WOMEN OUTLIVING MARRIAGE IN TURKEY: SINGLE HOUSEHOLDERS vs. DEPENDENT RELATIVES¹

EVLİLİK KURUMUNUN DIŞINDA KALAN KADINLAR: YALNIZ YAŞAYANLAR İLE AKRABALARA BAĞIMLI YAŞAYANLARIN KARŞILAŞTIRILMASI

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ABSTRACT

The 2011 Turkish Survey on Family Structure found that about 40 percent of all women over 65 in Turkey still lived with a husband, about 30 percent lived as single householders, and about 30 percent lived as dependents with other relatives. An exploratory summary of these three groups compares residential density, household amenities and income, health insurance coverage and a subjective measure of happiness. Models of these outcomes control for age, education and lifetime residential mobility as well as household status. Such comparisons suggest that traditional kin-based and/or state- and market-based financial and in-kind supports for living arrangements, health care and life satisfaction of these vulnerable population groups are keeping up with the challenges of an aging population.

KEYWORDS: population aging, dependents, single heads of household, well-being

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ÖZET

2011 Türkiye Aile Yapısı Araştırması'na (TAYA) göre tüm Türkiye'de 65 yaş üstü kadınlarının %40'ı hâlâ eşleriyle, %30'u bekâr hane reisi olarak ve yaklaşık %30'u ise akrabalarla yaşamaktadır. Bu üç gruba dair yaptığımız keşfedici analiz, barınma yoğunluğu, hane halkı geliri ve imkânları, sağlık sigortası ve öznel mutluluk göstergesini mukayese etmektedir. Bu sonuçlara dayalı modeller, yaş, eğitim ve hayat boyu ikametgâh hareketliliği ile hane halkı statüsü kontrol değişkenlerini göz önüne almaktadır. Bu türden karşılaştırmalar, bu korunmasız nüfus gruplarına, birlikte yaşama düzenlemeleri, sağlık ve yaşam memnuniyeti adına sağlanan geleneksel akraba-temelli ve/ya devlet- ve piyasa-temelli parasal ya da ayni desteğin yaşlanmakta olan bir nüfusun karşılaştığı güçlükler seviyesine gelmekte olduğunu göstermektedir.

KEYWORDS: nüfusun yaşlanması, bağımlılık, bekâr hanereisileri, refah

LIVING ARRANGEMENTS IN LATER LIFE

Turkey's population is growing older as a result of modernization and the demographic transition to lower birth and death rates (Ünalan 1997; Yüceşahin and Özgür 2008; Yüceşahin 2009). The rate of increase for the population at ages 65 or older exceeds that of any other age group (Lloyd-Sherlock 2000). While persons aged 65 or older are currently only seven percent of the total population, projections suggest that this age group will constitute about 20 percent of the population of Turkey by 2050. This group must be examined thoroughly to better prepare the country at both the institutional and individual levels for the challenges arising from the ongoing age transition (Duben 1985, Hancioğlu 1985), but Turkey's older population has not yet received the level of systematic attention found in many other developed countries. This exploratory descriptive study aims to stimulate further research and discussion of an increasingly crucial aspect of Turkish demographic development.

In Turkey as in most societies, aging is a gendered process experienced differently by men and women. Women survive longer than men, so the sex ratio of men to women drops below unity and becomes progressively more feminine after about age 50 (Toros 2000). The Turkish Statistical Institute estimates that as of 2012, the number of men at ages 65 or older in the country was 2,473,913 and the number of women at age 65 or older was 3,208,090, or about 30 percent more than the number of men. At the oldest ages the imbalance of the sexes grows more and more pronounced.

Unbalancing of the sex ratio affects chances to live together with a spouse differently for men than for women. Table 1 based on the nationally-

representative TAYA 2011 Turkish Survey on Family Structure (Yolu & Mahallesi 2012) shows that most male respondents lived together with a wife or other partner well into old age, although an important fraction of them have lost partners by the oldest ages. In contrast, remaining together in couples is impossible for a large majority of older women because there are not enough surviving men and because men typically have slightly younger wives. In Table 1 we see that one-fourth of Turkish women lived without a husband already at ages 55 to 64, rising to half of all women at ages 65 to 74, and nearly three-fourths of all women at ages 75 to 84. Although virtually all women in Turkey are married by midlife, in old age most women outlive their marriages. For this reason we concentrate here on the living arrangements of these older women and reserve attention to the situations of men for future research.

The TAYA 2011 survey conducted by the Turkish Statistical Institute and the Directorate General of Family and Social Research included a national sample of over 12,000 respondents representing the non-institutionalized

Table 1: Adult Population by Age, Sex and Household Status, Turkey 2011

	Population	Dependent	Single Head	Couple*	
Men					
35 to 44	5,205,649	9%	3%	88%	
45 to 54	4,272,629	3%	3%	93%	
55 to 64	2,876,267	3%	4%	93%	
65 to 74	1,461,702	6%	8%	86%	
75 to 84	766,217	11%	16%	74%	
85 +	136,467	31%	21%	48%	
Women					
35 to 44	5,076,196	10%	6%	85%	
45 to 54	4,219,685	6%	11%	82%	
55 to 64	3,011,954	10%	16%	74%	
65 to 74	1,831,618	20%	29%	51%	
75 to 84	981,891	31%	40%	29%	
85 +	231,108	64%	31%	6%	

Source: 2011 TAYA Survey weighted to national population estimates

^{*(}Includes both partners in a couple if either of them is household head. Fewer women appear in such couples because men have more partners under age 65.)

population of the country. This study reports key indicators of well-being for women at ages 65 or older who lived alone as single heads of households or who lived as dependents with other relatives, compared to women who still lived with husbands at the same ages. The general impression in many other societies as well as in Turkey is that women still living together with husbands should report a higher level of well-being, while women who have outlived marriages should report lower well-being (George, Okun & Landerman 1985: 225). As developed below, analysis of the 2011 TAYA survey confirms this expectation. Comparing the two groups of women who have outlived marriage to each other, expectations are less clear. Public confidence in and sentiment for family attachments might suggest that women who live as dependents with their adult children could experience greater well-being than women who live as single heads of household, but we explore this comparison without a preconceived notion of which group we expect to be better off.

MEASURES OF WELL-BEING FOR OLDER WOMEN

We consider several aspects of quality of life for Turkish women at ages 65 or older, summarized in Figure 1. Our aim is to compare these measures across the three groups of older women described above: women still living with husbands, those living as dependents in the households of other relatives, and those living as single heads of households.

Residential Density

A measure of persons per room is widely used as a negative indicator of quality of life, with higher values indicating more crowding and less privacy in the household. Female 2011 TAYA respondents at ages 65 or over reported mean residential density of 1.45 persons per room with a standard deviation of 0.9 and a long right tail to the distribution as illustrated in Figure 2. However, it is worth noting that for an older woman living alone as a single household head, low residential density by itself may not always represent an indicator of more happiness or well-being.

Monthly Household Income

The 2011 Turkish Survey on Family Structure included several questions about the financial situation in each household. Well-being can be assessed on the basis of reported monthly household income, but a number of caveats apply to use of such figures. First, we must assume that different households (large, small, urban, rural, householder couples, single householders, and so on) follow generally similar rules of allocation of this household income to the needs of each member of the household, because no information about such allocation decisions within households was collected in this survey.

0.00-0.49 19,1% Persons per Room 0.50-0.99 39,9% 1.00-1.49 23,9% 9,5% 1.50-1.99 2.00-2.99 5,5% 3.00-7.50 2,1% <250 lira 17,0% Adjusted Monthly 250-289 lira 15,8% 390-559 lira 26,9% 560-839 lira 21.9% 18.3% 840+ lira refrige rator 97,8% phone 90,1% Household Amenities 88,2% washer 75,6% vacuum blender 30,9% computer 20,4% air conditioner 12,8% pay television 8.7% Health insurance 91,4% very unhappy 1.1% Happiness score unhappy 5,0% ave rage 38,0% 46.7% happy very happy 9.3% 0% 20% 40% 60% 80% 100%

Figure 1: Material and Psychological Well-Being of Turkish Women Ages 65 or Older in 2011

Source: Original tabulation from 2011 TAYA survey.

This assumption can be questioned, but without it we cannot connect household income to individuals in that household. Second, if we accept relatively uniform cultural norms governing allocation within households, we must arrive at some method for weighting additional members for larger households. We compared three possible alternatives: a strictly per-capita measure that simply divides total household income by the number of persons in the household; a measure that looks at total household income without any consideration of household size; and the standard definition recommended by the Organization for Economic Cooperation and Development (OECD) for use in such calculations. The OECD measure counts the household head

as one person, each additional adult in the household as 0.5 of a person to reflect household economies of scale, and each person under age 18 in the household as 0.3 of a person. We present results for the OECD measure here, but note that results predicted for different categories of education, household composition and lifetime migration history were robust to using either of the other measures. Since dependents lived in the largest households and single heads lived in the smallest households, household income differences were strongest with no controls for household size and weakest for the strictly percapita calculation, but the direction of differences and results of significance tests remained essentially the same across any measure of household income.

Household Amenities

The 2011 TAYA survey utilized a checklist of specific amenity items in each household studied. Factor analysis using eight of these items (refrigerator, phone, washer, vacuum, blender, computer, air conditioner and pay television) produced two factors with eigenvalues of 1.66 and 0.49, with no other important factors. Loevinger's H-statistic (Mokken, 1971) was above 0.50 for scaling of these items in the order listed to produce an index scored from 1 to 8 based on the number of items present in a household. The resulting index had a mean of 4.8 items per household, with a standard deviation of 1.9 items. More items (higher scores on these scales) may be taken as an indicator of greater material well-being.

Health Insurance

Another measure from the 2011 Survey gives a slightly different perspective on the relation of householder status to quality of life. For each household in the survey, information was collected about whether each member had access to health insurance. A code of zero indicates no health insurance and a code of 1 indicates health insurance coverage.

Subjective Happiness

Finally, a question on the 2011 TAYA questionnaire asked respondents to self-rate their own subjective sense of happiness. The responses were scored -2 for very unhappy, -1 for unhappy, zero for "average", +1 for happy and +2 for very happy. A higher score on this item indicates greater subjective psychological well-being.

LIVING ARRANGEMENTS AND OTHER PREDICTORS

Household Status

Some people in every society do not live in conventional family households. They may live in a military barracks, a prison, a hospital or other non-

household residential setting. Particularly in old age, this non-household population includes people living in institutions such as nursing homes or other congregate living arrangements that are not included in the universe of family households covered by most surveys, including the 2011 TAYA survey data examined here. Omitting the non-family-household population is a smaller problem in Turkey than it might be in some other countries, however, because the share of Turkey's population living in such non-household settings is lower than in most developed countries. Less than one percent of the older population was living in institutional care in the mid-1990s (Kandel and Adamec 2003). The agencies conducting the 2011 Turkish Survey on Family Structure estimated that three percent or less of the elderly population lived in such non-family-household settings. Virtually all of the elderly in Turkey live in private households (Imamoglu & Imamoglu 1992, Ediey, Yavuz, and Yüceşahin 2012) and traditionally the family takes care of older relatives who cannot live independently. Specifically, sons may be expected to take older parents into their homes (Spencer 1960, Aykan and Wolf 2000, Ozer 2004). In 2005 nursing homes throughout the country had a total capacity of less than 25,000 places (State Planning Organization 2007).

In each household someone is identified in most surveys (including data examined here) as the head of the household while other people are classified as dependents of the household head (Burch 1980, Santi 1990). Even when a man and woman live together as a couple, traditional gendered household roles usually lead people to identify the man as the head of the household and his partner as a dependent. A woman is usually identified as the head of a household only when she lives without a husband (Ko 1997). We assume that couples actually share responsibility in many ways as householders in charge of their homes (Herbst 1952, Carliner 1975). We count all wives living with their husbands as well as the husbands themselves as living in *householder couples*. Table 1 above shows the percent of men and women living in such householder couples for age groups below as well as above age 65. Of men living in such householder couples in the TAYA 2011 sample, 94 percent were listed as head of household. For women living in such householder couples, 94 percent were listed as partners of the household head.

Women shown in Table 1 living as dependents with other relatives do not include wives living with their husbands, since wives are counted as members of couples. We assume that the social position of a woman is fundamentally different when she is the spouse of a household head than when she is a dependent living in the household of some other relative. Women identified as dependents from the 2011 TAYA survey had no husband or other partner, and some other person (almost always a child of the woman) headed the household.

Women shown in Table 1 living as single heads of their own households had no husband or other partner, and were listed as head of household. In a

few cases they had other dependents living with them (usually a child) but in most cases they lived alone. Of course, as pointed out by Aytaç (1998), Aykan & Wolf (2000) and many others, living in a single-person household does not necessarily imply social isolation, since many such single heads of households have other relatives living nearby. Still, living as a single head of household represents a significantly different strategy for everyday life than living as a dependent with other relatives or continuing to live as part of a married couple. Comparing well-being of women in these three contrasting situations forms the central focus of this study. Since these three groups of older women differ in many other ways besides household status itself, however, we also must consider additional factors that could explain well-being in order to identify the separate role of household living arrangements.

Age

As Table 1 illustrated, household living arrangements change with age for both men and women. Even when we focus only on women at ages 65 or older, each additional year of age translates into fewer surviving spouses. Older ages also mean that those women who have outlived marriage become more dependent on other relatives and are less likely to live alone. Older women still living in couples with a husband reported an average age of about 71 as shown in Table 2. The average age of women living as single heads of household was about 75, and those living as dependents with other relatives were on average even older.

To account for changes in household status with increasing age, we include age as a continuous variable along with other predictors in all statistical models. We subtract 65 from reported ages, so that model intercepts discussed below refer to women at age 65. The age coefficient in these models refers to the effect of one additional year lived above age 65.

Education

Educational attainment influences family living arrangements across the entire life cycle, not only in Turkey (Aytac 1998; Akyak and Wolf 2000) but also in most other societies (Khadr 1997; Shah, Yount, Shah, and Menon 2002; Uhlenberg 2009). Education also should affect well-being outcomes. Once formal schooling is finished, usually in early adulthood, it becomes a lifelong marker that affects many other aspects of the life course including old age. Formal schooling is linked to better survival chances, so more-educated people should be widowed less often and should retain more partners for that reason. The effect of schooling on risk of divorce is less clear, both in Turkey itself and in other societies, but so few of the older respondents in this survey were divorced that educational differences are irrelevant. Education also increases autonomy of women in several ways, including more prestige

Table 2: Female TAYA Respondents at Ages 65 or Older in 2011 by Education, Household Status & Residential History

	Education	n <primary< th=""><th colspan="3">Education primary+</th></primary<>	Education primary+		
	women	mean age	women	mean age	
Rural Stayers					
Dependent	259,502	77.4	57,135	74.0	
Single Head	329,881	75.0	61,346	71.1	
Couple	374,224	71.3	208,393	70.4	
Urban Migrants					
Dependent	142,801	78.6	77,428	76.8	
Single Head	109,109	76.1	133,714	72.5	
Couple	92,425	71.5	154,089	70.2	
Urban Stayers					
Dependent	188,892	76.6	91,820	73.4	
Single Head	178,793	74.9	173,845	73.6	
Couple	194,265	71.9	216,956	70.2	
All Women 65+	1,869,892	74.6	1,174,726	71.9	

Source: 2011 TAYA Survey

and bargaining power within their households, a wider understanding of the larger social context in which those households are situated, and in some cases more chances for higher-paid and more influential jobs in the paid labor force (Moghadam 1993). More education for women also may indicate more affluent and successful parental families, which could confer additional lifetime advantages on such women even if their education was not itself the direct cause. All of these effects mean that more-educated women who had lost their partners were more likely to remain heads of their own households. Less-educated women who lose their partners were more likely than were more-educated women to become dependent on other family members, especially adult children. Less educated women also usually married earlier and had more children. More children might mean more available alternative living arrangements for a less-educated woman who loses her husband, compared to options available to a more-educated woman. Education also may contribute to greater material and psychological well-being.

The 2011 TAYA survey identified all household members in one of six categories of educational attainment. While details of this educational

distribution are important for young people in more recent Turkish generations, among people over age 65 in 2011 there were really only two important categories of this education variable. These people grew up in Turkey and completed their schooling during a historical period when required education ended with completion of nine years of primary schooling (Kruger 1972; Tansel 2002; Tansel & Bodur 2012). For people in these earlier generations, the most important distinction is between those who failed to complete primary school (61 percent of women 65 or older) and those who completed primary school or beyond (39 percent of women 65 or older) as shown in Table 2. This distinction proved to be the most useful predictor of other life outcomes, compared to other more finely-drawn educational distinctions. For example, Figure 2 (based on Table 2) shows that women who completed primary school were more often still living with husbands as expected, while women who did not complete primary school were more likely to live as dependents with other relatives instead.

However, Table 2 also revealed that women with less than primary education tended to be older than those who completed primary school, so an age effect may be confused with an education effect in Figure 2. This furnishes yet another reason why statistical analysis below must control for the ages of respondents in order to clarify effects of other factors like education.

Urban/Rural Residence and Lifetime Migration

Another important influence on both household living arrangements and measures of well-being in Turkey long has been the difference between urban centers and rural areas of the country. The urban/rural distinction recorded in this survey is based on the administrative classification of a town or city as well as its population size, so that "urban" has a clear and well-understood meaning in the Turkish context. A massive shift from the countryside into Turkish cities continued through most of the 20th century (Robinson 1958, Gökdere 1994, Erman 1998). Thus we find three different population groups in Turkey as shown in Table 2—those born in cities and still living there, those born in rural areas and still living there, and a third group who were born in the countryside but at some point moved to urban areas (Taueber 1958, Shorter & Tekçe 1974).

Such residential mobility (or its absence) displays an obvious relation to household living arrangements in Figure 2, as suggested by Aytaç (1998). Interestingly, for both considered levels of education the women remaining in rural areas are the most likely still to be living in a couple with their husbands. This pattern seems inconsistent with the fact that survival rates are lower in rural areas. In cities fewer couples should be disrupted by widowhood and more people should remain in couples as they grow older. The pattern in Figure 2 suggests that women who become widowed in the countryside may

Rural < primary 27% 34% 39% Migrant <primary 41% 32% 27% Urban <primary 34% 32% 35% Rural primary+ 17% 19% 64% Migrant primary+ 21% 37% 42% Urban primary+ 19% 36% 45% 0% 20% 40% 60% 80% 100% ■ Single Head ■ Couple** □ Dependent*

Figure 2: Turkish Womwn Ages 65 or Olderin 2011 by Education, Household Status & Residential History

Source: Original tabulation from 2011 TAYA survey.

go to live with their children, and that these children often may have moved to one of Turkey's growing urban centers. This migration explanation for the apparently higher rural incidence of surviving couples also fits the pattern in Figure 2 for women living as dependents with other relatives. Compared to lifelong urban residents, women staying in rural areas are less likely to live as dependents with other relatives, but women moving from rural to urban areas are more likely to do so, suggesting that those relatives may in fact have been a reason for the move to a city.

Above and beyond the effects of urban versus rural residence, some research suggests that different geographic regions of Turkey may represent

^{*(}includes women living as dependents when household head is someone besides a husband)

^{**(}includes all women living with a husband when either is household head)

distinctive cultural contexts (Albaum & Davis 1973, Magnarella & Turkdogan 1973, Ulusoy 1993). Average household size increases from West to East and nuclear families are more prevalent in the more urbanized West, South, and Central regions (Yavuz 2004; Ünalan 2005). Extended families, especially families that co-reside with an older family member, are more likely to be in the East region (Aytaç 1998). Living together as independent couples increased in all regions among people 50 years old and over between 1983 and 1998 but the North and East experienced greater increases in this percentage (Yavuz 2004). The greater increase in the North and East may show the effect of internal migration, as these two regions have been subject to severe outmigration of younger populations towards other regions over the last few decades (Doh 1984, Yavuz 2004).

However, consideration of twelve different regions of Turkey (Istanbul, East and West Marmara, regions on the Aegean, Mediterranean and East and West Black Sea coasts, West Anatolia, Central Anatolia, and Northeast, East Central and Southeast Anatolia) generally failed to show significant differences in surviving couples among 2011 TAYA respondents at ages 65 or older. Observed regional differences in percentages of older women with husbands were explained by age, education and urban-rural residence within these regions. Similarly, among women who had outlived marriages, the balance between remaining as single heads of their own household or becoming dependents in the households of others also did not vary significantly across these regions after controlling for education and urban/rural residence. Given these results, no variable for regions is included in analysis below.

RESULTS FOR MODELS PREDICTING WELL-BEING

Each of the well-being measures described above (residential density, household income adjusted for household size, household amenities, health insurance and subjective happiness) served as an outcome in a multivariate regression model including women's ages, education, household living arrangements, and lifetime residential mobility as predictors.

Table 3 shows OLS regression results for each of the outcomes described above. Omitted reference categories for predictors were less than primary schooling for education, single head for household status, and rural-urban migrant for residential history. The intercept of each regression model thus refers to the combination of these omitted reference categories, and to women 65 years old for the continuous age variable included in each model. Coefficients in Table 3 for categories of each predictor are significantly different from the omitted reference category when they are at least 1.96 times larger than their standard errors, as noted in the table by * markers. In addition to the main effects for these predictors shown in Table 3, additional analysis explored

possible interaction effects in which the pattern observed for one variable overall was different within some particular category of another variable. For example, for both rural residents and rural-urban migrants, women living as dependents with other relatives reported more health insurance coverage than did women living as single heads of households. This pattern did not hold, however, for lifetime urban residents, for whom living as dependents with other relatives instead meant less health insurance coverage than for women living by themselves. This inconsistency was the only substantively and statistically important observed interaction, so extensive interaction coefficients are not reported in Table 3.

Consistent Age and Education Effects

Two considered predictors, age and the educational contrast between completing and not completing primary school, had consistent effects for older Turkish women across the considered measures of well-being in Table 3. Finishing elementary school predicted significantly less residential crowding,

Table 3: OLS Regression of Well-Being Measures on Household Status, Residential History, Education and Age, Turkish Women Ages 65 or Older in 2011

						0				
	Persons/ Room		Household Income ¹		Amerities ²		Health Insurance		Self-rated Happiness	
	β	$\sigma_{_{\!eta}}$	β	$\sigma_{_{eta}}$	β	$\sigma_{_{eta}}$	β	$\sigma_{_{eta}}$	β	$\sigma_{_{\!eta}}$
Household Status										
Dependent ³	0.90*	0.05	-59 ₺	41₺	1.03*	0.09	3.8%	2.4%	-0.099	0.054
Single head	0.00		0₺		0.00		0.0%		0.000	
Couple ⁴	0.26*	0.03	-39も	38₺	0.21*	0.08	5.7%*	2.1%	0.159*	0.054
Residential	Residential History									
Rural	0.08	0.04	-313七*	43₺	-1.47*	0.09	0.0%	2.0%	0.047	0.054
Migrant	0.00		0₺		0.00		0.0%		0.000	
Urban	0.04	0.04	-171七*	51₺	-0.49*	0.09	0.7%	2.1%	0.021	0.053
Education	Education									
<primary< td=""><td>0.00</td><td></td><td>0₺</td><td></td><td>0.00</td><td></td><td>0.0%</td><td></td><td>0.000</td><td></td></primary<>	0.00		0₺		0.00		0.0%		0.000	
Primary+	-0.14*	0.03	268老*	33₺	0.77*	0.07	2.2%	1.6%	0.135*	0.047
Age (years>65)	-0.01*	0.00	-3₺	2₺	-0.03*	0.01	-0.2%	0.1%	-0.007*	0.003
Intercept	0.63	0.05	732₺	55₺	4.60	0.11	88.9%	2.7%	0.526	0.065

^{1.} Monthly household income divided by adjusted household size (OECD standard: Head= 1, Other 18+= 0.5, Others < 18= 0.3)

^{2.} Items in scaled order: refrigerator, phone, washer, vacuum, blender, computer, air conditioner, pay television.

^{3.} Includes all women living as a dependent with a household head other than a husband

^{4.} Includes both partners in a couple if either of them is head of the household

higher monthly household income adjusted for household size, a greater number of household amenities, a higher prevalence of health insurance coverage and significantly greater self-rated happiness.

Similarly, each additional year of age past 65 predicted less residential density, lower household income adjusted for household size, fewer amenities present, less health insurance coverage, and not surprisingly, less self-rated happiness. Only the age effects on self-rated happiness, number of amenities, and residential density were statistically significant. The residential density effect was in the direction of fewer persons per room with increasing age, not more residential crowding.

Categories of household living arrangements and lifetime residential mobility, however, displayed different patterns of effects depending on which measure of well-being is considered. For this reason, we review the effects of household status and residential histories for each of these well-being outcomes separately.

Persons per Room

The density measure of persons per room differed dramatically by household status but not for different lifetime mobility histories. Single heads of household experienced significantly lower residential density than women in couples, since most single heads lived alone at these ages. Women living as dependents with their children and other relatives experienced by far the highest densities. Net of age, education and household status, however, density of persons per room showed little or no variation for different residential histories.

Adjusted Household Income

In contrast to determinants of persons per room, only residential histories predicted significant differences in adjusted household income. Lifetime rural residents lived in households with significantly lower income adjusted for household size than did lifetime urban residents, but women who moved from rural to urban areas experienced significantly higher adjusted household incomes than even the women living in urban areas since their births. This reinforces the impression of a strong positive economic selection for such rural-to-urban mobility. Adjusted income showed no significant differences by household status (couples, single heads or dependents) net of effects of age, education and residential histories; this is one of the most important and encouraging results of the present study.

Household Amenities

The amenities available to older women varied significantly both by household status and by residential histories. Regardless of lifetime residential mobility,

women living as single heads of household always had access to significantly fewer amenities than did women still living with husbands, but women who move in as dependents with children or other relatives had access to significantly more amenities than did women still living with husbands. Husbands may provide greater material well-being when they remain with these older women, but their children apparently do even better in that respect. This highlights an advantage of living with other relatives rather than living as a single head of household.

Lifetime rural residents had significantly fewer amenities in their homes than did lifetime urban residents. In contrast, women who moved from rural to urban areas enjoyed significantly more amenities than even the lifetime urban residents. This was true not only for women moving to cities to live with their children, but also for women who moved to cities and lived on their own, or who still lived with a husband, showing more evidence of the strong economic selection effects that clearly characterize rural-to-urban migration for Turkey's older population.

Health Insurance

Women living as single heads of household were significantly less likely than women living with husbands to be covered by health insurance, regardless of lifetime mobility history. Women living as dependents with other relatives, however, displayed a more complex pattern. As noted above, lifetime urban residents who moved in with children had the lowest level of health insurance coverage of all urban women at ages 65 or older--lower even than single heads of household. In contrast, lifetime rural residents living as dependents with their children had the highest level of coverage of all rural women at ages 65 or older, second only to urban women still living with husbands. The explanation for these variations in health insurance coverage surely deserves closer attention with other data sets more suited to this issue, since such coverage is more important for older adults than for any other age group.

Self-Rated Happiness

Finally, a model fitting these predictors to respondents' self-rated happiness scores finds self-rated happiness to be significantly higher for women who still live with their husbands, net of the effects of age, educational differences and residential histories. Women who outlived their marriages report lower average levels of happiness, with those who moved in with other relatives reporting the lowest happiness scores (though their difference from single heads of household was not statistically significant). Self-rated happiness does not vary significantly by residential history, despite the lower incomes and shorter lists of amenities for rural households.

SUMMARY AND CONCLUSION

Living arrangements change with advancing age for people in Turkey. More education translates into more surviving partners as people grow older, but women still tend to outlive men, so most Turkish men live as heads of their own households well into old age. A majority of women, however, outlive their marriages and become single heads of their own households or dependents (particularly at the oldest ages) in the households of their children or other relatives. These gender differences are well-known to scholars of aging in many societies.

Whether as a result of different cultural standards and traditions or of different economic opportunities and constraints, the cities of Turkey appear to provide a more supportive environment than the countryside for older women who outlive marriage to retain their autonomy, independence, and householder status. In rural areas there may be few alternatives for an older woman who loses her husband, apart from living with children. Yet for many of these rural women (who also are more likely to lose husbands than are urban women) there may be few or none of their children remaining in a local rural community. A rural woman who loses her husband, and who cannot find an available child's household nearby to join, may have no choice but to move to the city herself to join children who already moved there. Such migration helps to explain why so few women remaining in rural areas lack partners even in old age, if many of those without partners have left. This process of rural-to-urban migration for older women who have outlived their marriages appears to be selective for those from more prosperous households. Perhaps more of their children have moved to cities ahead of them and can offer social networks to facilitate such migration. This important pattern of selective migration in later life merits closer study using data sets more specifically tailored to looking at the options and sequence of choices of these rural women from different backgrounds.

Once in the cities, these older women might live with children who also have moved there. However, in urban areas it also appears that older women who no longer have husbands are able in many cases to manage as single heads of their own households, particularly if they had finished the primary level of education. Of course, even women living alone as heads of their own household may rely on substantial support and contact with nearby relatives (Aytaç 1998) but financial resources and household amenities observed for these single heads of household provide little evidence that such separate residence might be a luxury enjoyed by women from the most privileged families; women living as dependents with other relatives enjoyed more amenities than the single heads of household.

As a vulnerable and growing population, women who outlive their marriages provide sensitive signals about how well Turkish society is adjusting to the population aging that accompanies its social, economic and demographic modernization. If older women without partners experienced significantly worse living conditions than did women who still had partners, such a problem could grow dramatically larger along with Turkey's older population. However, this does not appear to be the case.

Women at ages 65 or older who had outlived their marriages revealed only one significant and systematic disadvantage in the 2011 TAYA survey, compared to women still living with their husbands at these ages. The women without husbands expressed significantly less subjective self-rated happiness. Analysis of more objective conditions such as residential density, household income and amenities, or availability of health insurance does not reliably account for this unhappiness, however. While widows living with their children experienced more residential crowding, they also enjoyed a greater variety of household amenities and more health insurance. While women living alone as single heads of household had fewer household amenities and were less likely to have health insurance, they experienced the least residential crowding and enjoyed higher adjusted household incomes than women living as dependents with other relatives. Women living as single heads of household or as dependents with their children each had advantages in some specific details of living arrangements, but these advantages balance out on the whole and leave the two groups with nearly equal levels of life satisfaction. In a society like Turkey one might expect that co-residence with children could give elderly women emotional and practical support which would lead to higher levels of self-reported happiness than those living by themselves. That this is not the case may indicate that there is a price to be paid for the lack of independence that these women experience.

Rural households had fewer amenities and less money, but this was true for women with as well as without husbands. In contrast, older women who had moved from rural areas to cities enjoyed the most amenities and better household budget balances than even lifetime urban residents, but this also was true for women regardless of household status. While rural-to-urban migration complicates the picture of well-being for these older women, particularly due to strong selection for the most economically successful families from rural areas, it does not disturb our conclusion about the link between household living arrangements and self-rated happiness.

Older women who have outlived their marriages are less happy than those still living with husbands, as expected. However, this outcome primarily is due simply to that absence of a partner, a problem of life that no social policy can remedy. Their unhappiness does not seem to stem from any

systematic disadvantage in other objective circumstances. Among the women who have outlived their marriages, we find no significant difference in self-rated happiness for women who live as dependents with their adult children compared to women living as single heads of household. These two groups are both equally unhappy compared to women still living with husbands, but in material terms neither of these groups are systematically worse off than women with husbands.

The Turkish state and Turkish society appear to be insuring adequate living conditions for a growing population of older women who have outlived their marriages, whether these women live with other relatives or on their own as single householders. Indeed, success in supporting this vulnerable population allows families to follow the path of later marriages and low birth rates, a key part of the modernization process. Parents worry less about having many children as "social insurance" when they are confident of safety and support in old age. As this group of older women who have outlived their marriages expands as a share of the Turkish population in coming decades, continued success in supporting them as independent single heads of household and in supporting their children who take them in as dependents will form a key element of ongoing modernization in Turkey.

NOTES

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