5 16,5 100,0 6,1 15,0 21,3 28,3 14,1 15,2 100,0 6,0 13,9 22,6 29,9 13,7 13,8 100,0 5,9 14,4 24,5 30,7 12,5 12,0 100,0 12,2 18,6 24,4 18,1 12,9 13,8 100,0 9,7 17,4 21,4 26,2 12,5 12,8 100,0 9,2 16,5 22,7 27,9 12,4 11,4 100,0

Source: Report on the Youth and the Old Survey in Taiwan area, Republic of China. 1987-89. DGBAS. Report on the Old Status Survey. Taiwan area, Republic of China. 1990. DGBAS.

The trend of a decline in the frequency of visiting parents raises the question of whether parents are being abandoned by their children. The greatest concern here is for parents who live alone. A concern also exists for parents who live with one of their children. If they are visited by other children, this suggests that the norm of filial piety is still maintained.

The determinants of frequent visits to parents

Table 6 indicates that parents who lived alone were visited most frequently: 26,3 % were visited by their children daily or weekly. Another 50 % were visited monthly or quarterly. The next most frequently visited group were parents who lived with the respondent's siblings: 24,7 % were visited daily or weekly. Another 54 % were visited monthly or quarterly. On the other hand parents who lived with relatives or in an institution were relatively less frequently visited by their children; they probably had fewer children. Generally speaking, a quarter of the parents were visited daily or weekly. Another half of the parents were visited monthly or quarterly. It thus seems that parents were usually not abandoned by

children who did not live with them, or further, that filial piety is still maintained in contemporary Taiwan society.

Table 6
Frequency of visiting parents by SES: percentage distribution

	Daily	Weekly	Monthly	Quarterly	Bi- annually	Yearly+	Total	Chi-square
Sex								
Male	13,7	19,5	24,9	25,5	9.6	6.9	100,0	478,32 ^a
Female	5,9	14,4	24,5	30,7	12,5	12,0	100,0	(5)
Merital statu	ıs							
Single	8,8	10,4	23.3	30,2	15,8	11,4	100,0	57,94 ^a
Married	8,8	16,8	24.8	28,6	11,1	9,9	100,0	(10)
Other	0,0	15,1	23,1	30,4	10.2	13,2	100.0	, ,
Education								
Primary	7.4	14,8	22,6	29.3	13.0	12,9	100,0	143.08 ^a
Junio:								(5)
high+	9.6	17,2	25,9	28.4	10.4	8.4	100,0	
Residence								
Rural	8,2	16.0	24,7	29,8	10,7	10,7	100,0	41,84ª
Township	8.9	16.4	25,9	25,5	12.0	11,3	100.0	(10)
Urban	10,0	16,9	23.9	28.2	12.9	8.2	100,0	
Age								
25-29	B.1	14,0	24,6	30,5	13.5	9,2	100,0	49,54ª
30-34	8.6	16,7	25,3	29.4	11,3	8,3	100,0	(10)
35-49	9,1	17,0	24.3	27,6	10.5	11,4	100,0	
Living arrar	ngement							
With sibling	8,3	16.4	25,4	28.9	11.1	9.9	100.0	24 859.61 ^a
With	5(4		2011	20.0		0,0	.00,0	£ 4 003,01
relative	7,7	13,8	20,1	30,6	9.0	18,7	100,0	
Alone	10.5	15,8	21,9	28,4	12.7	10,7	100,0	
Institution	4,5	17,6	21,5	17,3	9.5	29.5	100,0	
Total	8,7	16,3	24,6	28,8	11,4	10.1	100,0	
	(373 547)	(694 241)	(1 052 337	1 (1 228 879)	(487 173)	(433 265)	4 269 448	3
Source:				us surve	y, Taiw	an area,	Repub	olic of
			OGBAS					
a	N. P		0.01 lev					
()		of free		s are we	eighted	number	of case	s, or the

Table 6 also shows that respondents who were male, married, better-educated, urban-resident and older, visited their parents more frequently than did other respondents. The cumulative and independent effects of these variables were further investigated.

The probability of respondents' visiting their parents weekly or more frequently with different combinations of four SES characteristics are shown in Table 7. Again it was found that marital status and sex were decisive factors for the probability of visiting parents weekly or more frequently. Married males had a greater probability of visiting parents frequently: the probability ranged from 0,24 to 0,39. It is interesting to note that the rank order of the finding was rather similar to the counterpart probability of parents' co-residing with a sibling or living alone (Table 3). The finding indicates that the groups in which the respondents had a greater probability of living away from their parents, visited their parents more frequently. The finding also offers further evidence that parents not co-residing with children are not abandoned by their children.

Nevertheless, there is an obvious concern with the behaviour of unmarried young adults with a lower education who are somewhat isolated. In the study these persons not only stayed away from their parents but also visited their parents infrequently. The probability of visiting their parents weekly or daily was only 5-6 %. It is hoped that this can simply be attributed to a "stage" that they will later grow out of.

Table 8 shows the results of polytomous logit analysis on frequency of visiting parents. It seems that there is a threshold of changing the frequency of visiting for some SES variables. Male subjects preferred daily visits to weekly or monthly visits. When the visiting interval was expanded, males preferred quarterly or biannual visits to daily visits. A similar pattern was observed for marital status and education. However the cut-off point was between quarterly and biannual factors. Also, married and better-educated subjects preferred daily to weekly, monthly or quarterly visits. Otherwise they visited parents biannually rather than daily. The behaviour of urban residents was somewhat different: they preferred weekly (even monthly and quarterly) to daily visits, or biannual to daily visits. This pattern suggests that distance influences the frequency of visiting. If both parents and subjects lived in the same city, they preferred to visit their parents daily. If parents lived in rural areas, the subjects had a greater probability of visiting their parents weekly rather than daily.

Table 7Probability of visiting parents weekly or more frequently, by sex, age, marital status and education

	М	ale	Female		
	25-29	30-49	25-29	30-49	
	years	years	years	years	
Married					
Primary	0,24	0,39	0,19	0,17	
	(15 042)	(369 545)	(124 029)	(1 020 618)	
Junior-high+	0,33	0,35	0,22	0,17	
	(134 238)	(778 049)	(458 455)	(895 705)	
Other					
Primary	0,06	0,23	0,05	0,19	
	(10 482)	(34 897)	(11 891)	(68 426)	
Junior-high+	0,17	0,27	0,02	0,26	
	(140 476)	(70 876)	(74 564)	(62 155)	

Source: Report on the Old Status Survey, Taiwan area, Republic of China, 1989, DGBAS.

Nevertheless, there is no clear visiting pattern for the variables of age and parents' living arrangement. Middle-aged respondents prefer daily visits to monthly visits. This probably indicates that parents help to care for grandchildren during the day and that the adult children fetch their children from the grandparents in the evening. When parents live alone, live with relatives, or live in an institution, they are more likely to be visited quarterly rather than daily. The finding suggests that the parent-child relationship is rather loose in such cases.

Summary and discussion

Although the selection of an adult child with whom to coreside in later life is a complex process, the analytical results in this article suggest that the selection is basically governed by economic feasibility or dependency theory. Parents may provide continued assistance to unmarried, divorced, or less well-off children by living with them. On the other hand parents living with better-off adult children, or being supported in meal rotation by less well-off children implies parents' dependency on children. To confirm these findings, a full model, rather than a partial model, is needed. There is therefore a need for more data, including parents' characteristics, family composition, family structure and home ownership.

Table 8Results of the polytomous logit analysis of frequency of visiting parents

	Weekly	Monthly	Quarterly	Biannually+
	Daily	Daily	Daily	Daily
Constant	-0,78	-0,29	0,24	0,49
	(-19,13) ^a	(-8,39)a	(8.46) ^a	(19,04) ^a
Living arrangement (With others)	0,01 (0,37)	0,04 (1,82)	0,07 (3,57) ^a	-0,02 (-1,01)
Sex	-0,38	-0,10	0,05	0,16
(male)	(-15,71) ^a	(-5,07) ^a	(3,28) ^a	(9,65) ^a
Marital status	-0,10	-0,16	-0,01	0,08
(married)	(-2,75)	(-4,95)ª	(-0,31)	(3,30) ^a
Education (jumor-high+)	-0,07	-0,08	~0,06	0,03
	(-2,63) ^a	(-4.07) ^a	(~3,28)ª	(1,85)
Urbanization	0,08	0,01	0,00	-0,05
(urban)	(3,60) ^a	(0,69)	0,12	(-3,43) ^a
Age	-0,02	-0,06	0,00	0.04
(30-49)	(-0,80)	(-2.48) ^a	(-0,07)	(1,87)
Chi-square DF P N	520,07 228 1.oE-21 15 819			

Source: Report on the Old Status Survey, Taiwan area, Republic of China, 1989. DGBAS.

- a Significant at 0,01 level.
- () Figures in parentheses are Z values.

Another concern in this article is the continuation of filial piety. Filial piety was demonstrated by living with children, or not living with children but being visited frequently. Basically, the results of the analysis support the continuation of the traditional norm: parents who lived alone were visited most frequently. Adult children who had a greater probability of living away from parents were more inclined to visit their parents more frequently. Nevertheless two findings give cause for concern: one is that a trend of a steady decline in frequency of visiting parents was observed in the period 1986-89. The other is the behaviour of young, unmarried and less-educated adults; these children not only lived away from their parents but visited their parents infrequently. Alternatively, they were somewhat isolated from their stem family. There is therefore a need to closely observe the change in frequency of visiting parents in the future.

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Figures in parentheses are weighted number of cases.

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