

Households and Aging for Men and Women in Turkey

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The average age of Turkey's population has been increasing for decades as a result of the demographic transition to lower birth and death rates (Ünalın 1997; Yüceşahin and Özgür 2008; Yüceşahin 2009). The rate of increase of the elderly population remains higher than any other age group (Lloyd-Sherlock 2000). While persons aged 65 years and older are currently only seven percent of the total population, projections show that this age group will constitute about 20 percent of the population by 2050. This group of individuals must be examined more thoroughly to better prepare the country at both the institutional and individual levels for the changes that will occur as a result of the ongoing age transition (Duben 1985, Hancıoğlu 1985).

In Turkey as in most societies, aging is a gendered process experienced differently by men and women. Several factors differentiate the aging experience by sex. First, women survive longer than men, so the sex ratio (men/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 age 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.

Dimensions of Household Living Arrangements

This unbalancing of the sex ratio affects chances to live together with a partner. Figure 1 based on the nationally-representative 2006 Turkish Survey on Family Structure shows that nearly all male respondents lived together with a wife or other partner in all considered age groups above age 35. Fully 85 percent of men even at ages 65 or older were living in a couple with a female partner.

Remaining together in couples is not possible for many older women because there are not enough surviving men. Older women also live without partners because men in most societies have partners on average slightly younger than themselves. Although Figure 1 shows that nearly all women also live in couples in midlife, as they gradually outlive the men this situation inevitably changes. Only 49 percent of interviewed women at ages 65 or older lived in couples. A majority of older women lived without a partner.

A second key fact about living arrangements concerns independence or autonomy. For various reasons, some people in every society are unable to 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. This institutionalized population is not covered by survey data examined here. Omitting the non-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). Virtually all of the elderly in Turkey live in private households (Imamoglu & Imamoglu 1992, Ediev, Yavuz, and Yüceşahin 2012) and traditionally the family takes care of older relatives, specifically sons taking older parents into their homes (Spencer 1960, Aykan and Wolf 2000, Ozer 2004). In 2005 there was total capacity of less than 25,000 places in nursing homes throughout the country (State Planning Organization 2007).

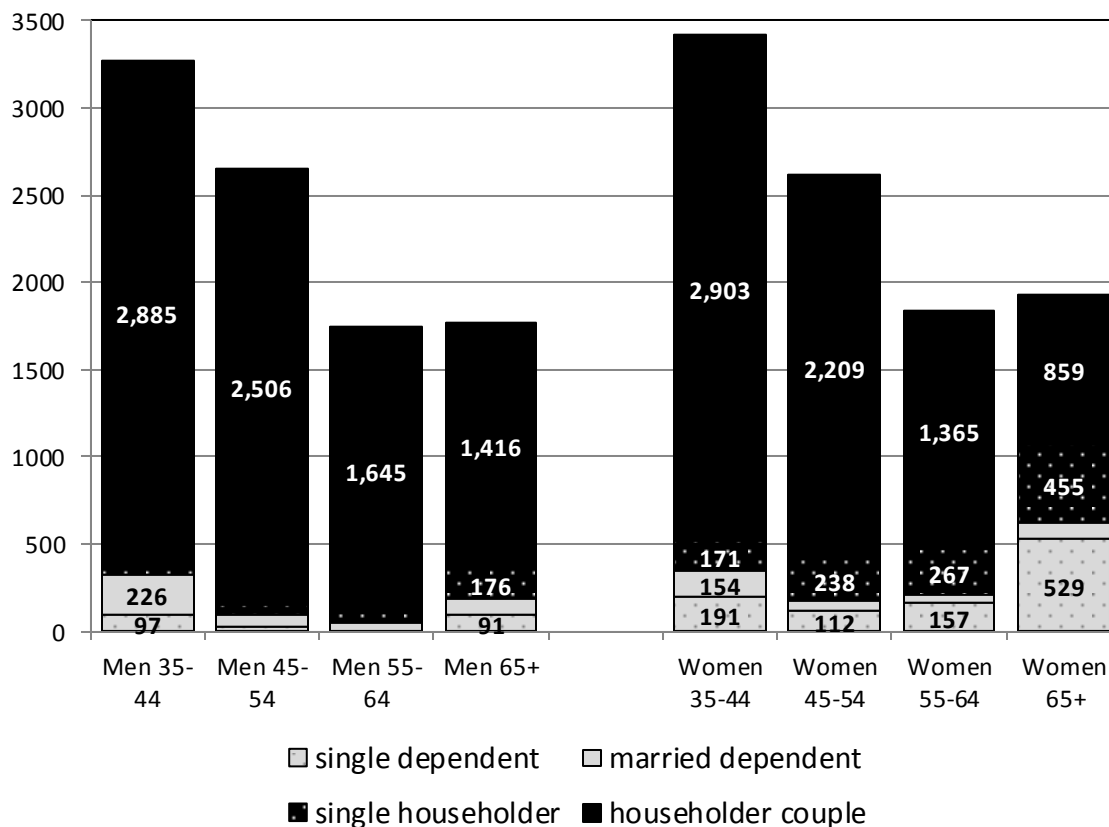
Living in a family household, however, does not indicate the same degree of independence for all household members. In every household, someone is identified in many surveys (including data examined here) as the head of the household while other people are classified as dependents of the household head (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 male partner (Koč 1997).

For this analysis, we take account of this gendered definition of household heads by counting both members of a couple as “householders” whenever either of them is listed as the household head and the other is listed as the partner of the head of household. We assume that couples actually operate as teams, sharing responsibility and authority as householders in charge of their homes (Herbst 1952, Carliner 1975). Of men living in such householder couples, 98 percent were listed as head of household. For women living in such householder couples, 98 percent were listed as partners of the household head, but we count them as “householders” along with their husbands. A few women with male partners were listed as household heads in cases where the man might be physically disabled, or not actually the husband of the woman, or in other unusual circumstances. The results of this definition also appear in Figure 1.

Figure 1:

Household and Partner Status by Age and Sex, 2006 Survey Respondents



Source: tabulation from 2006 Survey

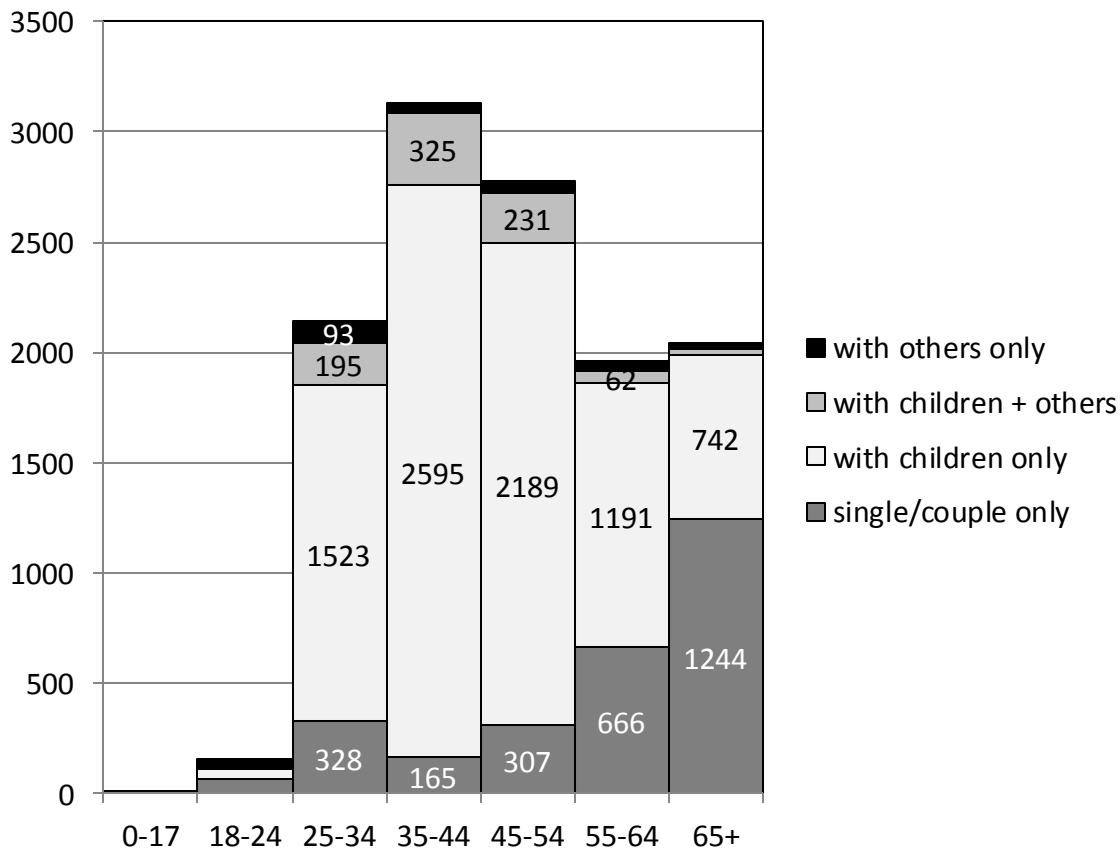
In the 2006 survey, most men at all considered adult ages lived as householders in their homes. Of these about one in ten lived as a single householder without a female partner. Since most men had female partners, most women also lived as householders from ages 35 through

64. On the other hand, only 68 percent of all women at ages 65 or older were counted as householders, even when we include partners of household heads. Only two-thirds of these female householders lived with a male partner. The other third of these female householders were counted as single heads of household.

The composition of households for these householders (singles or couples) depended on their age. Figure 2 shows this pattern over the life course for different age groups of household heads. At the youngest ages there are very few householders of any kind, but by ages 25 to 34 many young adults have taken charge of adult roles and responsibilities and live as householders. About three-fourths of these young householders live in conventional nuclear family households with only their children, while a few have not yet had any children and a few others live in complex households that include not only their children but other relatives (sometimes including one or more of their parents). By ages 35 to 44 we reach the peak years for household headship. Over 85 percent of these many householders live in nuclear family households with only their children. The share living with no children or other dependents reaches a minimum of only about five percent of household heads at these ages. The number of householders with coresident parents and other relatives increases, but not as much as the increase in the number of nuclear family households.

Figure 2:

Household Composition by Age of Head, 2006 Survey



By ages 45 to 54, some householders who began having children early in life begin to see their grown children moving away to lives of their own, so the share of householders living by themselves as single heads or as couples begins to increase slightly. The share of

householders at these ages with co-resident parents and other relatives also increases, partly offsetting the departure of children.

Older working ages of 55 to 64 reveal smaller generations of the Turkish population born in earlier years, who also have been reduced in number by the beginning of the rising mortality trend characteristic of old age. In this age range, fully one-third of all householders live alone or in couples with no other dependents in their households. Nearly all of the other householders have only their children present. By these ages the householders begin to outlive their parents and represent the senior generation of their families.

At ages 65 and older, the tide has turned. Almost two-thirds of all older people who manage to remain in control of their households, either by themselves or as couples, live without any other people in their homes. The other third still continue to have dependent children residing in their homes, but this is a much smaller share of households than during middle adulthood. Older people have very few other relatives living with them.

Having a partner helped older people to keep their householder status. Compared to the shares of men and women householders with partners noted above, only half of men living as dependents had a partner, and fully 86 percent of women living as dependents in the homes of someone else had no husband or other male partner.

In short, when we consider men as they grow older, there is really only one predominant living arrangement. They live as heads of their own households in almost all cases, and usually with a female partner. Women growing older face very different conditions. Less than half of them at ages 65 or older live with male partners in householder couples. Over one-third live as dependents in the homes of their children or other relatives, and the rest live as heads of household without a male partner.

It is important keep in mind that having a partner (a wife or husband) is a separate issue from whether a person enjoys autonomy and independence. Some people without partners live independently (sometimes even alone) as single heads of household. Some married couples live together as dependents in the household of an adult child or other relative. Figure 1 above illustrates a trend toward fewer partners and also a trend toward more dependency in household arrangements with increasing age, particularly for women. To capture this process, this analysis considers age trends in living arrangements starting at ages 45 to 54, then at ages 55 to 64, and finally for ages 65 or older.

The analysis begins with the question of what factors produce more or fewer partners for people, and how these factors change in importance for successively older age groups as described above. Given the gendered nature of aging as a family and household process, this question must be answered separately for men and for women.

Once we have a clear idea about how certain social factors influence the chance to continue living with a partner with increasing age, the next question concerns the prevalence of independent household headship. Since nearly all men at all adult ages lived as householders whether they had partners or not, this question chiefly concerns older women. Women who had a partner also almost all remained as householders by our definition (that is, part of a couple in which one partner was the head of household) since their male partners remained household heads in official records. The balance of autonomy versus dependency is actually an issue mostly for women who no longer lived with a male partner.

Factors for Explaining Household Living Arrangements

This exploratory analysis is limited to the most fundamental structural features of Turkish society, which as in other countries might affect such living arrangements. Once these basic outlines of the daily circumstances of people are established, future research will be able to use these findings as a foundation for more detailed exploration of other factors.

Education

The 2006 survey identified all household members in one of six categories of educational attainment. Preliminary analysis of these education categories revealed that the distribution of respondents over the different living arrangements shown in Figure 1 above was almost identical for the first and second categories, and also for the third and fourth categories, and finally for the fifth and sixth categories. We therefore collapsed the six categories into three, which we will call simply basic, middle and higher education respectively. The similarity of living arrangements within each pair of categories was so striking that almost no information is lost by this simplification. Few older men and almost no older women in the 2006 survey appear in the “higher” education category of lycee/university diplomas, but rather than collapse them together with the “middle” category we kept this group separate. If the “basic” and “middle” education levels do show significant statistical differences in living arrangements, there can be no suspicion that this was due to including the “higher” group in the “middle” category.

Educational attainment has been shown to be a key determinant of 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). 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. For this reason, we consider educational attainment of older adults in the survey as an influence both on having a partner and on living as an autonomous householder. Almost all of the adult respondents in the Turkish survey had married, so virtually all of them had partners at some point in their lives. The key issue, then, involves any patterns we can find in the risk of these unions ending before or during old age. Formal schooling is linked to survival chances of both men and women, so more-educated people should be widowed less often. They should retain more partners for that reason. The effect of schooling on risk of divorce is less clear, both in Turkey itself (citations) and in other societies (Harkonen and Dronkers, 2006), but so few of the older respondents in this survey were divorced that educational differences are irrelevant. We thus expect more education to translate into more surviving partners through less widowhood as people grow older.

Education also increases autonomy of women in several ways, including more prestige 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 should mean that more-educated women who do lose their partners will be more likely to remain heads of their own households. Less-educated women who lose their partners will be more likely to become dependent on other family members (especially children) and to live in households with someone else as the head. Education also could be related to householder versus dependent status in another way. Less educated women usually marry earlier and have more children. The most highly-educated women marry later and have fewer children, or in some cases none at all. More children might mean more available alternative living arrangements for a less-educated woman who loses her husband, compared to options available to a highly-educated woman.

Urban/Rural Residence

Another important influence on household living arrangements in Turkey has long 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 the 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), so in reality we find three different

population groups in Turkey—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 (Taeuber 1958, Shorter & Tekçe 1974).

For example, in 1990, 56 percent of those 65 years and older resided in rural areas, and the elderly constituted a slightly higher percentage of the rural population than the urban population (Lapham and Kinsella 1997). Of the 2006 survey respondents studied here, over 60 percent of respondents aged 65 or older lived in rural areas. Yet although rural residents have more children than urban residents, over sixty percent of respondents between ages 25 and 34 lived in urban areas. Many of the older rural residents' children must have moved to cities. Unfortunately, the household roster information for over 48,000 household members in over 12,000 households included in the 2006 survey does not include birthplace. Some of the people identified as urban residents at the time of the survey in fact were born in rural areas. Atyac (1998) finds a strong effect of urbanization on living arrangements, as married men who live in the urban areas are less likely to co-reside with a widowed parent, though this had no effect on whether they lived near their elderly family members.

Although marriages tend to be earlier and more universal in the countryside than in cities, survival rates at older ages are also lower in the rural areas. It is not entirely clear how these two factors might balance each other to produce possible differences in the extent of surviving couples in old age. Since we only know residential location at the time of the survey for these respondents, it is more difficult than in the case of education to say whether the urban/rural distinction should be viewed as a cause or a consequence of differences in living arrangements. For example, in cities fewer couples are disrupted by widowhood, so more people remain in couples as they grow older. On the other hand, more women may never get married in urban areas, and these women would usually not live with a male partner later in life. Similarly, women who become widowed in the countryside may go to live with their children, but these children may well have moved to one of Turkey's growing urban centers, so the urban residence of the widowed mother is a result of the loss of her partner, rather than a cause. Despite these conceptual difficulties, we include the urban/rural contrast as a possible explanatory factor in models below.

Geographic Region

Finally, above and beyond the effects of urban versus rural residence, and also apart from the effects of education (which itself varies between urban and rural contexts) some research suggests that different geographic regions of Turkey may represent distinctive and varying cultural contexts (Albaum & Davis 1973, Magnarella & Turkdogan 1973, Ullusoy 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; Ünalán 2005). Extended families, and more specifically families that co-reside with an older family member, are more likely to be in the East region (Atyac 1998). As long as both spouses remain alive, an older couple is more likely to live in a nuclear household together than with their kin. This household arrangement among those 50 years and over increased for all regions between 1983 and 1998, though the North and East experienced greater increases in the percentage (Yavuz 2004). The greater increase in the North and East shows the effect of internal migration, as these two regions have been subject to severe out-migration of younger populations towards other regions over the last few decades (Doh 1984, Yavuz 2004). These regional variations may act as influences in their own right on patterns of daily living including living arrangements in old age. People with the same level of education, living in villages or towns of the same size in different parts of the country, may have different feelings about traditions such as living with children in old age.

With regard to patterns of household status in the 2006 survey, 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 older people. Observed regional differences in the prevalence of couples were explained by age, education and urban-rural residence within these regions.

Similarly, among women who had lost their partners, the balance between remaining as single heads of their own household or become dependents in the households of others also did not vary significantly across these regions—except that, even after taking into account education and urban-rural residence, significantly more older women remained independent householders in the Mediterranean and West Black Sea coastal regions. For this reason, no empirical results for regions are shown or discussed below.

Results

Partner Status of Men and Women

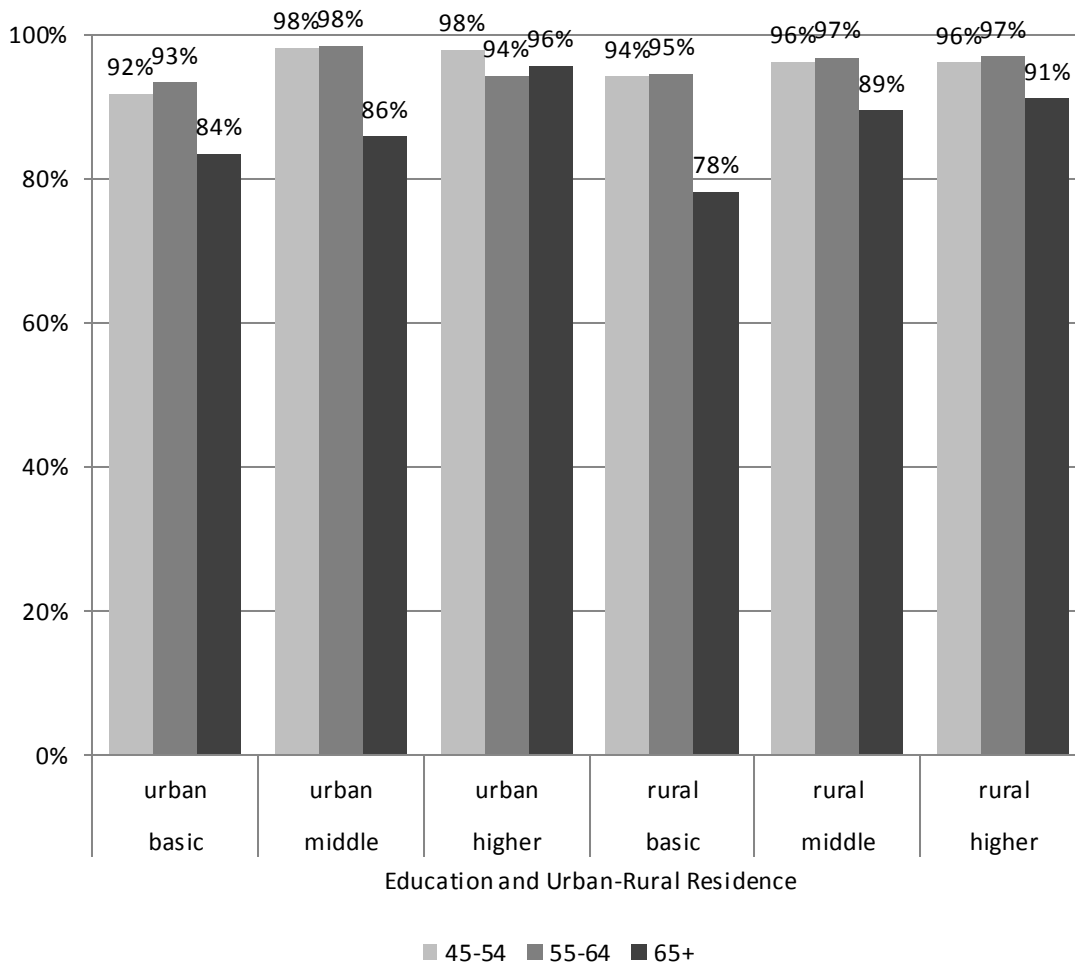
Figure 3 shows the percentage of men living with a partner for three age groups: 45 through 54, 55 through 64, and 65 or older. The vertical bars in the Figure compare results for men with three levels of educational attainment, separately for urban compared to rural areas of the country. The main conclusion from this Figure is easy to see—pretty much all men have partners. This is true even at ages 65 or older, although a few more men at these oldest ages have lost their wives and live without partners. More educated men do seem slightly less likely to lose their partners at these oldest ages, and more of the oldest men also seem to be without partners in rural than in urban places. Thus 22 percent of men at ages 65 or older are missing partners if they have only basic education and live in rural areas, while only four percent of men at the same ages live without partners if they have higher education and live in cities.

The situation for women contrasts dramatically with that for men. Figure 4 shows the percent of women with partners by age, education and urban-rural residence. While urban-rural differences for men were very small in general, for women this urban-rural contrast was enormous. For urban residents the “partner gap” between men and women opens wider and wider in successively older age groups. This gap is fairly small at ages 45 to 54, but already by ages 55 to 64 the partner deficit for urban women compared to urban men is nearly twenty percentage points wide—over 90 percent of men live with partners, compared to only about 70 percent of women who live with partners. At ages 65 and above, this partner gap becomes truly staggering in urban areas—still between 80 and 90 percent of men with partners, but far less than half of women living with partners. Education also does not seem to help urban women to retain partners as they grow older. In all three considered age groups, the percentages of urban women without partners are very similar across the three levels of education.

For rural women, on the other hand, quite a different picture appears in Figure 4. There it is very clear that more education is strongly linked to greater chances of retaining a partner in old age. Overall levels of living with partners also are higher for women in rural areas than in urban areas. More will be said about this below.

Figure 3:

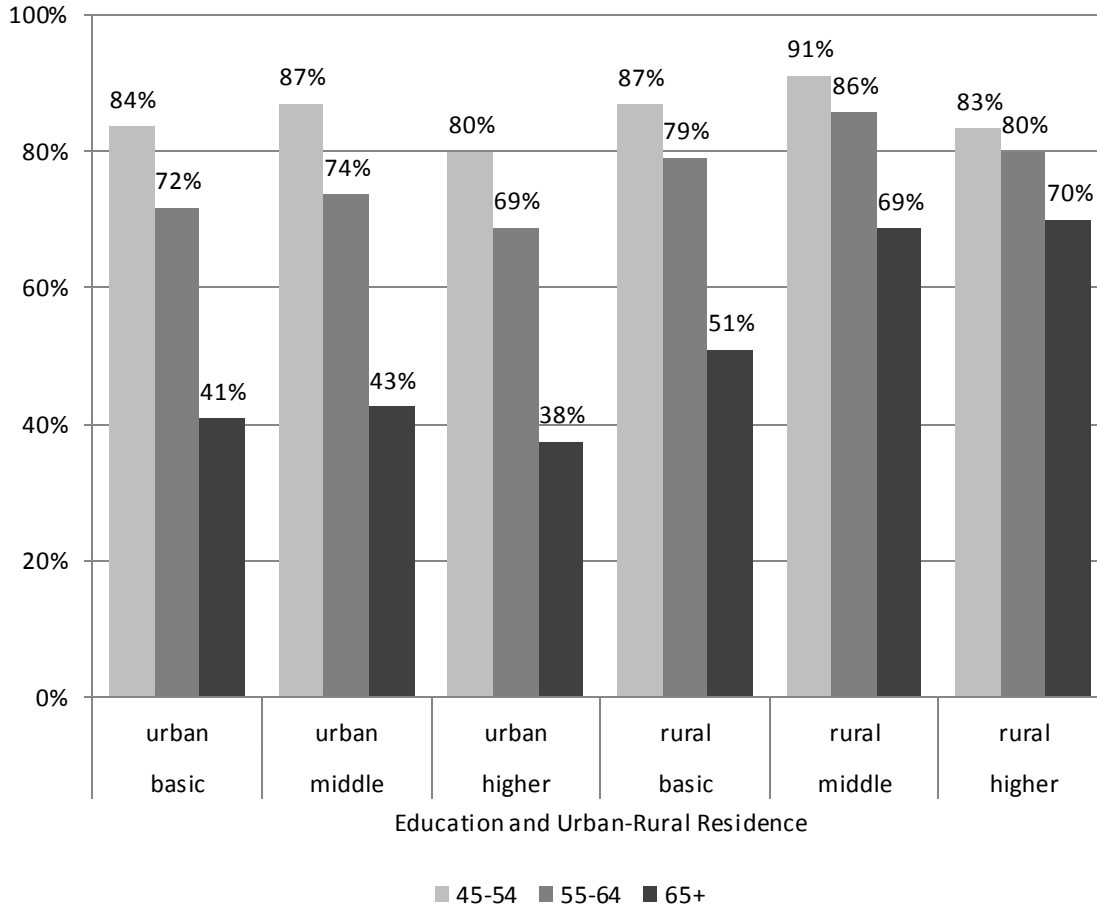
Percent of Men with Partners by Age, 2006 Survey



Source: tabulation from 2006 AYA Survey.

Figure 4:

Percent of Women with Partners by Age, 2006 Survey



Source: tabulation from 2006 Survey.

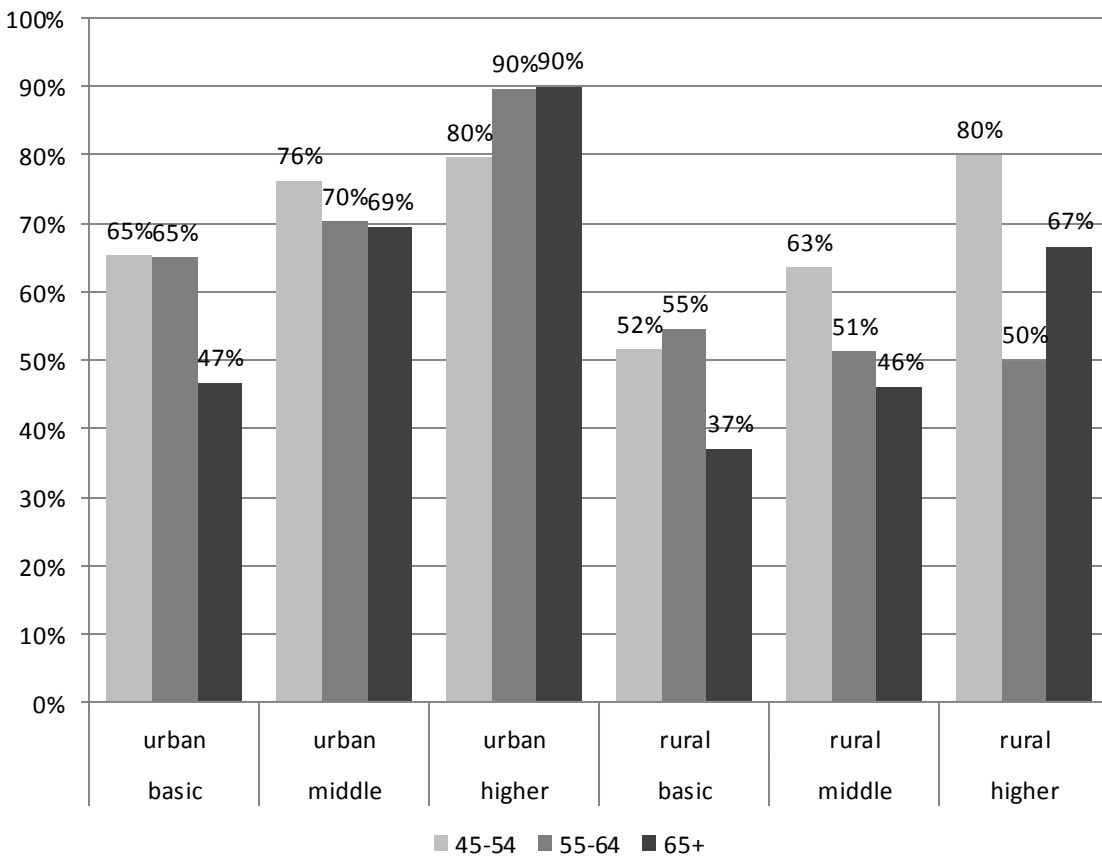
Householder Status of Women Without Partners

The clearest conclusion from Figures 3 and 4 above, showing partner status of mature men and women in Turkey, is that major decisions open up in later life for many women which are rarely faced by men at all. These decisions involve what to do when one loses a partner, a much more common experience for women. A woman who has lost a partner must choose between trying to remain as an autonomous, independent single head of her own household, or becoming a dependent in a household headed by someone else--usually sons or daughters, often married and with families of their own.

Figure 5 shows the patterns related to this choice between single householder status and co-resident dependency, again sorted by education and urban-rural residence.

Figure 5:

Percent Householders for Women Without Partners, 2006 Survey



Source: tabulations from 2006 Survey.

For most categories of education in both rural and urban areas, Figure 4 shows the same gradual fading of independence and autonomous householder status with increasing age observed in previous Figures, this time among the women who have lost their partners. The higher education categories display mixed patterns in this regard, but there are so few respondents who have lost their partners in these higher education categories (counted usually only in single digits) that they probably should not even be considered here.

Figure 5 also gives clear evidence that women with more education are more likely to remain as single heads of their own households when they lose a partner, and that householder status for women is significantly more common for women alone in cities than in the countryside. At ages 65 and above, for example, only a little over one-third of rural women with basic education managed to remain householders on their own without a partner—all the rest of these women lived as dependents in the households of children or others. By contrast, nine of every ten urban women aged 65 or older with middle or higher education remained single heads of household if they had no partner, rather than living with children. One level of education was roughly equivalent to the difference between urban and rural residence in this regard. Rural women with the middle level of education were about as likely to remain householders in old age as urban women with the basic level of education. Rural women with the highest level of education were about as likely to remain householders after age 65 as urban women with the middle level of education.

Households with Dependent Parents

Results above show that parents with more education live less often as dependents with their children. To balance that focus on householder or dependent status among older adults, particularly older women who have lost partners, it is useful to reverse the perspective and consider the situation from the point of view of the younger generation of household heads who may or may not have older parents living with them.

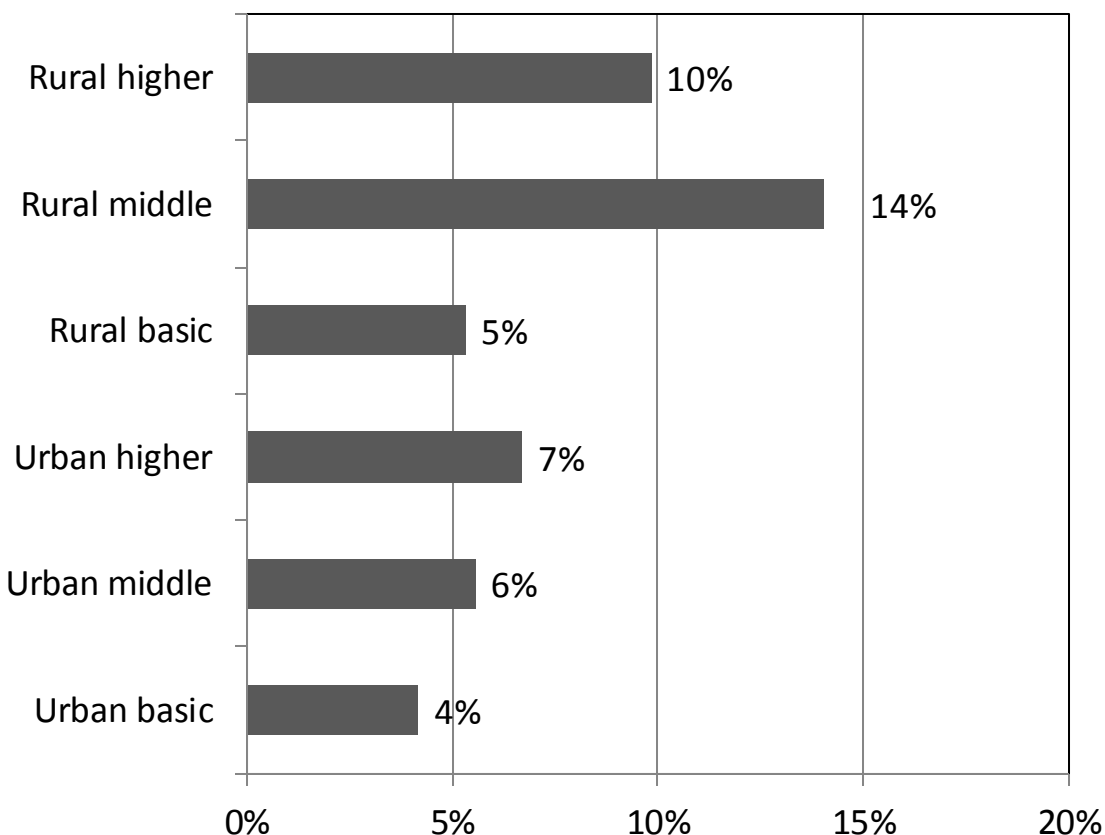
If less educated parents had many children, it is possible that even though these parents are more likely to live with a child in old age, they also have several other children who do not have parents co-residing. For example, if five more-educated parents each have two children (ten children in all) and two of these five parents live with children, two out of ten of these children (20 percent) will have parents in their homes. If five less-educated parents each have four children (twenty children in all) and three of these five parents live with children, three out of 20 of these children (15 percent) will have parents in their homes. Even though more of these less-educated parents live with their children, fewer of their total number of children have parents in their homes because there are more children to share responsibility for parents.

And in fact, a result similar to this appears in Figure 6, viewing the situation from the perspective of householders between ages 35 and 64. (Exactly the same pattern appears if we consider other age ranges such as 25 to 54, 25 to 64, or other age options.) This younger generation is much less likely to have parents living with them if they live in cities than if they live in rural areas, which goes along with the finding that more older people remain in separate households of their own in urban areas. In fact, education of the household heads has no significant relation to this pattern in cities, and all urban residents are almost equally unlikely to have older parents living with them.

In rural areas, however, Figure 6 reveals the apparent paradox that householders between ages 35 and 64 are more likely to have parents living with them if they have more than basic education, even though Figures 3 and 4 above show that the more-educated parents themselves are more likely to remain independent householders in old age. Although we cannot test the family-size explanation directly because we do not know the numbers of children ever born to all these older parents in the 2006 survey, the two findings can be reconciled by such an explanation. Even though the more-educated rural parents are more likely to remain independent householders, the few of them who do become dependents have fewer children to choose among, and consequently the share of their children with co-resident parents is also higher than for children from less-educated families.

Table 6:

Percent of Households with Dependent Parents,
Heads Aged 35 to 64 by Education



Source: tabulation from 2006 Survey.

Summary and Conclusion

Living arrangements change with advancing age for people in Turkey. Most of the results of this short analysis of such changes are clear and straightforward. More education translates into more surviving partners, a cumulative effect as people grow older. Men have more education than women, and women also tend to outlive men, so for Turkish men there is really only one dominant pattern—most men live as heads of their own households, usually with a partner, until they die.

Women, on the other hand, experience aging very differently. For an important minority of women, aging resembles the experience for men, living together with a partner as householders. However, another large group of women lose partners and subsequently become single heads of their own households. A third large group find themselves becoming dependents, particularly at the oldest ages, in the households of their children or other relatives. These patterns are well-known to scholars of aging in many societies.

The Turkish context reveals some unusual anomalies in addition to these standard results. In particular, Figure 4 above showed that in urban areas the share of women still living with partners in old age falls far below the share observed in rural areas. At the same time, however, Figure 5 showed that among this large number of older women without partners in

cities, more remain heads of their own households than among rural women without partners. Measures needed to test explanations of these anomalous results are not reliably present in the 2006 survey data, but some possible explanations can at least be suggested.

Whether a result of different cultural standards and traditions or different economic opportunities and constraints, it seems that the cities of Turkey provide a more supportive environment for older women without partners 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 are also more likely to lose husbands than are urban women) there may be no children available for co-residing. As noted above, a large majority of the older generation in the 2006 survey lived in rural areas, while an equally large majority of respondents a generation younger lived in urban areas. Many of the older people's children have moved to cities. A rural woman who loses her partner, and who cannot find an available child's household nearby to join, may have no choice but to move to the city herself. Such selective migration could help to explain why so many rural women still have partners, even in old age. The women who have lost partners are no longer rural because they moved to cities. Once in the cities, these older women might live with children who also have moved there. However, in the urban areas it also appears that older women—even those who no longer have partners—are able in many cases to manage as single heads of their own households. They may well have children living somewhere nearby, but in the city they are able to maintain their own separate households and to retain their householder status.

Considerable additional research will be required to see whether such an interpretation has any basis in fact, but the patterns suggested here do offer at least one explanation of the empirical anomalies noted above in the age trends in living arrangements for men and women in Turkey.

References

- Albaum, Melvin and Christopher S. Davies. 1973. The spatial structure of socioeconomic attributes of Turkish provinces. *International Journal of Middle East Studies*. 4(3):288-310.
- Aykan, Hakan and Douglas A. Wolf. 2000. Traditionality, modernity, and household composition: parent-child coresidence in contemporary Turkey. *Research on Aging* 22(4): 395-421.
- Aytaç IA: 1998. Intergenerational Living Arrangements in Turkey. *Journal of Cross-Cultural Gerontology* 13: 241-64.
- Burch, Thomas K. 1980. The index of overall headship: a simple measure of household complexity standardized for age and sex. *Demography* 17(1): 25-37.
- Carliner, Geoffrey. 1975. Determinants of household headship. *Journal of Marriage and the Family* 37(1): 28-38.
- Doh, Rainer. 1984. Inter-provincial migration in Turkey and its socio-economic background: a correlation analysis. *Nüfusbilim Dergisi* 6:49-61.
- Duben, Alan. 1985. Turkish families and households in historical perspective. *Journal of Family History* 10:75-97.
- Ediev, Dalkht M., Sutay Yavuz, and M. Murat Yüceşahin. 2012. Private households in Turkey: big changes ahead. *Population Review* 51(1): 28-49.

- Erman, Tahire. 1998. Becoming 'urban' or remaining 'rural': the views of Turkish rural-to-urban migrants on the integration question. *International Journal of Middle East Studies* 30(4):541-61.
- Gökdere, Ahmet. 1994. An evaluation of Turkey's recent migration flows and stocks. *Nüfusbilim Dergisi* 16:29-56.
- Hancioğlu, Atilla. 1985. Family types and household size in Turkey. *Nüfusbilim Dergisi* 7:61-76.
- Härkönen, Juho and Jaap Dronkers. 2006. Stability and Change in the Educational Gradient of Divorce. A Comparison of Seventeen Countries. *European Sociological Review* 22(5):501-17
- Herbst, P.G. 1952. The measurement of family relationships. *Human Relations* 5:3-29.
- Imamoglu EO, Imamoglu V. 1992. Life situations and attitudes of the Turkish elderly toward institutional living within a cross-cultural perspective. *Journal of Gerontology* 47: 102-8.
- Khadr, Z.A. 1997. *Living Arrangements and Social Support Systems of the Older Population in Egypt*. Ann Arbor, MI: University of Michigan.
- Kandel, Joseph and Christine Adamec (eds). 2003. *The Encyclopedia of Senior Health and Well-Being*. New York: Facts on File Publishing.
- Koç, İsmet. 1997. Female-headed household in Turkey and socio-demographic and economic characteristics of female household heads. *Nüfusbilim Dergisi* 19:73-99.
- Lapham, Susan J. and Kevin Kinsella. 1997. Aging trends – Turkey. *Journal of Cross-Cultural Gerontology* 12(3): 273–283.
- Lloyd-Sherlock P. 2000. Population aging in developed and developing regions: implications for health policy. *Social Science & Medicine* 51: 887–895.
- Magnarella, Paul J. & Orhan Turkdogan. 1973. Descent, affinity, and ritual relations in eastern Turkey. *American Anthropologist New Series* 75(5):1626-33.
- Moghadam, Valentine. 1993. *Modernizing Women: Gender and Social Change in the Middle East*. Boulder: Lynne Rienner Publishers.
- Ozer M. 2004. A study on the life satisfaction of elderly individuals living in family environment and nursing homes. *Turkish Journal of Geriatrics* 7: 33-36.
- Reher, David Sven. 1998. Family ties in western Europe: persistent contrasts. *Population and Development Review* 24(2): 203-34.
- Robinson, Richard D. 1958. Turkey's agrarian revolution and the problem of urbanization. *Public Opinion Quarterly* 22(3):397-405.
- Santi, Lawrence L. 1990. Household headship among unmarried persons in the United States, 1970-1985. *Demography* 27(2): 219-32.
- Shah, Nasra M., Kathryn M. Yount, Makhdoom A. Shah, and Indu Menon. 2002. Living

arrangements of older women and men in Kuwait. *Journal of Cross-Cultural Gerontology* 17: 337-355.

Shorter, Frederic C. & Belgin Tekçe. 1974. The demographic determinants of urbanization in Turkey, 1935-1970. pp. 281-294 in P.Benedict, E. Tumertekin, F. Mansur (eds) *Turkey: Geographical and Social Perspectives*. Leiden: E.J. Brill.

Spencer, Robert F. 1960. Aspects of Turkish kinship and social structure. *Anthropological Quarterly* 33(1):40-50.

State Planning Organization. 2007. *The Situation of Elderly People in turkey and National Plan of Action on Ageing*. Ankara, Turkey: T.R. Prime Ministry State Planning Organization.

Taeuber Irene B. 1958. Population and modernization in Turkey. *Population Index* 24(2):101-122.

Toros, Aykut. 2000. Life tables for the last decade of the 20th century in Turkey. *Nüfusbilim Dergisi* 22:57-111.

Turkish Statistical Institute. 2013. *Population and Housing Census 2011*. Ankara: Turkish Statistical Institute.

Uhlenberg, Peter (ed). 2009. *International Handbook of Population Aging*. New York: Springer Publishing.

Ulusoy, Mahir. 1993. Clustering of provinces according to socio-economic variables. *Nüfusbilim Dergisi* 15:69-78.

Unalan, Turgay. 2000. The status of old age population in Turkey. *Turkish J Population Studies* 22:3-22.

Ünalın, Turgay. 1997. Turkey's population at the beginning of the 21st century. *Nufusblimim dergisi* 19:57-72.

Ünalın, Turgay. 2005. Changing family structure in Turkey, 1968–1998. Pp. 181-201 in *Population, Resources and Development: Riding the Age Waves*, edited by Shripad Tuljapurkar, Ian Pool, and Vipin Prachuabmoh. Netherlands: Springer.

Yavuz, Sutay. 2004. Changing household and family composition in Turkey: a demographic evaluation for 1968-1998 period. *Hacettepe University Sociological Research E-journal* 15: 435-460.

Yüceşahin, M. Murat and E. Murat Özgür. 2008. Regional fertility differences in Turkey: persistent high fertility in the southeast. *Population, Space and Place* 14(2): 135-158.