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Differences in Care Use Between Men and Women: The Role of Publicly Financed and Informal Care at Home

Debbie Verbeek-Oudijk[1] Alice De Boer[2] Isolde Woittiez[1]

Abstract

Although most recipients of long-term care are women, due to rising life expectancy among men, future users of care are increasingly likely to be men. There are indications that gender is an important factor in the way in which a country organizes its care, and that social policy can have diverging outcomes on the average health of men and women. Nevertheless, gender differences in the use of care are seldom considered. Research into possible explanations for these differences has focused mainly on differences between individual characteristics of men and women. In addition, this study examines the effect of public spending on professional home care and the average availability of informal care by over-50s on the actual use of care. Data from the Survey of Health, Ageing and Retirement 2004, 2007, and 2013 from eight European countries were used, in combination with OECD data on public spending on professional home care. A multinomial regression with fixed effects was estimated for the correlation between these macro characteristics and individual use of care for men and women separately. Findings show that higher public expenditure on home care is associated with less use of paid care, but also that this is particularly the case among men ("paid care" includes care paid for by the user himself or herself). More plentiful informal care is associated with lower use of paid care, in both men and women. One of the possible implications for future policy on long-term care is that men are relatively more likely to respond to changes in the availability of home care than women and that this responsiveness will become even more marked as the proportion of men using care rises.

Keywords: Informal care, seniors, gender, home care expenditure

Key Practitioners Message

- In social policies and the organization of long-term care, gender differences are seldom considered. This study examines the effect of public spending on professional home care and the average availability of informal care by over-50s for men and women separately.
- Higher public expenditure on home care is associated with more use of paid care, particularly among men. More plentiful informal care is associated with lower use of paid care, in both men and women.
- Men are relatively more likely to respond to changes in public spending on home care than women, and this responsiveness will likely become even more marked as the proportion of men using care rises.

Introduction

Moving forwards, long-term care faces several challenges. For example, the average age of populations will continue to rise as the proportion of older people in the population continues to increase; demand for paid and unpaid forms of long-

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term care will therefore also rise. Additionally, more older people prefer to be cared for in their own home for as long as possible (OECD 2017). All these developments will affect not only the affordability of care but also the supply of care. Currently, most recipients of long-term care are women (Colombo et al. 2011). For many years women have had a higher life expectancy than men. However, the difference in life expectancy is decreasing, which means that in the future long-term users of care are increasingly likely to be men.

Gender differences in the use of care have been investigated many times, and women generally receive more long-term care than men (Dorin, Krupa, Metzing, & Beuscher, 2016; Enroth, Aaltonen, Raitanen, Nosraty, & Jylhä, 2018; Grundy & Jitlal, 2007; Katz, Kabeto M., & K.M., 2000; Luppa M. et al., 2010; Martikainen P., Murphy, Metsä-Simola, Häkkinen, & Moustgaard, 2012; Schmidt, 2018). The explanations often focus on age and health. Globally, life expectancy is higher for women than for men, and the decline in mortality is lower for men than for women across all age groups (Wang et al., 2012). Furthermore, women, regardless of their average age, also seem to report poor health significantly more often than men (Boerma, Hosseinpor, Verdes, & Chatterji, 2016), despite the fact that morbidity for many disorders is higher in men (Hawkes S. & Buse, 2013).

In addition to these types of individual characteristics, other determinants have also been mentioned in order to account for the gender-specific use of care. This includes social determinants, such as network characteristics, and financial resources; determinants often used in the explanation of care use (Babitsch, Gohl, & von Lengerke, 2012; Von Lengerke, Gohl, & Babitsch, 2014).

Research shows that most of the long-term care is provided by informal caregivers (Chiatti et al., 2013), especially by the women in a family (Bond et al., 1999; Litwak, 1985; Silverstein, Gans, & Yang, 2006). At least two developments are underway in social networks and the informal help that these can provide. First, the relationship between family and non-family care is changing. Several studies have shown that non-kin make up a rising proportion of social networks for later birth cohorts (Suanet & Antonucci, 2017; Suanet, Broese van Groenou, & van Tilburg, 2017). Suanet and Antonucci (2017) assume that these changes in social networks will have a particular effect on women in the future. They anticipate that women's networks will include more (ex-) colleagues and non-kin as a result of women's increasing labor force participation. Research shows, however, that non-kin are less likely to provide informal care than family members (Barker, 2002; Jacobs, Broese van Groenou, Aartsen, & Deeg, 2018). Secondly, employment participation rates among women have increased over recent decades, which means that the time they have available for providing informal care may be decreasing. Although there is no one-on-one relationship between informal care provision and paid work, there are indications that it has become more difficult for older persons to receive informal care from adult daughters or other family members (Haberkern, Schmid, & Szydlik, 2015).

Furthermore, men seem to ask for and accept professional care less often because they are expected to solve their own care problems; an image that is reinforced through social interactions (Pattyn, Verhaeghe, & Bracke, 2015; Verbrugge, 1985). For example, Pattyn, Verhaeghe, and Bracke (2015) show in a vignette study that both men and women were more likely to advise men to look after themselves, and they considered therapy less effective for men. Other research shows that husbands are less likely to provide care for their wives than vice versa, possibly because women tend to be seen as more suitable carers, having the right skills, or believing that they have them (Schenk, Dykstra, Maas, & Van Gaalen, 2014). Men, therefore, tend to prefer informal care (Pinquart & Sörensen, 2002) and receive informal care from their partners more often than women do (Glauber, 2017; Schenk, Dykstra, Maas & Van Gaalen, 2014).

Financial resources also play a role in gender differences in the use of care. Lower-income groups generally receive more long-term care (Nihtilä & Martikainen, 2007). On the other hand, higher-income groups have more opportunities to purchase care (Broese van Groenou, Glaser, Tomassini, & Jacobs, 2006; Puthenparambil, Kröger, & Van Aerschot, 2017). The income of older men is generally higher than that of older women, although this difference is becoming less pronounced (OECD, 2011). The financial knowledge and skills of women also lag behind those of men, which means that they are less likely to have made financial preparations for their future (Bucher-Koenen, Lusardi, Alessie, & Van Rooij, 2017). Higher-income groups are also more willing to pay for care than those with lower incomes (Nieboer, Koolman, & Stolk, 2010). Because of their higher income, men are more likely to be able to afford to purchase care, while women are more likely to use publicly funded care.

The role of the organization of care and policy on care use are also cited as explanations for care usage patterns (Hlebec & Filipovic Hrast, 2016; Suanet, Broese Van Groenou, & Van Tilburg, 2012; Verbeek-Oudijk, Woittiez, Eggink, & Putman, 2014). For instance, the use of paid care is higher in countries where the responsibility for long-term care lies mainly with the government (Verbeek-Oudijk et al. 2014). The availability of social care services (only available in the morning vs. throughout the day) and the total number of users of these services also appears to be a second important predictor of whether formal and informal care is received (Hlebec & Filipovic Hrast, 2016). Comparable results were obtained by Suanet, Broese Van Groenou and Van Tilburg (2012), who show that in countries with fewer home care services, less institutional care and more informal care, older people are more likely to rely on informal care alone. These studies did not look at the differences between men and women. Although earlier research has found that no unequivocal conclusions can be drawn about the link between formal and informal care (Pickard, Wittenberg, Comas-Herrera, Davies, & Darton, 2000), the study by Suanet, Broese van Groenou and Van Tilburg (2012), like many other studies (Bolin, Lindgren, & Lundborg, 2008; Gannon & Davin, 2010; Hanaoka & Norton, 2008; Kemper, 1992; Van Houtven & Norton, 2004) would suggest that informal and formal care are substitutes for one another. A similar line of reasoning can be used in relation to care that is paid for by the recipient and publicly-funded care: one form of care provides an alternative to the other.

The combination of gender differences with the use of formal/informal care and care provision has seldom been investigated, however. There are indications that gender is an important factor in the way in which countries organize care. For example, (Saraceno & Keck, 2011) state that, although it is formulated as gender-neutral, care policy is in fact rarely gender-neutral. Beckfield (2017) described how the indicators of social policy have different outcomes on the average health of men and women. However, there is ambiguity about the direction of the relationship; some types of investment predominantly benefit men and others predominantly benefit women. If social investment influences the health of men and women in different ways, it is plausible that the same may apply to their use of care. Morgan et al. (2016) state that too little account is taken of differences between men and women in the provision of care. They argue that *gender* affects needs, perceptions, and outcomes across all facets of the health system. In addition, they observe that social expectations dictate what men and women "ought to do", and that these influence the way in which people live, work and relate to one another in multiple areas of life, including health and care. In their view, gender influences health, choices, and behaviors, and thus it affects not only the demand for care but also the decision to use care and what type of care is required or desirable. These assumptions have not been tested empirically, however.

It can be concluded from the literature that women use care because they tend to experience poorer health and have lower socioeconomic status. In addition, women tend to be more forthcoming in asking for professional care. They are therefore more likely to be sensitive to the availability of care. If spending on publicly funded care increases, women are more likely to use this care and less likely to receive informal care or paid care. Because men are relatively more likely to receive care from their partner, men will rely more on informal care. The expectation is that a high level of informal care in a country is associated with more use of informal care, especially among men. The following hypotheses are formulated:

Hypothesis 1: Higher levels of public spending on professional home care are associated with lower use of informal care and care paid for by the user, especially among women

Hypothesis 2: Higher levels of informal care provision in a country are associated with higher use of informal care and lower use of care paid for by the user, especially among men.

Materials

In order to accurately estimate the relationship between macro characteristics, on the one hand, and the use of care on the other, data is used from a longitudinal database: The Survey of Health, Ageing and Retirement in Europe (Börsch-Supan, Jürges, & Lipps, 2003). Eight countries and three years were selected: 2004, 2007, and 2013. The effect of public spending on professional home care on the individual use of care is estimated with a multinomial logit with fixed effects. The longitudinal nature of the data and analysis helped isolate the relationship of interest, although the relationships cannot be interpreted as causal, as explained later. Fixed effects analysis in this study automatically select the respondents who used care in the first year they participated and no longer use care in later years, respondents who didn't use care before but do in later years and respondents who used informal care and switched to paid care or vice versa. Therefore, the data concerns over-50s who participated in the SHARE survey at least twice, and whose use of care changed during the research period.

Participants

Overall, this study includes 16,458 observations of 6,471 respondents who participated in either two or three measurement years of the SHARE survey. The respondents were 67 years old on average in 2004 ranging from 50 to as old as 104 years. In 2007 the average age was slightly higher (68 years) and was the highest in 2013 (73 years). Most of the respondents were female (60% in 2004 and 2007 and 63% in 2013). 36% had moderate or serious physical limitations in 2004 compared to 44% in 2013; 17% dealt with moderate or serious depressive feelings in 2004 compared to 20% in 2013. A relatively large share of the respondents is Belgian (about 20%) and a relatively small share is Swiss (about 5%). Weighted data are used to adjust for these differences. For a complete overview of the descriptive statistics, see Table-1 and Table-2.

Table-1. Descriptive statistics (means & standard deviations) of the research population, by year

Variable	2004	2007	2013
Age	68.53 (10.98)	67.62 (11.04)	73.33 (9.64)
Chronic conditions	1.57 (1.4)	1.56 (1.42)	1.85 (1.5)

Note. Values in parentheses indicate standard deviations.

Macro Data

For this study, national datasets were used to explain the use of care. The first of these was registration data on public spending on home care, which includes the bulk of expenditure on long-term care (Colombo, Llena-Nozal, Mercier, & Tjadens, 2011; Grabowski, Norton, & Van Houtven, 2012). This is government spending

on professional home care[1] which is recorded by the OECD and divided into "healthcare" and "social care". The former relates to, among other things, personal care and nursing care, and the latter includes domestic help and support. However, countries differ in which spending they define as healthcare and which as social care. To minimize the effect of any differences in these definitions between countries, both types of spending were combined. Overall spending also fits better with the evaluation of individual care use in SHARE, which includes both personal care as well as household care. Expenditure is measured as a percentage of gross domestic product (GDP); this is the best available indicator for the countries and the research period that this study focuses on. Spending on home care as a percentage of GDP describes the relative importance that the government accords to home care compared to other publicly funded services.

Table-2. Descriptive statistics of the research population (continued), by year

	N (%)		
	2004	2007	2013
Gender			
Man	2111(40%)	2216 (40%)	1666 (37%)
Woman	3184 (60%)	3335 (60%)	2880 (63%)
Physical limitations			
None	2001 (38%)	2266 (41%)	1465 (32%)
Slight	1436 (27%)	1304 (24%)	1059 (23%)
Moderate	1196 (23%)	1226 (22%)	1051 (23%)
Serious	662 (13%)	755 (14%)	972 (21%)
Depressive feelings			
None	3661 (69%)	3843 (69%)	3002 (66%)
Slight	746 (14%)	779 (14%)	675 (15%)
Moderate	477 (9%)	486 (9%)	437 (10%)
Serious	411 (8%)	443 (8%)	433 (10%)
Partner			
No	2163 (41%)	2325 (42%)	2088 (46%)
Yes	3132 (59%)	3227 (58%)	2458 (54%)
Child >17 years in the household			
No	4792 (91%)	5128 (92%)	4090 (90%)
Yes	503 (10%)	424 (8%)	457 (10%)
Income quartile			
1	1525 (29%)	1577 (28%)	1587 (35%)
2	1405 (27%)	1591 (29%)	1371 (30%)
3	1258 (24%)	1264 (23%)	915 (20%)
4	1108 (21%)	1120 (20%)	673 (15%)
Country			
Austria	493 (9%)	447 (8%)	274 (6%)
Germany	638 (12%)	676 (12%)	429 (9%)
The Netherlands	729 (14%)	735 (13%)	541 (12%)
Spain	681 (13%)	660 (12%)	955 (21%)
France	805 (15%)	844 (15%)	595 (13%)
Denmark	553 (10%)	763 (14%)	655 (14%)
Switzerland	220 (4%)	313 (6%)	256 (6%)
Belgium	1177 (22%)	1112 (20%)	842 (19%)

The supply of informal care is not available in the registration data. However, the SHARE data also makes it possible to aggregate data on informal care at the country level. There is no generally accepted definition of informal care (Roth, Fredman, & Haley, 2015). For the purpose of this study, the definition was based on the questions in the SHARE survey. A person provides informal care if he/she provides personal care to someone in their own household and/or provides support in the form of household or personal care to someone outside their own household. Care within the same household is a help that is provided daily. For care outside of the household, it was asked how often care is given: occasionally, monthly, weekly or daily. For each of the respondents, aged 50 years or above, it is known whether they provide informal care and whether that care is occasional or regular. This information was used to create a measure for the provision of informal care, as well as the frequency of the care provided. The starting point was a discrete variable that takes the value 0 if no informal care is provided, the value 1 if care is provided monthly or less frequently, and the value 2 if it is weekly or daily. The average for each country and each year was calculated. The change in the average thus reflected the change in the supply of informal caregiving among over-50s in a country. Table-3 provides an overview of the national data that were included in this study.[2]

1 To improve readability the term home care instead of professional home care is used.

2 The 2015 OECD data on public spending on home care were obtain from stats.oecd.org; Health expenditure and financing - Long-term nursing care: home care.

Table-3. Summary of public spending on home care and average supply of informal care for the over-50s in eight European countries, by year

	Public Spending on Home Care (% GDP)			Average Supply of Informal Care (0-2)		
	2004	2007	2013	2004	2007	2013
Austria	.67%	.66%	.74%	.44	.51	.39
Belgium	.56%	.59%	.80%	.74	.71	.54
Denmark	1.05%	1.12%	1.22%	.68	.66	.56
Germany	.71%	.78%	.96%	.53	.58	.45
France	.42%	.39%	.49%	.49	.48	.43
The Netherlands	1.47%	1.48%	1.82%	.66	.68	.51
Spain	.14%	.17%	.22%	.36	.35	.29
Switzerland	.47%	.49%	.55%	.58	.52	.37
Unweighted Average	.69%	.71%	.85%	.56	.56	.44

Note: Definition supply of informal care: 0 = provides no informal care; 1 = provides occasional or monthly informal care; 2 = provides weekly or daily informal care.

A face-value comparison shows that the share of public spending on home care increased in all countries between 2004 and 2013. By contrast, the degree to which informal care was provided in these countries decreased everywhere and was significantly lower in 2013 than nine years earlier. Public spending on home care is particularly high in Denmark and the Netherlands, and lower in Spain and Switzerland. It is also remarkable that the extent to which informal care is provided is also relatively high in Denmark and the Netherlands and lower in Spain and Switzerland.

Micro Data

The source for the individual data was the Survey of Health, Ageing, and Retirement in Europe (Börsch-Supan, Jürges & Lipps, 2003). The data concerned people aged over 50 living independently in various European countries. SHARE is a longitudinal survey. The survey was carried out for the first time in 2004 and repeated in 2007, 2011 and 2013. Respondents from eight European countries were selected - Austria, Belgium, Denmark, France, Germany, the Netherlands, Spain, and Switzerland - who had participated in the survey at least twice in 2004, 2007 or 2013 and for whom a change in the use of care had occurred.[3] As explained previously, longitudinal nature of the data was used in order to better estimate the relationship between macro characteristics and the use of care. The focus is on changes over time and not on differences between individuals. The method (see description of the statistic method) thus only included those characteristics that changed over time.

The dependent variable of interest in this study was the use of care. A discrete variable was created to which three values could be assigned (no care, informal care, and paid care).[4] The definition of informal care and paid care was based on the questions included in the SHARE survey. A respondent received informal care if he/she received personal care and support from someone in their own household and/or received support in the form of household or personal care from someone outside their own household. Paid care was defined as the use of professional or paid care services at home due to physical, mental, emotional or memory problems. Unfortunately, user-paid and publicly-funded care cannot be differentiated. It is probable that the relationship between public spending on home care and the individual use of home care is different from that between user-spending and paid care. After all, these forms of care are substitutes for one another.

In 2004, 20% of men aged 50 and older received care in these eight European countries; 14% received informal care and 6% paid care, possibly including informal care (Table-4). The share of men receiving informal care fell by 4 percentage points to 10% in 2013. The share of men receiving paid care increased less rapidly, by only 1 percentage point. The use of care was higher among women over-50. 30% of women received care; two-thirds of these received informal care and one-third received paid care. The difference in the use of care between men and women hardly changed in the period 2004-2013, although the share of users of informal care fell slightly.

3 The 2011 measurement was not included because that survey did not include questions about the receipt of paid care.

4 The number of observations did not allow the combination of paid and informal care to be differentiated from paid care alone. For this reason, these two groups are combined in the category of paid care.

Table-4. Use of informal and paid care among over-50s in eight European countries, by year and gender

	No care		Informal care		Paid care	
	Men	Women	Men	Women	Men	Women
2004	80%	70%	14%	19%	6%	11%
2007	82%	71%	13%	19%	5%	10%
2013	83%	73%	10%	13%	7%	14%

In addition to the macro characteristics, several explanatory variables for the use of care were included, as outlined earlier. Three health characteristics were included that described the care needs of the respondent. First, the degree of physical limitation (0-3) was defined as no, slight, moderate and serious limitations. A similar categorization was used in relation to signs of depression, the second health characteristic that was included. Finally, the number of chronic health conditions that the respondent was living with were counted. The number varied between 0 and 8 conditions. The method used to construct the hierarchical scales for physical limitations and depression was developed by (Mokken, 1971). The scale for the physical limitations was an indication of the extent to which respondents have difficulty carrying out a selection of 22 daily activities. The score for indicators of depression was based on feelings of sadness, fatigue, poor sleep, reduced appetite, lack of interest in surroundings and feelings of no longer wanting to live. The construction of both scales has been described extensively (Oudijk, Woittiez, & de Boer, 2011; Verbeek-Oudijk et al., 2014) and has been applied (Plaisier, Verbeek-Oudijk, & De Klerk, 2016).

Social and economic sources are another important explanatory variable for the use of care (Babitsch, Gohl, & von Lengerke, 2012; Von Lenkerke, Gohl, & Babitsch, 2014). A large proportion of informal care comes from partners and adult children (Tarricone & Tsouros, 2008; Triantafillou et al., 2011). Therefore, the presence of a partner (yes/no) and adult children within the household (yes/no) are included in the analyses. Because income was measured in a different way in 2007 and was consistently lower in that year compared to in other years, income amount could not be included. As an alternative, income quartiles were used as a proxy for financial resources.

Finally, a dummy for "year" was included as an explanatory variable, because the macro variables are country-specific variables that vary over time. If the analyses were not corrected for time separately, general shocks may have rendered the effect of macro variables less clearly visible over time. One example is the economic crisis that occurred in 2008, which may have impacted on spending on home care.

Method

The relationship between the macro characteristics and individual use of care is estimated separately for men and women, correcting for the micro-characteristics mentioned previously by using multinomial logistic regression with fixed effects, as developed by Chamberlain (1980) and implemented by Pforr (2014) in Stata. The method was developed for longitudinal data and controls for the effects of unmeasured variables that may have influenced the relationship between the macro characteristics on the one hand and the use of care on the other, which may have led to inconsistent estimates. An example of such unmeasured variables is individual personality traits. For example, an assertive individual would be likely to seek a solution to their care problem more quickly than a person who is more reserved. In a regression without fixed effects, the degree of assertiveness could then have a distorting effect on the relationships between spending on care and use of care. Fixed effects analyses focus on variations in individuals, or on variations over time, and not on variation between individuals. The models control for *time-invariant unobserved heterogeneity* (Gangl, 2010). The assumption here was that the unmeasured variables would remain constant over time.

The macro characteristics included in the model were country-specific variables that varied over time, which means that the variables have the same value for all individuals in a country in a given year. Individuals are clustered within countries, which could have influenced the correlation between the macro characteristics and the individual's use

of care. The standard error was adjusted by using the Huber-White Sandwich Estimator to control for clustering within countries. The model included two country-specific variables that varied over time. The reliability of the results could have been undermined if the correlation between the variables was too high. In contrast to other regression analyses, there is no standard multicollinearity test in fixed effects analyses. To gain some understanding of the mutual correlation, the Cronbach's alpha was calculated. The reliability of the association, which was 0.4, did not appear to be too high. Additionally, as a sensitivity analysis, the macro variables were added one by one to see if the coefficients were stable and did not change too much. There was, therefore, no indication of multicollinearity in the analyses.[5] Whether the relationship between the macro characteristics and the use of care among men differed significantly from that among women was assessed in two ways. First, Z scores were calculated: $(B_{woman}-B_{man})/\sqrt{(SE_{woman}^2 + SE_{man}^2)}$ (Paternoster, Brame, Mazerolle, & Piquero, 1998). In addition, a model was estimated for men and women together, in which interaction terms with gender for all macro and individual characteristics were included. Because the effects of the macro characteristics are the primary interest of this study, only these interaction terms are shown. To get an idea of the effect of the level of public expenditure on home care and the average supply of informal care among people over 50, the average (semi) elasticity was calculated using the Stata module *aextlogit* (Kemp & Santos Silva, 2016). The coefficients can be interpreted as "when expenditure is increased by e.g. one unit, the average chance that care is received increases by x%".[6]

There are two possible endogenous issues in the use of panel data that need to be addressed: omitted variable bias and reverse causality. Macro attributes at the country level may unintentionally reflect the effects of other variables that vary over time. In such cases, there is omitted variable bias. To correct for this, a dummy for "year" in is included in the model that controlled for general shocks, such as the economic recession of 2008 which affected care spending and possibly informal caregiving. Reverse causality implies that causality also runs in the opposite direction. The macro variables in the analyses are related to the individual use of care. It is plausible that changes in the use of care at the individual level also affected the macro variables in the analyses, but the effect would have been delayed. The countries included in the study use (varying degrees of) budgeted LTC systems with access criteria. As such, undesirable developments in the individual use of care often lead to changes to the access criteria, which ultimately lead to a change in expenditure on care. Nevertheless, reverse causality cannot be ruled out and it is appropriate to exercise caution when it comes to attributing causality. For this reason, this study speaks of correlation rather than causation.

Results

The relationship between the macro characteristics and the individual use of care differs between men and women. Public expenditure on home care is negatively correlated with the likelihood of receiving informal care, but only among men (β = -2.46, Table-5). For both men (β = -6.97) and women (β = -3.29), public expenditure on home care is also associated with a lower likelihood of the use of paid care. As mentioned previously, unfortunately, it was not possible to distinguish between publicly funded home care and care paid for by the user. However, the negative association found between public expenditure on home care and paid care would suggest that most of the paid care reported in the survey was care paid for by the user.

The proportion of informal carers aged 50 or older in a country does not correlate significantly with informal care received but is negatively associated with the receipt of paid care (men, β = -12.12, women, β = -6.92). The absence of any association with informal care could be explained if the increase in the supply of care mainly results in more hours of care being received rather than more people receiving care. Alternatively, and

5 The same also applies to the other explanatory variables. The direction and order of magnitude of the coefficients were very stable.

6 The basic estimate of the aextlogit is a conditional logit and it therefore deviates from the multinomial logit with fixed effects, which is central to this article. This means the likelihood of paid care vs. no care and the likelihood of informal care vs. no care were estimated. The results of the conditional logit did not deviate greatly.

conversely, it could be explained if a decrease in the supply of informal care, as shown in Table-3, mainly results in a decrease in the number of care hours provided. Additionally, some of the care will also be provided by those aged below 50 years. Unfortunately, the data did have information on under 50-s.

women when a partner or adult child is present. This is probably because these women are often younger and are less likely to receive care from their partner. Among men, there is a significant relationship between income quartile and the informal use of care. The likelihood of receiving informal care is higher in the higher income quartiles than in the lower income quartiles, although

Table-5. Multinomial logical regression with individual fixed effects of the use of informal and paid care by over-50s in eight European countries, by gender

	MEN		WOMEN	
	Informal Care	Paid Care	Informal Care	Paid Care
	β (95CI)	β (95CI)	β (95CI)	β (95CI)
Public spending on home care	-2.46 (-4.03 to -.90)**	-6.97 (-9.17 to -4.77)***	-.41 (-1.64 to .83)	-3.29 (-4.80 to -1.88)***
Proportion of informal carers aged 50 years and older	.40 (-2.27 to 3.07)	-12.12 (-15.64 to -8.60)***	1.71 (-.43 to 3.85)	-6.92 (-9.41 to -4.43)***
Physical limitations				
Slight	.80 (.60 to 1.01)***	.81 (.50 to 1.11)***	.56 (.40 to .71)***	.78 (.53 to 1.02)***
Moderate	1.31 (1.06 to 1.56)***	1.65 (1.30 to 2.01)***	1.02 (.82 to 1.21)***	1.43 (1.18 to 1.69)***
Serious	2.61 (2.22 to 2.99)***	2.64 (2.22 to 3.06)***	2.06 (1.79 to 2.33)***	2.71 (2.38 to 3.03)***
Depressive feelings				
Slight	.28 (.03 to .54)*	.64 (.28 to 1.00)***	.28 (.11 to .45)**	.55 (.33 to .77)***
Moderate	.49 (.12 to .87)**	.68 (.21 to 1.14)**	.55 (.34 to .76)***	.69 (.42 to .95)***
Serious	1.02 (.58 to 1.46)***	1.31 (.82 to 1.81)***	.57 (.33 to .82)***	.85 (.55 to 1.14)***
Number of chronic conditions	.11 (.03 to .18)**	.37 (.26 to .47)***	.15 (.10 to .21)***	.18 (.12 to .25)***
Household situation				
Partner present	-.20 (-.53 to .12)	-.20 (-.63 to .23)	-.52 (-.79 to .25)***	-.18 (-.53 to .16)
Child >17 years in household	-.17 (-.49 to .14)	-.47 (-.96 to .02)	-.30 (-.58 to .04)*	-.19 (-.59 to .21)
Income quartile				
Second quartile	.44 (.22 to .66)***	.13 (-.18 to .44)	.12 (-.04 to .28)	.16 (-.03 to .37)
Third quartile	.35 (.10 to .60)**	.06 (-.28 to .41)	.04 (-.15 to .23)	.17 (-.08 to .42)
Fourth quartile	.36 (.11 to .62)**	-.05 (-.43 to .33)	.02 (-.18 to .24)	-.15 (-.43 to .13)
Year				
2007	-.06 (-.19 to .07)***	.31 (.10 to .51)**	.00 (-.11 to .11)	.18 (.02 to .33)*
2013	.15 (-.17 to .47)	.68 (.20 to 1.16)**	-.05 (-.31 to .21)	.73 (.38 to 1.08)***
Pseudo R2	.21		.19	

Note 1: Huber-White sandwich estimator used for heteroscedasticity-consistent standard errors.

Note 2: Reference categories are: no physical limitations, no depressive feelings, no partner present, no child older than 17 years present, first income quartile and 2004.

Note 3: Notation of significance level: * p <0.05, ** p <0.01, *** p <0.001

There are remarkable differences between men and women in terms of individual characteristics. The presence of a partner and adult children in the household is significantly negatively correlated with the use of informal care among women but plays no role in this among men. The likelihood of receiving informal care is lower for

this effect becomes less pronounced as incomes increase. The average age is generally higher in the lower-income groups. As age increases, the size of the social network shrinks and those who remain often also face health problems themselves, which can affect their ability to provide informal care.

The differences between men and women in the effect of the macro characteristics on the use of care are subsequently tested for significance in two ways; a Z-test and interaction terms. The differences between men and women described above remained valid in all cases (Table-6).

Table-6. Tests for differences in effects of macro characteristics on use of informal and paid care between men (Z-score and interaction terms)

	Ztest		Interaction Terms	
	Informal Care	Paid Care	Informal Care	Paid Care
	$Z_{M\text{-}W}$	$Z_{M\text{-}W}$	$B_{M*macrocharacteristic}$(95CI)	$B_{M*macrocharacteristic}$(95CI)
Public spending on home care	**2.01**	**2.71**	-2.60 (-4.16 to -1.05)**	-6.71 (-8.90 to -4.51)***
Proportion of informal carers aged 50 years and older	.75	**2.36**	-.30 (-2.77 to 2.16)	-11.40 (-14.69 to -8.10)***

Note-1: Interaction term calculated using a multinomial logistic regression in which all macro and individual characteristics are interacted with gender.

Note-2: Notation of significance level; Z-score > 1.96 in bold, interaction term * p < .05, ** p < .01, *** p < .001

To get an idea of the strength of the relationships found here, the (semi-) elasticity is determined.[7] When public spending on home care increases by one unit, the average likelihood of men receiving paid care decreases by 7.0% (p <0.001) and the likelihood of men receiving informal care decreases by 1.9% (p <0.01). For women, there is only a significant relationship for the use of paid care, which is considerably lower, with an average decrease of 3.2% (p <0.001). The (semi-) elasticity of the average supply of informal care was also calculated. When the supply of informal care increases by one unit, the likelihood of men receiving paid care decreases by 11.8%. The association between both spending on home care and the average supply of informal care is, therefore, greater for men than for women. These results suggest that men are likely to respond more strongly to the supply of (informal and paid) care than women, for whom the use of care is influenced more by individual characteristics.

Discussion

Given the increasing number of older people and increasing life expectancy, the use of long-term care will increase in the years to come. In the past, it was mainly the women who were living longer and who therefore used more care; however, the difference in life expectancy between men and women, and therefore the differing demand for care, will decrease steadily in the future. The provision of care will need to respond to this change. This article helps to determine to what extent change in provision will be necessary. It was examined whether the supply of informal and publicly funded home care has a different effect on the use of care among men and women. The relationship was studied between both the supply of home care - measured as public spending on home care - and informal care (the extent to which over-50s provide care), and the use of paid and informal care among older persons.

The appropriate supply of care differs for men and women

The first hypothesis was that higher public expenditure is associated with a lower likelihood of the use of informal care and care paid for by the user, and that this would particularly be the case among women. The results show that a more plentiful supply of care paid for through higher public expenditure is used by men in particular. For men, publicly funded care seems to be a substitute for informal care and for care paid for themselves. Among women, no significant association was found with informal care they received, and only paid care is used less often. It is possible that the higher age of the respondents plays a role here, meaning that the difference between men and women was other than what was predicted beforehand. In general, the higher the age, the more health problems an individual will have, and there comes a point when "not asking for help" is no longer a realistic

7 Firstly, of the likelihood of paid care vs. no care, and secondly of the likelihood of informal care vs. no care.

option for that individual. Although care funded by the government could not be distinguished from care that users pay for themselves, the findings imply that most of the results reported here involved care paid for by the receiver. After all, if paid care mainly involved publicly funded care, some kind of positive association between the use and supply of paid care would have been found. Men generally have more money to spend than women and are more likely to be able to afford user-paid care, and this could also explain the fact that, among men, the association between the supply of publicly funded home care and the use of (user-) paid care is stronger than among women.

The second hypothesis is partly supported by the findings. The degree to which informal care is provided in a country is significantly correlated with (user-) paid care but is not related to receiving informal care. This applies to both men and women. A more plentiful supply of informal care is therefore not associated with more recipients of care, but with fewer recipients of paid care. The results of the model, therefore, suggest that the supply of informal care benefits those who are already receiving informal care and that it also acts as a substitute for paid care. The latter finding suggests that paid care is used mainly by individuals who have nobody in their social network who is willing or able to provide care.

This study has adopted a fairly rough and ready approach to the provision of publicly funded care and informal care. Data on the number of working professionals and the number of hours of care they provide would provide a more accurate estimate of the supply of care available. After all, higher spending on home care may also lead to qualitative improvements. However, such data is not currently available. In relation to the supply of informal care, too, a more detailed analysis of the amount of care provided would be preferable. The SHARE data includes information about the frequency of care, but not about how many hours of care are provided, for example. The care that is provided weekly is obviously less frequent than care provided daily, but if the daily care involves one hour per day and the weekly care involves eight hours per week, it is unclear which frequency might provide a greater benefit. There are opportunities for improvement in the individual measurement of the use of care. The SHARE data now includes the paid care that is received but does not distinguish between care paid for by the user and publicly-funded care. Earlier in this article, it was argued that these two forms of financing can act as substitutes for one another, but also for informal care. The negative relationship between the supply of publicly funded home care and user-paid care would probably have been stronger if it was possible to differentiate between these types of care empirically. Furthermore, migrants are over-represented in privatized care services in many European countries (DaRoit & Weicht, 2013) which could lead to cultural differences in the care that is received. Although ideally it would be considered there was no information on migrant care available.

This study is based on data from different countries. Although it relates to Western countries that generally have reasonably good arrangements in place in relation to long-term care, the countries included also differ in many respects. The analyses were corrected for country differences by looking at changes over time in particular individuals, so that differences between individuals - and therefore between countries - play no role. Although the associations found in this study likely apply to all the countries studied, the extent to which they are applicable may vary. One recommendation for future research would therefore be to conduct an in-depth study into the role of differences in care provision and the use of care by men and women in the same country but in different regions.

Implications for policy and future research

Although in the period 2004-2013 the number of older persons increased everywhere, the proportion of care users among them decreased. It decreased more among women than among men, mainly because the use of informal care among women fell more than it did among men. The demand for long-term care among men is likely to continue to increase. The results show that the supply of both informal care and expenditure on home

care seems to have a stronger negative correlation with the use of (user-) paid care among men than among women. This would appear to lend further credence to the appeal that differences between men and women should be considered in the design of care systems, the supply of care products, the nature of the labor market in care, and the way in which it is funded (Morgan et al., 2016). The expectation was that the relationship between public spending on home care and the use of care, both informal care and (user-) paid care, would be stronger among women than among men, because women tend to experience a greater need for care and the threshold for requesting professional care seems to be lower among women. If the proportion of men among care users increases, a policy mismatch may develop (because women respond differently to men to changes in the supply of home care). The findings show that among men there is a stronger correlation between the use of care and the supply of both publicly funded home care and informal care than among women. Changes to care policy or to the financing and supply of care may therefore have a greater impact in the future, and lead to greater shifts in the use of care that have been observed hitherto. Although these effects found here are relatively small, it could possibly affect several million potential care users, amounting to billions of euros. It is important for policymakers to understand that investment in home care can have differing effects on men and women. Men appear to be more sensitive to changes in the provision of care than women, and among women, in particular, individual sources of care, such as a partner, play a more important role in the use of care.

References

Babitsch, B., Gohl, D., & von Lengerke, T. (2012). Re-revisiting Andersen's behavioral model of health services use: A systematic review of studies from 1998-2011. *GMS Psycho-Social-Medicine, 9*(DOC 11). Crossref

Barker, J. C. (2002). Neighbors, friends, and other nonkin caregivers of community-living dependent elders. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 57*(3), 158-167. Crossref

Beckfield, J. (2017). How social policy contributes to the distribution of population health: The case of gender health equity. *Scandinavian Journal of Public Health, 46*(1), 6-17. Crossref

Boerma, T., Hosseinpor, A. R., Verdes, E., & Chatterji, S. (2016). A global assessment of the gender gap in self-reported health with survey data from 59 countries. *BMC Public Health, 16*(1), 675. Crossref

Bolin, K., Lindgren, B., & Lundborg, P. (2008). Informal and formal care among single-living elderly in Europe. *Health Economics, 17*(3), 393-409. Crossref

Bond, J., Farrow, G., Gregson, B. A., Bamford, C., Buck, D., McNamee, P., & Wright, K. (1999). Informal caregiving for frail older people at home and in long-term care institutions: Who are the key supporters? *Health and Social Care in the Community, 7*(6), 434-444. Crossref

Börsch-Supan, A., Jürges, H., & Lipps, O. (2003). *SHARE: Building a panel survey on health, aging, and retirement in Europe*. Mannheim: Mannheim Research Institute for the Economics of Aging (MEA).

Broese van Groenou, M., Glaser, K., Tomassini, C., & Jacobs, T. (2006). Socio-economic status differences in older people's use of informal and formal help: A comparison of four European countries. *Ageing and Society, 26*(5), 745-766. Crossref

Bucher-Koenen, T., Lusardi, A., Alessie, R., & Van Rooij, M. (2017). How financially literate are women? An overview and new Insights. *J Consum Aff, 51*, 255-283. Crossref

Chamberlain, G. (1980). Analysis of covariance with qualitative data. *The Review of Economic Studies, 47*(1), 225-238. Crossref

Chiatti, C., Melchiorre, M. G., Di Rosa, M., Principi, A., Santini, S., D'Âhner, H., & Lamura, G. (2013). *Family networks and supports in older age*. New York: Springer US. Crossref

Colombo, F., Llena-Nozal, A., Mercier, J., & Tjadens, F. (2011). *Help wanted? Providing and paying for longterm care*. Paris: OECD Publishing. Crossref

DaRoit, B., & Weicht, B. (2013). Migrant care work and care, migration and employment regimes: A fuzzy-set analysis. *Journal of European Social Policy, 23*(5), 469-486. Crossref

Dorin, L., Krupa, E., Metzing, S., & Beuscher, A. (2016). Gender disparities in German home-care arrange-

ments. *Scandinavian Journal Caring Science, 30*, 164-174. Crossref

Enroth, L., Aaltonen, M., Raitanen, J., Nosraty, L., & Jylhä, M. (2018). Does use of longterm care differ between occupational classes among the oldest old. *European Journal of Ageing, 15*(2), 143-153. Crossref

Gangl, M. (2010). Causal inference in sociological research. *Annual Review of Sociology, 36*, 21-47. Crossref

Gannon, B., & Davin, B. (2010). Use of formal and informal care services among older people in Ireland and France. *European Journal of Health Economics, 11*(5), 499-511. Crossref

Glauber, R. (2017). Gender differences in spousal care across the later life course. *Research on Aging, 39*(8), 934-959. Crossref

Grabowski, D. C., Norton, E. C., & Van Houtven, C. H. (2012). *Informal care*. Cheltenham, UK: Edward Elgar Publishing Limited.

Grundy, J., & Jitlal, M. (2007). Socio-demographic variations in moves to institutional care 1991-2001: A record linkage study from England and Wales. *Age Ageing, 36*(4), 424-430. Crossref

Haberkern, K., Schmid, T., & Szydlik, M. (2015). Gender differences in intergenerational care in European welfare states. *Ageing and Society, 35*(2), 298-320. Crossref

Hanaoka, C., & Norton, E. C. (2008). Informal and formal care for elderly persons: How adult children's characteristics affect the use of formal care in Japan. *Social Science and Medicine, 67*(6), 1002-1008. Crossref

Hawkes, S. & Buse, K. (2013). Gender and global health: evidence, policy, and inconvenient truths. *Lancet, 381*(9879), 1783-1787. Crossref

Hlebec, V., & Filipovic Hrast, M. (2016). Influence of contextual and organizational factors on combining informal and formal care for older people. Slovenian case. *Research on Ageing and Social Policy, 4*(30). Crossref

Jacobs, M. T., Broese van Groenou, M. I., Aartsen, M. J., & Deeg, D. J. H. (2018). Diversity in older adults' care networks: The added value of individual beliefs and social network proximity. *J Gerontol B Psychol Sci Soc Sci, 73*(2), 326-336. Crossref

Katz, S. J., Kabeto M., & K. M., L. (2000). Gender disparities in the receipt of home care for elderly people with disability in the United States. *Journal of the American Medical Association, 284*(23), 3022-3027. Crossref

Kemp, G., & Santos Silva, J. (2016). *Partial effects in fixed-effects models*. United Kingdom 2016: Stata Users' Group Meetings

Kemper, P. (1992). The use of formal and informal home care by the disabled elderly. *Health Services Research, 27*(4), 421-451.

Litwak, E. (1985). *Helping the elderly: The complementary roles of informal networks and formal systems*. New York: Guilford Press.

Luppa, M., Luck, T., Weyerer, S., König, H., Brähler, E., & Riedel-Heller, S.G. (2010). Prediction of institutionalization in the elderly. A systematic review. *Age Ageing, 39*(1), 31-38. Crossref

Martikainen, P., Murphy, M., Metsä-Simola, N., Häkkinen, U., & Moustgaard, H. (2012). Seven-year hospital and nursing home care use according to age and proximity to death: Variations by cause of death and socio-demographic position. *J Epidemiol Community Health, 66*(12), 1152-1158. Crossref

Mokken, R.J. (1971). *A theory and procedure of scale analysis*. The Hague/Berlin: Mouton/De Gruyter.

Morgan, R., George, A., Ssali, S., Hawkins, K., Molyneux, S., & Theobald, S. (2016). How to do (or not to do)… gender analysis in health systems research. *Health Policy and Planning, 31*(8), 1069-1078. Crossref

Nieboer, A. P., Koolman, X., & Stolk, E. A. (2010). Preferences for long-term care services: Willingness to pay estimates derived from a discrete choice experiment. *Social Science & Medicine, 70*(9), 1317-1325. Crossref

Nihtilä, E., & Martikainen, P. (2007). Household income and other socio-economic determinants of long-term institutional care among older adults in Finland. *Population Studies, 61*(3), 299-314. Crossref

OECD (2011). *Divided we stand: Why inequality keeps rising*. Paris: OECD Publishing.

Oudijk, D., Woittiez, I., & de Boer, A. (2011). More family responsibility, more informal care? The effect of motivation on the giving of informal care by people aged over 50 in the Netherlands compared to other European countries. *Health Policy, 101*(3), 228-235. Crossref

Paternoster, R., Brame, R., Mazerolle, P., & Piquero, A. (1998). Using the correct statistical test for the

equality of regressing coefficients. *Criminology, 36*, 859-866. Crossref

Pattyn, E., Verhaeghe, M., & Bracke, P. (2015). The gender gap in mental health service use. *Soc Psychiatry Psychiatr Epidemiol, 50*(1089). Crossref

Pforr, K. (2014). Femlogit-implementation of the multinomial logit model with fixed effects. *The Stata Journal 14*(4), 847-862. Crossref

Pickard, L., Wittenberg, R., Comas-Herrera, A., Davies, B., & Darton, R. (2000). Relying on informal care in the new century? Informal care for elderly people in England to 2031. *Ageing and Society, 20*(6), 745-772. Crossref

Pinquart, M., & Sörensen, S. (2002). Older adults'preferences for informal, formal and mixed support for future care needs: A comparison of Germany and the United States. *The International Journal of Aging and Human Development, 54*(4), 291-314. Crossref

Plaisier, I., Verbeek-Oudijk, D., & De Klerk, M. (2016). Developments in home-care use. Policy and changing community-based care use by independent community-dwelling adults in the Netherlands. *Health Policy, 121*(1). Crossref

Puthenparambil, M. J., Kröger, T., & Van Aerschot, L. (2017). Users of home-care services in a Nordic welfare state under marketization: the rich, the poor and the sick. *Health & Social Care in the Community, 25*, 54-64. Crossref

Roth, D. L., Fredman, L., & Haley, W.E. (2015). Informal caregiving and its impact on health: A reappraisal from population-based studies. *Gerontologist, 55*(2), 309-319. Crossref

Saraceno, C., & Keck, W. (2011). Towards an integrated approach for the analysis of gender equity in policies supporting paid work and care responsibilities. *Demographic Research, 25*(11), 371-406. Crossref

Schenk, N., Dykstra, P., Maas, I., & Van Gaalen, R. (2014). Older adults' networks and public care receipt: Do partners and adult children substitute for unskilled public care? *Ageing and Society, 34*(10), 1711-1729. Crossref

Schmidt, A.E. (2018). Older persons' views on using cash-for-care allowances at the crossroads of gender, socio-economic status and care needs in Vienna. *Social Policy & Administration, 52*, 710-730. Crossref

Silverstein, M., Gans, D., & Yang, F. M. (2006). Intergenerational support to aging parents: The role of norms and needs. *Journal of Family Issues, 27*(8), 1068-1084. Crossref

Suanet, B. & Antonucci, T. C. (2017). Cohort differences in received social support in later life: The role of network type. *The Journals of Gerontology: Series B*, 72(4), 706–715. Crossref

Suanet, B., Broese Van Groenou, M., & Van Tilburg, T. (2012). Informal and formal home-care use among older adults in Europe: can cross-national differences be explained by societal context and composition? *Ageing and Society, 32*(3), 491-515. Crossref

Suanet, B., Broese van Groenou, M., & van Tilburg, T. (2017). Social network type and informal care use in later life: A comparison of three Dutch birth cohorts aged 75–84. *Ageing & Society, 0*, 1-22. Crossref

Tarricone, R., & Tsouros, A. D. (2008). *Home care in Europe. The solid facts*. Geneva, Switzerland: World Health Organization.

Triantafillou, J., Naiditch, M., Repkova, K., Stiehr, K., Carretero, S., Emilsson, T., Di Santo, P., Bednarik, R., Brichtova, L., Ceruzzi, F., Cordero, L., Mastroyiannakis, T., Ferrando, M., Mingot, K., Ritter, J., & Vlantoni, D., (2011). *Informal care in the long-term care system*. Athens/Vienna.

Van Houtven, C. H., & Norton, E. C. (2004). Informal care and health care use of older adults. *J Health Econ., 23*(6), 1159-1180. Crossref

Verbeek-Oudijk, D., Woittiez, I., Eggink, E., & Putman, L. (2014). *Who cares in Europe. A comparison of long-term care for the over-50s in sixteen European countries*. The Hague: Netherlands Institute for Social Research.

Verbrugge, L. M. (1985). Gender and health: An update on hypotheses and evidence. *J Health Soc Behav, 26*(3), 156-182. Crossref

Von Lengerke, T., Gohl, D., & Babitsch, B. (2014). Re-revisiting the behavioral model of health care utilization by Andersen: A review on theoretical advances and perspectives. In C. Janssen, E. Swart, & T. von Lengerke (Eds.), *Health care utilization in Germany*. New York: Springer. Crossref

Wang, H., Dwyer-Lindgren, L., Lofgren, K. T., Rajaratnam, J. K., Marcus, J. R., Levin-Rector, A., Levitz, C. E., Lopez, A. D., & Murray, C. J. (2012). Age-specific and sex-specific mortality in 187 countries, 1970-2010: A systematic analysis for the global burden of disease study 2010. *Lancet, 380*(9859), 2071-2094. Crossref

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ORIGINAL RESEARCH

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Re-Experiencing Trajectories of Posttraumatic Stress Disorder Among Older Adults Exposed to an Exile

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Abstract

One of the main symptoms in Posttraumatic Stress Disorder (PTSD) is re-experiencing the trauma (APA, American Psychiatric Association, DSM-5 Task Force, 2013), and studies have mentioned the effects of re-experiencing symptoms immediately after traumatic instances. Also, adverse psychological reactions of a traumatic event that occurred many years ago have not been extensively examined in the literature. In this respect, whether the content or frame of re-experiencing trauma symptom groups have differed from others during long years is questioned. The aim of this study is to determine the nature of the re-experiencing symptoms among individuals experienced by a shaky traumatic event many years ago. The interviews were conducted with 61 Ahıska Turkish older adults, who had the experience of deportation and forced migration. The participants' feelings, thoughts and experiences related to those events were recorded by a video. A total of 2204 re-experiencing memos were recorded by qualitative analysis of video recordings in MAXQDA[12] (VERBI, 2015). Principal codes of these memos were re-experiencing events directly by self or witnessing others pain, showing physical reactions (heath breathing, sweating) when re-experiencing, shaking emotionally, reporting flashbacks, recollections of nightmares, and having intrusive memories often. Findings demonstrated that re-experiencing the trauma even long-time after the event are not different from other immediate reactions. Re-experiencing symptoms are discussed in the frame of PTSD theories with clinical implications for deported and forced-migrated individuals. Results reveal that deportation/forced migration experiences during childhood and adolescence have life-long trajectories among older adults.

Keywords: Posttraumatic Stress Disorder (PTSD), re-experiencing the trauma, exile, deportation, long-term effects of trauma, older adults, Ahıska Turks

Key Practitioners Message

- Professionals should concern adverse psychological reactions to deportation trauma.
- Deportation/forced migration experiences have life-long trajectories among individuals, especially for older adults.
- Clinically, when considering re-experiencing symptoms do not disappear in long years, it is crucial to help psychologically to sufferers of deportation.

There have been growing migrated or deported populations around the World. A lot of people are changing place of residence due to psycho-socio-economic and political reasons. While migration is defined as a temporary or permanent move to another land with a willingness to change living place, deportation or exile is an involuntary movement to another land mostly permanently. An increasing number of individuals have been experiencing migration or deportation over the last

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decade (von Werthernet al., 2018). Considering this growing population, the psycho-social problems of immigrants are becoming more critical.

Psycho-social problems related to migration or deportation have been examined in several studies, and mostly negative experiences have reported. In a review of several studies conducted with migrated and deported individuals, higher levels of depression, anxiety, and posttraumatic stress disorder (PTSD) were found both during and after detention, and higher scores were reported among detained ones (von Werthern et al., 2018). Also, studies have given importance to long-term adverse results. In a longitudinal study with two years follow up, there were higher scores of social isolation and psychological symptomatology among immigrants (Stell et al., 2011). Similarly, higher PTSD symptoms are seen for four years beyond detained migration (Coffey, Kaplan, Sampson, Tucchi, 2010). Therefore, migration and deportation have a long-term impact on individuals. It can be said that those effects can be seen in a lifetime. Recent stressors such as living problems affected immigrants' mental health negatively after the migration (Laban, Gernaat, Komproe, van der Tweel, & De Jong, 2005). Similarly, it was reported that stressors were associated with PTSD symptoms, especially after the migration (Carswell, Blackburn, & Barker 2011).

When considering life-long stressors among deportees, professionals concern adverse psychological reactions of deportation trauma during time is crucial to describe their psychological needs associated with PTSD. Also, the adverse psychological effects of deportation in a lifetime has mentioned in the literature. For instance, after 50 years of the Nazi concentration experiences, delay onset of PTSD was prevalent among deportees that PTSD was seen 35% to 45% of them (Favaro, Rodella, Colombo, & Santonastaso, 1999). When examining the long-term effect of trauma among Holocaust survivors, women reported higher PTSD scores than men (Prot, 2009). Similarly, among deported Romanian survivors (Bichescu et al., 2005) and refugees in the United States (Rasmussen, Crager, Baser, Chu, & Gany, 2012), they had higher scores of PTSD. In a mixed-method study conducted with Australian refuges, higher PTSD, anxiety, and lower life quality were reported with difficulties in social relationships, disturbance in memory, and sensitivity in insecurity and injustice (Coffey et al., 2010). Therefore, considering those deportees' mental health studies connected with PTSD, understanding the frame of the disorder along time is essential.

Increased arousal, emotional numbness, avoidance, and re-experiencing the trauma are some main symptoms of PTSD (APA, 2013). On the other hand, the symptoms of PTSD can be diverse over a long time of any traumatic encounter. It is estimated that re-experiencing, arousal, and avoidance are mostly seen symptoms in case time since encountering a trauma increases (O'Donnell, Elliott, Lau, & Creamer, 2007). Those symptoms are observed in neural system activity even time after trauma increases and also increases the risk of revictimization (Risser, Hetzel-Riggin, Thomsen, & McCanne, 2006). Therefore, understanding the adverse psychological reactions of a traumatic event that occurred many years ago are essential. Also, it is recommended to examine PTSD symptoms among diverse trauma types (Risser et al., 2006). Further studies describing the long-term influence of immigration or deportation are suggested (von Werthern et al., 2018). Considering those studies about PTSD, it is critical to inquire whether the content and frame of symptoms among immigrants encountering migration long years ago are similar to the PTSD phenomenon (Galea, Tracy, Norris, & Coffey, 2008). The adverse psychological effects of a traumatic life that occurred many years ago would not disappear spontaneously over time despite the fact that researchers have not extensively studied the long-term effects of it. One of the most important trajectories of trauma is commonly appearing through re-experiencing of it. On the other hand, it is still unknown whether the content or frame of re-experiencing trauma changes during long years. Some researchers assume that symptoms are not different from each other when the time passes from the trauma (Olff, Sijbrandij, Opmeer, Carlier, & Gersons, 2009). In this context, the primary purpose of this research is to deter-

mine the nature of the re-experiencing symptoms among individuals experienced by a shaky traumatic event many years ago. It is aimed to create themes related to the re-experiencing trajectories of exile experience among decrypt the video recordings of individual face-to-face interviews with older adults.

Method

Participants

Ahıska Turkish older adults were selected for the present study since they had experienced two times of deportation within 40 years. The first deportation happened in1944. People were forcibly removed from their homes one night and forced to a one-month journey in locked and debris wagons and sent to Central Asian countries indiscriminately in November 1944. Most of them settled in Uzbekistan. Fergana region was placed where Ahiska Turkish people was lived and worked in Uzbekistan. The second event, forced migration, happened in 1989 at Fergana. Due to incidents intensified for ethnic reasons, houses of Ahiska people were firstly marked and burned, many people were killed, and significant events erupted. They were forcedly to migrate from Uzbekistan for the second time because of the Fergana incidents (Beridze, Kobaidze, 2005). After these events, Azerbaijan, Kazakhstan, and Kyrgyzstan accepted the Ahiska Turks as immigrants. In addition, some of them settled in the south of Russia. In the following years, some of them were migrated to Turkey.

The sample of the study consists of Ahıskalı Turkish over 60 years of age who have exile and forced migration experience. Participants allowed video interviews to be recorded and agreed to participate voluntarily. Of the 61 people who participated in the qualitative research, 72.13% (N = 44) were male and 27.87% (N = 17) were female. The age range of the participants ranged between 74-94, and the mean age was 81.51 (S = 4.72). The average age during exile ranged from 2-22. (M = 9.51, S = 4.72).

Semi-Structured Interviews

In order to evaluate the trajectories of exile trauma on a one-to-one basis, interviews were conducted with 61 older adult people from Ahiska, each lasting approximately 45-90 minutes. In the present study, a part of those interviews related to re-experiencing trauma was only included. In these interviews, their experiences were recorded through semi-structured questions on condition that the volunteer's consent and volunteerism were recorded. In the light of the experience in advanced age, trauma, exile/forced migration processes, and the literature, the questions determined by the authors and researchers were prepared to understand the content of traumatic experiences, the current nature of post-traumatic stress symptoms. For example, "Would you describe the place where you migrated? What kind of place was it? " What did you experience during your journey? How do you deal? "and "What would you like to bring back from your past life to this day?" are some questions asked participants to understand the past experiences.

Procedure

Ethical approval of the study was obtained from the Human Research Ethics Committee of Bolu Abant Izzet Baysal University. Confidentiality and volunteerism principles were adhered to in all procedures in the qualitative data collection process. The participants of the study were reached through the World Union of Ahıska Turks (DATUB) Headquarters and local associations established by Ahıskalı Turks. Interviews were taken place into a home and social environment.

Qualitative Data Analysis

Qualitative research allows us to access exploratory information on a subject with limited knowledge. In accordance with this purpose, semi-structured, face-to-face individual interviews will be conducted, video recordings of the interviews were obtained from the participants, and the interviews were decoded and analyzed in the light of the same approach. MAXQDA[12] (VERBI, 2015) Qualitative Data Analysis Program was used for

decoding and analyzing qualitative data since it allows systematic analysis of different types of data such as text, photo, audio, video, and allows advanced querying of relationships.

In the study, semi-structured interviews were conducted with Ahıska Turkish older adults. The purpose of these interviews used in qualitative analysis is to understand the nature of the traumatic experiences. In line with the phenomenological approach that is the basis of qualitative research, human experiences are separated, analyzed, and compared to define the truth (Merriam, 2002). It is also recommended to use a phenomenological approach to study active, emotional, and intense experiences (Merriam, 2002). In this approach, researchers review their own assumptions about the phenomenon and re-look at the phenomenon, which is the process of returning the reality of the experience, combining experiences around themes, and following reality from different perspectives (Merriam, 2002).

Interview protocols were analyzed qualitatively. The two researchers examined the interview videos independently and extracted the meaning units from the interview videos. As stated, the pieces of meaning can be the smallest structures in the interviews, words, cross-sections, or whole sentences (Jones, 1984). While the interview videos were examined, each researcher wrote his / her thoughts, and then the subcodes that could be related to the main themes and main themes were analyzed. During the determination of the dispute negotiation protocols, the process was followed up until an agreement was reached in the codes and subcodes, In the literature, it is recommended that researchers review at least 10 interviews in order to agree on coding and sub coding (Thomas & Chambers, 1989).

Results

The data regarding the re-experiencing process that emerged in interviews were remarkable. Totally 2204 memo codes were counted from 61 interviews conducted with Ahıska Turkish older adults. Here there were some examples in Table-1.

Table-1. Interview examples

"We didn't get anything to cover us on the way inside the cattle wagon. I was a child. I had my favorite shoes. We couldn't even get it from my home. I have seen dreams for years and even today" - 1944 Exile
"My mom put all my wooden toys in the bag and put it in the corner of the house, so she said to me, 'when we get back, I'm gonna give it back to you.' I wanted my toys, therefore, crying along the way. I finally figured I'd never see them again." 1944 Exile
"People eat so little on the way that there's something left for tomorrow." 1944 Exile
"Some of the stations were getting off the train to bring wood, etc., but there were also those who didn't catch the train." 1944 Exile
"Two nations opposed each other, or we were good with the Uzbeks. I remember like someone is saying to me right now that 'If you do not take the Turks away within 24 hours, the conflict will begin'" -Fergana after the events in 1990
"Our sinless people died; they burned houses. I am now looking at burned houses "-Fergana events
"They squeezed us there and persecuted us. Allah never let anyone live like this (crying)" - 1944 Exile
After Fergana's events, Uzbeks ministry placed everyone on campus. They told the cooks is poisoning the food so that our society could die whenever eating food.- Fergana events
"It is still in my eyes, my grandfather came to cry, 'we were driving'" -1944 Exile

Unwanted Distressing Memories, Re-Experiencing Event - Witnessing Event, Shaking Emotionally When Remember the Event, Physical Reactions (heartbeat, sweating), and Stating Bad Dreams and Nightmares About the Event were subcodes associated with re-experiencing the event symptom cluster in PTSD. The number of memos reported, the number of participants reporting memos, and the average memo are shown in Table-2.

At first, "Unwanted Distressing Memories" were the most frequently reported subcodes among re-experiencing symptoms (the number of memo = 1058, the number of participants reporting memos = 61, the average memo = 17.34). One example of unwanted distressing memories *"A group of people died in Siberia because the wagon doors remained open. Nobody knows about it at night."*. Another one was, *"During ex-*

Table-2. The number of memos reported, the number of participants reporting memos, and average memo

	Number of Memo Reported	Number of Participants Reporting Memos (out of 61)	Average Memo
RE-EXPERIENCING AHISKA EXILE (Total)	**2204**	**61/61**	**36.13**
Unwanted Distressing Memories	**1058**	**61/61**	**17.34**
Recalling memories about low confidence	11	11/61	1.00
Recalling memories about desperation	331	49/61	6.76
Recalling memories told by other people	164	48/61	3.42
Recalling memories of distressing	552	61/61	9.05
Re-Experiencing Event - Witnessing Event	**908**	**46/61**	**19.74**
Emotionally Shaking When Remember the Event	**136**	**44/61**	**3.09**
Physical Reactions (heartbeat, sweating)	**78**	**30/61**	**2.60**
Stating Bad Dreams and Nightmares About the Event	**24**	**16/61**	**1.50**

ile, I was about 20 years old, I was wounded from war but went exile with my family. When the wagon stopped, we were close to the Caspian Sea. I hugged a big tree and shoved it through the wagon. We chopped him all the way and used him in the stove."

The second subcode was a re-experiencing event/witnessing event that was highly prevalent among participants (the number of memo = 908, the number of participants reporting memos = 46, the average memo = 19.74). The two examples of re-experiencing event/ witnessing event were below:

"My mother said to my grandmother, let's open up the animals and leave them a few days later, so animals will not perish from the pain. There were car noises on the street. The worst was the screaming of the animals. The voices covered the entire village. Now I am like hearing the voices of animals…".

"Grandpa started packing us up. We slaughtered the sheep in 2 hours, and we collected the wheat into sacks. I went to the dog at the door, his mouth resting on my shoes and lay on. I held the lamp in my hand; I saw the dog cry. Those eyes never disappear in my mind."

The third subcode was Shaking Emotionally (the number of memo = 136, the number of participants reporting memos = 44, the average memo = 3.09). In this subcode, shed tears and crying were some of the reactions coded by researchers.

The fourth subcode was Physical Reactions (the number of memo = 78, the number of participants reporting memos = 30, the average memo = 2.60). While they were sharing past experiences, half of them showed heath breathing, sweating, and breath-holding.

The last subcode was Stating Bad Dreams and Nightmares about the Event (the number of memo = 24, the number of participants reporting memos = 16, the average memo = 1.5). One of the reactions was, "In my dream, I am often in the homeland of Ahıska. I see myself playing in the cornfields of the village". The number and percentages of memo reported for five subcodes are shown in Figure-1, and the average number of memos for five sub-codes are shown in Figure-2.

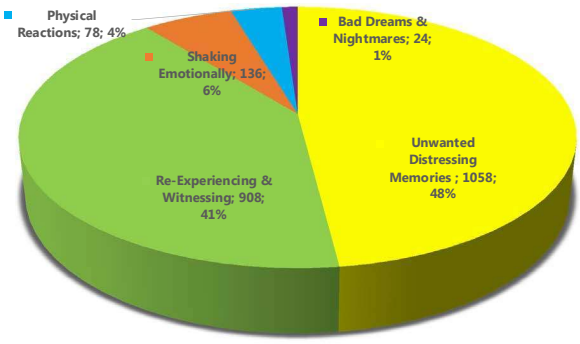

Figure-1. The number and percentages of memo reported for five sub-codes

Discussion

Concerning the growing population of immigrants around the World, several psychosocial problems have been considered as important by professionals. Also, experiences before and after migration have been mentioned to be as important (von Werthern et al., 2018). Older adults are affected by deportation and migration extremely since their difficulty in adjusting a new environment (Bhugra et al., 2014). The study is aimed to explore content and frame of one of the PTSD symptoms, re-experiencing symptoms among Ahıska Turkish older adults having experience of deportation twice within 40 years.

Re-experiencing symptoms in PTSD is described as repetitive memories about trauma, dreams and nightmares, re-experiencing the trauma, physical reactions such as feeling emotionally sad, sweating, rapid breathing, and heartbeat when re-experiencing (Foa et al., 2016). Based on the embedded theory, the re-experiencing symptoms of PTSD were highly seen among older adults when concerning the higher number of memos (2204 memos) obtained from interviews with 61 older adults. By means of using open coding and theory coding process (Foa et al., 2016), researchers turn into experiences of re-experiencing symptoms of PTSD specific to deportation among older adults. Likewise seen in other studies conducted with other trauma types (O'Donnell et al., 2007; Risser et al., 2006), the present study demonstrates the presence of re-experiencing the trauma of deportation.

Results revealed that Unwanted Distressing Memories, Re-Experiencing Event - Witnessing Event, Shaking Emotionally When Remember the Event, Physical Reactions (heartbeat, sweating), and Stating Bad Dreams and Nightmares About the Event were subcodes associated with re-experiencing the event symptom cluster in PTSD. Among average memos, re-experiencing event/witnessing and unwanted distressing memories were the two subcodes mostly seen among older adults. The difference between re-experiencing event/witnessing, and unwanted distressing memories were the latter include sharing memories while the former included "feel like going past." In addition to those two, older adults reported re-experiencing subcodes of Emotionally Shaking When Remember the Event, Stating Bad Dreams, and Nightmares about the Event. Memos and average memos appearing on those subcodes demonstrated that older adults have still influenced by deportation/forced migration trauma. Those physical and emotional reactions were apparent reactions that most older adults cried during the interview and showed sweating like physical reactions.

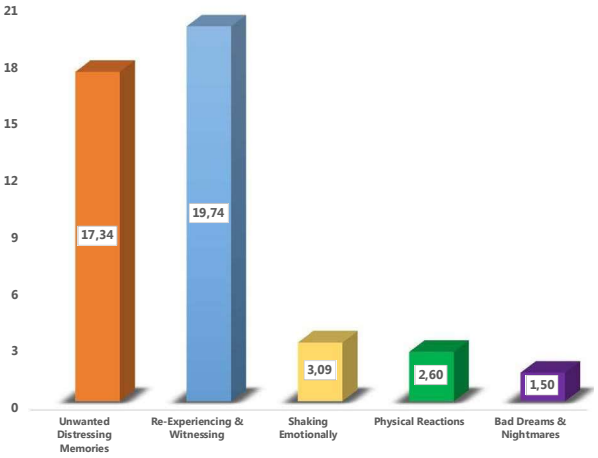

Figure-2. The average number of memos for five sub-codes

The results are essential for providing an understanding of the re-experiencing nature of trauma in case deportation and migration had happened long-years ago. As proposed by different studies (Galea et al., 2008), this study adds re-experiencing the nature of deportation. Clinically, when considering re-experiencing symptoms do not disappear in long years, it is crucial to help psychologically to sufferers of deportation. During the interviews, it was observed that there was intense re-experiencing of both exile and forced migration processes.

Therefore, deportation/forced migration experiences during childhood and adolescence have life-long trajectories among older adults. During interviews, re-experiencing is observed like something happened not long-years ago, but recent. Therefore, the implementation of psycho-social intervention programs is necessary among the immigrant population, which is growing around the world (von Werthernet al., 2018). Those programs, specifically for older adults, will exactly be useful. Also, other trajectories of PTSD symptoms are suggested to examine in future studies.

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References

APA (American Psychiatric Association, DSM-5 Task Force) (2013). *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5™)*. American Psychiatric Publishing, Inc. Crossref

Beridze, M. & Kobaidze, M. (2005). An attempt to create an ethnic group: Identity change dynamics of Muslimized Meskhetians. Paper presented at the Language, History, and Cultural Identities in The Caucasus, Malmo University.

Bhugra, D., Gupta, S., Schouler-Ocak, M., Graeff-Calliess, I., Deakin, N. A., Qureshi, A., ... & Till, A. (2014). EPA guidance mental health care of migrants. *European Psychiatry*, *29*(2), 107-115. Crossref

Bichescu, D., Schauer, M., Saleptsi, E., Neculau, A., Elbert, T., & Neuner, F. (2005). Long-term consequences of traumatic experiences: An assessment of former political detainees in Romania. *Clinical Practice and Epidemiology in Mental Health*, *1*(1), 17.

Carswell, K., Blackburn, P., & Barker, C. (2011). The relationship between trauma, post-migration problems and the psychological well-being of refugees and asylum seekers. *International Journal of Social Psychiatry*, 57, 107-19. Crossref

Coffey, G. J., Kaplan, I., Sampson, R. C., & Tucci, M. M. (2010). The meaning and mental health consequences of long-term immigration detention for people seeking asylum. *Social Science & Medicine*, *70*(12), 2070-2079. Crossref

Favaro, A., Rodella, F. C., Colombo, G., & Santonastaso, P. (1999). Post-traumatic stress disorder and major depression among Italian Nazi concentration camp survivors: A controlled study 50 years later. *Psychological Medicine*, *29*(1), 87-95. Crossref

Foa, E. B., McLean, C. P., Zang, Y., Zhong, J., Powers, M. B., Kauffman, B. Y., Rauch, S., Porter, K., & Knowles, K. (2016). Psychometric properties of the Posttraumatic Diagnostic Scale for DSM-5 (PDS-5). *Psychological Assessment, 28*(10), 1166-1171. Crossref

Galea, S., Tracy, M., Norris, F., & Coffey, S. F. (2008). Financial and social circumstances and the incidence and course of PTSD in Mississippi during the first two years after Hurricane Katrina. *Journal of Traumatic Stress*, *21*(4), 357-368. Crossref

Jones, C. S. (1984). *Training Manual for Thematizing Interview Protocols Psychologically* (Tech. Rep. No. 1). Knox Ville: University of Tennessee, Phenomenological Psychology Group.

Laban, C. J., Gernaat, H. B. P. E., Komproe, I. H., van der Tweel, I., & De Jong, J. T. V. M. (2005). Postmigration living problems and common psychiatric disorders in Iraqi asylum seekers in the Netherlands. *The Journal of Nervous and Mental Disease, 193*(12), 825-832. Crossref

Merriam, S. B. (2002). *Introduction to Qualitative Research*. In S. B. Merriam (Ed.), Qualitative Research in Practice: Examples for Discussion and Analysis (pp. 3-17). San Francisco, CA: Jossey-Bass.

O'Donnell, M. L., Elliott, P., Lau, W., & Creamer, M. (2007). PTSD symptom trajectories: From early to chronic response. *Behaviour Research and Therapy*, *45*(3), 601-606.

Prot, K. (2009). Late effects of trauma: PTSD in Holocaust survivors. *Journal of Loss and Trauma*, *15*(1), 28-42. Crossref

Olff, M., Sijbrandij, M., Opmeer, B. C., Carlier, I. V., & Gersons, B. P. (2009). The structure of acute posttraumatic stress symptoms: "Reexperiencing", "active avoidance", "dysphoria", and "hyperarousal". *Journal of Anxiety Disorders*, *23*(5), 656-659. Crossref

Rasmussen, A., Crager, M., Baser, R. E., Chu, T., & Gany, F. (2012). Onset of posttraumatic stress disorder and major depression among refugees and voluntary migrants to the United States. *Journal of Traumatic Stress*, *25*(6), 705-712. Crossref

Risser, H. J., Hetzel-Riggin, M. D., Thomsen, C. J., & McCanne, T. R. (2006). PTSD as a mediator of sexual revictimization: The role of reexperiencing, avoidance, and arousal symptoms. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, *19*(5), 687-698. Crossref

Steel, Z., Momartin, S., Silove, D., Coello, M., Aroche, J., & Tay, K. W. (2011). Two year psychosocial and mental health outcomes for refugees subjected to restrictive or supportive immigration policies. *Social Science and Medicine, 72*(7), 1149-1156. Crossref

Thomas, L. E., & Chambers, K. O. (1989). Phenomenology of life satisfaction among elderly men: Quantitative and qualitative views. *Psychology and Aging, 4*(3), 284–289. Crossref

VERBI (2015). *MAXQDA[12]: The Art of Data Analysis (Version 12.3.6.)*. GmbH Berlin, Germany: VERBI Software.

von Werthern, M., Robjant, K., Chui, Z., Schon, R., Ottisova, L., Mason, C., & Katona, C. (2018). The impact of immigration detention on mental health: A systematic review. *BMC Psychiatry*, *18*(1), 382. Crossref

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CASE REPORT - DISCUSSION

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Theories of Aging and Late Adulthood With Film Analysis Method From Virginia Satir's Framework: On Golden Pond

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Abstract

Virginia Satir is one of the leading theorists in the field of family counseling and therapy. In the literature, concepts such as family balance, family communication types, family self-regard are some essential aspects of Virginia Satir's family counseling theory, which is one of the most influential theories that enable applications on the family cases and its dynamics; these concepts are also functional in many areas and bring a different perspective to look at older ages and late adulthood. The aim of this study is to examine the theories of developmental psychology and social psychology in adulthood and later adulthood, together with the basic concepts of Virginia Satir's family therapy. In this respect, the examination of later adulthood will be carried out with the film analysis method by examining the "On Golden Pond" movie.

Keywords: Family, Satir's family therapy, adulthood, later adulthood, film analysis.

Key Practitioners Message

- Late adulthood is a period in which both the individual and society experience mutual separation. Retirement can be considered as a typical example of social rupture in the theory of withdrawal, given the social roles and general behavior patterns.
- The most critical factors of Satir Theory, such as freedom, equality, and individuality, can be used in later adulthood studies.
- The film analysis method can be used in the interpretation of late adulthood and other different developmental ages.

Introduction

There is continuous development throughout human life (Durak, 2019). One experiences this development in many aspects, such as physical, mental, emotional, sexual, and social developments. Physical development processes can be described as infancy, childhood, adolescence, adulthood, and later adulthood. In various developmental periods, there are differences in emotions, thoughts, behaviors, and abilities (Thompson, 1976). As a relative concept, later adulthood is the last stage of human life.Later adulthood is a decrease in the individual's ability to adapt to the changing environment and the potential of the organism to balance the internal and external factors, depending on the time factor. As it is the case in all age groups, people in later adulthood have their own behavioral patterns and psychological structure (Emiroglu, 1995). To this date, many theories and approaches have been proposed in the literature in order to make sense of the psychological structure of people in later adulthood. In the following sections of this study, some of these theories will be discussed in detail.

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Movies can strongly influence many people. The combined effect of images, music, dialogue, sound, and effects in films addresses deep emotions and thoughts. Movies often contain psychological elements in order to describe and influence people accurately. Because of this feature, movies are seen as important sources in which the theories and concepts in the field of psychology are concretized and offer the opportunity to understand and observe human psychology. When the literature is examined, film analysis studies are found according to various theories (Dermer & Hutchings, 2000). The method of film analysis, which is based on the examination of the relationship between specific theories and concepts in the literature of a particular field together with certain scenes of the film, has become a more relevant method of examination in the literature lately.

This is a descriptive study of "On Golden Pond" movie by screenwriter Ernest Thompson and directed by Mark Rydell, which was analyzed in conjunction with the advanced theories of adulthood and adulthood in the literature, particularly by the approach of Virginia Satir. In this context, the theories to be mentioned in the study are given below;

Family Therapy Theory of Virginia Satir

Influenced by the family system approach, in her approach, Virginia Satir evaluates family as a system consisted of parents, siblings, and other family members (Bitter, 1988; Cheung & Chan, 2002). However, in discordance with the system approach, Satir emphasized the role of the members in the system. For example, she focuses on the role of parents as family leaders in the family system on the inclusion of newcomers (Bitter, 1988).

Self-Regard in Family

The value or worth of self is one of the main pillars of Satir's family therapy theory (Satir, 1964). According to Satir, self-regard is the degree of personal value that one assigns to himself/herself, independent of others' views (Satir & Baldwin, 1983). A person whose self-regard is not sufficient tends to select the person as a spouse whose self-regard is low while he or she does not realize it. In this sense, low self-regard can be said to be contagious. Therefore, it is crucial to increase the self-regard of each individual in society. In this context, children with self-regard are the outputs of a low self-regard system formed by two people. In other words, if there is no intervention, the low self-regard is transmitted from parents to children. Satir states that (1964). the mother and father make excessive demands from their children in order to establish their own self-values, and that the child often falls into a dilemma in response to these demands; and together with this, the child needs approval from his/her mother or father (Senol-Durak & Fisiloglu, 2007). In this sense, other individuals in a family system that will be established by someone with low self-regard will inevitably have low self-regard.

Family Communication

One of the crucial concepts for balance in the family system is verbal and non-verbal communication. Verbal and non-verbal messages are compatible with each other in proper communication. After defining the correct communication, Satir has collected invalid communication types into four categories. These are accusatory, pleading-calming, calculated, and over-logical and irrelevant scattered types (Lee, 2002; Satir et al., 1991). Using unhealthy communication methods is an indicator of low self-regard and can be considered as an effort to cover fragility. Making unhealthy communication correct and healthy is one of the main objectives of the theory. To this end, Satir uses the terms "conformity" or "consistency". A person who is appropriate and consistent has high self-regard, has nothing to hide, and is therefore open and honest in all types of communications (Satir & Baldwin, 1983).

Family Homeostasis

The concept of family homeostasis is especially important in families going through change. Family members, whether open or closed, ensure or try to maintain the balance that already exists. When

the homeostasis is broken with the change, it is possible to reconstruct the homeostasis by studying the patterns, rules, and communication styles within the family (Innes, 2002). According to Satir (1964), when an individual changes in the system, the whole family changes (Senol-Durak & Fisiloglu, 2007). Therefore, it is possible to start with an individual in the system in order to initiate the change in the positive direction in the family.

Emotional Experiences Within the Family

Virginia Satir paid attention not only to relationships or the concept of family homeostasis but also to the concept of emotional experiences within the family. Satir emphasized the emotional deficiencies within the family, and stated that these families were staying together and described as a family just out of habit; families that adults and their children did not enjoy being together and that children can not learn self-regard (Senol- Durak & Fisiloglu, 2007, pp.20).

Focused Person Within the Family

Virginia Satir (1964). did not describe the family member with symptoms as "patient" or "different from the others", but as the person within the family whom the problem was focused, as in the System Approach. This person is the one who is the most affected by adverse family events. Because this person is hugely protected within the family or seen as the cause of these, experts can quickly identify this member of the family (Senol- Durak & Fisiloglu, 2007, pp. 20).

Family Functionality

In Satir's definition of a functional family, which is influenced by family system theories, communication is correct, and the rules are functional (Satir & Baldwin, 1983). Families with relationships of a functional type pay attention to the problem by making real evaluations and can propose different solutions. In non-functional families, the self-regard of family members is insufficient, and there is distrust towards the other side (Satir, 1964). Satir mentions that as in the System Approach, the functionality of the families consists of two sub-categories, open and closed. The main difference between open and closed systems can be seen in the reactions of family members through changes and developments both inside and outside. The open family type has commitment, sensitivity, and open communication. In such families, the positive development of family members is pursued, and change is regarded as a desirable aspect by the family members. In closed type families, communication is incorrect, and individuals' self-regard is low. When faced with problems and stress, they can not implement appropriate coping strategies. Although the rules are strict, the relationships of family members are not friendly (Satir, 2001).

Social Psychological Theories on Later Adulthood

Activity Theory: Activity theory is stated that it is necessary to be active in order to obtain subjective pleasure in later adulthood. According to the aforementioned theory, his/her former lifestyle, socioeconomic status, and state of health determine the activity status of older adulthood (Kalinkara, 2016). "The person, older adulthood, wants to continue the middle age activities for as long as possible and replaces the ones s(he) is forced to give up" (Onur, 1991). "This theory tries to explain how individuals adapt and cope with the changes that occur in their social lives as they get older" (Morgan & Kunken, 1998, cited in Baran, 2004). According to the activity theory, individuals in later adulthood should give the impression of being vigorous, active, and young by extending their middle age activities to prevent them from being excluded by society. According to this system of thinking, individuals should replace the middle-age activities and behaviors they need to give up with pleasant ones that are appropriate for their ages.

Social Withdrawal Theory: According to the theory of Social Withdrawal, later adulthood experiences physical, psychological, and social detachments. They physically slow down their activities; their energy consumption and struggles are reduced. Psychologically, their relationship with their environment weakens, and they turn to their inner

world. Socially, changes and ruptures are experienced both in the individual's approach to the society and the society's approach to the individual, and the mutual interaction weakens (Isik, 2002). "According to this theory, later adulthood is a period in which both the individual and the society experience mutual separation" (Baran, 2004). "According to this view, a person who is adapted to old age is accepted as an individual who accepts the fact that their social and psychological ties are diminished easily and adapts without reacting to social and personal changes" (Kalinkara, 2016).

Role Theory: "Age norms are the assumption of the capacity and limitations of what an individual can or should do about age" (Akcay, 2011). For example, a widow in later adulthood having an affair with a man who is at least five or ten years younger than herself is not tolerated and criticized by her family members and social community. A social role is one of the basic elements determining the behavior of the individual. "Individuals play various roles in their lives, such as students, parents, sons, spouses, employees, or grandparents. These roles define a person as a social individual and form the basis of his/her self-esteem" (Akcay, 2011).

Symbolic Interactionism Theory: The symbolic interactionist theory acts as the link between activity and social withdrawal theories. It focuses on the interaction of the environment and the person that affects aging (Hooyman & Kiyak, 1991). Symbolic interactionism is a theory that focuses on the interdependence between individuals and society. The ordinary meaning of symbols exists as a result of individuals living together and awareness of each other. This facilitates communication and the development of interpersonal empathy. Thus, it is explained that symbolic meanings are formed by interacting with the social environment and other individuals (Baran, 2004).

Social Exchange Theory: This theory directly links modernization with the status of individuals in later adulthood. It claims that the social status of individuals in later adulthood decreases as they become modern (Hooyman & Kıyak, 1991). According to the aforementioned theory, people establish social relations in order to obtain some awards. These are love, trust, economic welfare, social status, etc. "In the process of obtaining awards, certain costs are paid (negative experiences, fatigue, effort, spending time, etc.). or they have to give up their positive experiences for the sake of rewarding activity" (Hooyman & Kiyak, 1991).

Theories of Developmental Psychology

Psychosocial Development Theory (Erikson)

Erikson (1968). states that each individual faces a series of crises and milestones throughout his/her life, in which vulnerability increases and his/her potential increases. According to him, when solved correctly, these crises contribute to personality development and psychosocial maturity. Each crisis or stage is based on previous crises or stages that shape the development of the individual and form his or her personality. Erikson explained that individuals complete their psychosocial development in 8 different periods. The main emphasis of these developmental periods is whether one of the two characteristics, one of which is positive and the other negative, is acquired by the individual in each period. These periods are built on each other, starting from the first period of "insecurity against basic trust" and affect the characteristics of the individual throughout his/her life.

Despair Against Self Integrity: This is the eighth and the last stage of Erikson's theory. In the context of this study, it is the most crucial part of this theory and must be mentioned. Self-integrity is the acceptance of whole life as it is with its positive and negative aspects, and not to be met with fear or anxiety of the future. One is not afraid of the future, which will be terminated with death. The person who lacks a sense of self-integrity is afraid of death throughout his life. (S)he has a desperate desire to live forever. If the earlier stages mentioned in theory were healthy and crises have been overcome, the individual sees old age and death as a natural part of life and is at peace.

Flow Theory of Human Life (Buhler)

Another theory explaining adult development was proposed by Buhler (1957). Although it is a biologically based theory, the views on adult development and transition to adulthood are not content-rich. By assessing the differences, behaviors, attitudes, and achievements in the life cycle, the theory determines five life periods regarding the biological life flows of individuals (Buhler 1957). In the third period of growth determination, which is between the ages of 25 and 45, individuals revise their goals and acquire new objectives. According to Buhler's theory, individuals grow biologically, experience a period of stagnation in growth, and then begin to experience losses in development. Although Buhler's theory is biologically based, it has been observed that, from his views on the determination period of growth in the age range of 22-45 years, the emphasis on preparing for life by adopting new aims is the characteristics of the transition period to adulthood.

Life Cycle Theory (Kuhlen)

Buhler and his team proposed five life cycles corresponding to five biological periods, as mentioned above. Buhler's view emphasizes the causality between biological processes such as gaining stability and landing in growth and psychosocial processes such as expansion, promotion, and contraction in activities and achievements. Often the biological curve is further than the psychosocial curve. Kuhlen changed this theory of growth, ascent, and contraction. According to Kuhlen, the motives of growth and expansion (power, success, creativity, and self-realization, etc.). are dominant in the first half of an individual's life. These can vary throughout an individual's life because they are relatively saturated, and the individual has come to a new social status. Therefore, the human life cycle can be seen as an 'expansion and contraction curve. According to Kuhlen's model of explanation, anxiety, and threat can be a more important source of motivation in the second half of life. Kuhlen states that, with advancing age, individuals are less happy, they have a more negative perception towards themselves and lose their self-regard. This model of adult development argues that the life cycle can be seen in two general trends: growth, expansion, and contraction (Onur, 2004).

Stages of Life (Jung)

According to Jung, personality develops differently in the first and second periods of life.

First period (between youth and 35-40 years): The individual opens up to the outside world, interacts with the outside world, and strives for social rewards. In this way, sexual identity develops. Young individuals can be healthy by turning to the outside world rather than their inner world.

Second period (the 40s and later): The importance of ambitions and goals for the individual decreases and the individual feels stagnant and fatigue. Looking at the past is risky in this period. The individuals should focus on the future and achieve goals for themselves. In order to get rid of the unrest, one should turn to his/her self, focus on the meaning of life, and listen to the unconscious to reveal his/her real dreams.

Findings

"On Golden Pond" (Rydell, 1981). movie, which's plot in the simplest form can be summarized as a turbulent family life, Norman, one of the main characters who is grumpy and stubborn, doesn't like visibly changes and gives great importance to his own rules and imposes them on his daughter, Chelsea who is as stubborn as her father and lived out of the family and away for years because of her persistence. Scenes that might correspond to Virginia Satir's stated concepts are identified and analyzed from the perspectives of adulthood, and then adulthood theories will be briefly evaluated through these scenes.

Self-Regard in the Family

Below, there are evaluations of the effect of schemas on the formation of self-regard in the movie. The individuals who are influential in the process of self-regard that the spouses interacting build the self-value based on each other.

Minutes 25-50: Norman talks to Ethel and says, "I'm back to you. To feel that I am safe and still that I was", and in the following sections, Ethel says to Norman that "You are my white horsed prince", indicates the self-regard which spouses founded in interacting mutually. It also shows the low self-confidence system that one needs for the other to be oneself.

Minutes 45-50: Bill tells Chelsea that she and her son constantly talked about how smart Norman is, shows Norman's importance for self-regard in terms of establishing it. However, the fact that Norman did not receive his approval caused his rejection, as Satir predicted. Of the types of miscommunication, "pleading-calming" types often seek to get approval from others. They may engage in an intense effort to please others.

Considering the symbolic interaction theory of life of individuals being aware of each other, the self-regard of interdependence can be considered to affect the definition of this concept.

Chelsea's lack of support from his father Norman for his self-regard and identity can be considered as a negative factor in Erikson's fifth phase of identity complexity crisis. In this context, the self-regard needed to establish Chelsea's identity can not be achieved, and the crisis may not be overcome.

Emotional Experiences Within the Family

In the movie, some crucial scenes that can be examples of emotional experiences in the family have been identified. For example;

Minutes 27-29: The "hugging scene" following Norman's desperation about his future and boredom is an excellent example of the emotional experiences within the family. Cuddling behavior emerges as a habit and may cover the problems. Another feature of unhealthy family systems is that their problem-solving skills are weak, and they have developed emotional coping methods in general.

First Half of the Movie: The lack of emotional experiences between Norman and Chelsea in the first half of the movie and the absence of positive emotional exchanges indicate the difficulty of forming emotional experiences in the family.

Minutes 1-35: In Chelsea and Ethel's conversation scene, Ethel says "your father loves you", but Chelsea swears after saying "he can't love anybody" and then Ethel slaps Chelsea, can be considered as one of the typical characteristics of an unhealthy family structure in Satir's theory; with the sharing of the negative feelings between parent and child. According to Satir, such symptoms demonstrate non-functional rules. Individuals can use primitive survival methods such as aggression when faced with intense stress.

In the vast majority of the movie, Norman and his daughter Chelsea's vicious or cynical emotion sharing implies that Erikson's sixth phase of psychosocial development theory, the crisis of isolation against proximity, could not be overcome by Norman and that he established superficial relationships in this direction. The decrease in the psychological connections of Norman with his environment leads problems in his emotional experiences in terms of social withdrawal theory.

Family Communication

As it is mentioned below, in the movie, there are many examples of basic communication types described in Satir's family theory.

Minute 04:20. Norman says to Ethel, "I don't hear anything at all", at 22:25, he says, "Detroit lost the game" in a way that disrupts the flow is an example of an irrelevant/ disorganized type of communication in Satir's theory.

Minute 12:50. Norman says to Ethel, along with a hard hand gesture, "what are you doing?" is an example of accusatory communication.

Minute 16:40. Norman says, "these are strawberries, and they grow in soil" can be interpreted as an extremely logical type of communication.

Minute 17:30. After an aggressive response to massage, Ethel's phrase "with pleasure" is an example of a soothing type of communication.

According to the theory of symbolic interactionism, Norman's weak connection with Ethel su-

ggests that Norman does not understand Ethel, and Ethel's discreet and satirical approach to Norman shows that Ethel understands the existence of common symbols and coexistence.

Likewise, when Erikson's psychosocial development theory is taken into consideration, it is thought that Norman did not overcome the isolation crisis positively and acted in isolation when communication and relations were concerned.

Family Functionality

It is thought that in the context of the following scenes, family functionality, which is one of the essential concepts of Virginia Satir's family therapy theory can be illustrated. In the movie, closed, unhealthy, and dysfunctional family type examples are especially encountered. These scenes are:

Minutes 45-50: The closed family structure in Satir's theory can be observed while Chelsea only talks and asks Ethel about Billy's stay with Ethel and Norman and tells Ethel to ask it to Norman. In Satir's theory, a closed family structure is known as having hidden, indirect, and weak communication.

Last Half of the Movie: Towards the end of the movie, Chelsea's unannounced marriage to her family in Brussels points to the existing secrecy and the failure of her family to sit down and talk about ways to solve the situation. It also demonstrates the trouble with family functionality.

When the social withdrawal theory is taken into consideration, it is a predictor that the family's functionality will adversely affect the perception that the psychological ties of the individuals who adapt to without changing and reacting to the problems are reduced, instead of discussing and solving the existing problems in the family context, the functionality of the family will adversely affect.

Family Homeostasis

As Virginia Satir states, the most important basic concept for the continuity of family dynamics is homeostasis. Below are scenes from the movie that will help us better understand the family homeostasis. For example:

1- Norman and Ethel's stable life patterns changed fundamentally with Norman's retirement, and the family homeostasis had an impact when their daughter, her boyfriend, and their son entered their life years after.

2- Billy's staying with Norman and Ethel alone for a long time necessitated a redefinition of the family homeostasis as it is in Satir's theory. In terms of activity theory, Ethel and Norman successfully tolerated the events affecting the existing homeostasis and adapted to the new situation.

Focused Person Within the Family

The focused person within the family on the problem can be easily determined by Satir's theory since it is far from family life and is easily affected by adverse events and has a fragile or problematic structure. In this context, the following findings give us data regarding who this person is.

In the context of the movie, given the little talk about being away from her family and her harmful emotional sharing with her father Norman, Chelsea resembles the profile of the person in which the problem is focused.

Minutes 40-45: Bill says to his son Billy, "if you do not change your behavior, I will send you to your mother" It is thought that during the "other" family life, (pre-divorce period). this person is Billy.

The movie's interpretation of Chelsea as the focus of the problem evokes that Chelsea is experiencing Erikson's role-confusion crisis against identity. The fact that spouse selection is at this stage supports the interpretation, and it is noteworthy that Chelsea could not get the support she wanted from Norman for her identity and roles.

Acceptance

We can state that the primary source of satisfaction and happiness in both family and individual lives, is the acceptance of adverse events and negative situations in life, and the rejection of events that can be called negative in life is the rejection of the essence and essential part of life. The dissatisfaction with this type of life can be found in the scene of the movie below.

Minute 57: The fact that Chelsea was always disturbed by the past and expressed this around 57. minutes brought to mind the fact that she could not accept all this.

She was constantly disturbed by her past, suggesting that role complexity against identity and the fundamental crisis of phase 5 of Erikson's theory of psychosocial development did not proceed in a healthy way. In individuals who can not solve this stage crisis, dissatisfaction with roles and personal identities as well as suspicion against identity are expected to occur.

Maturation

Maturation is one of the important concepts of Virginia Satir, and scenes which can be an excellent example of it are given below.

Minutes 96-97: The fact that Chelsea says "We should talk" to Norman, and that she makes a positive request regarding their relationship and problems, shows the fact that Chelsea has matured over time, as well as a positive contribution to the family functionality.

Again in the context of the movie, it is appropriate to consider maturation as Billy's becoming a person who can communicate more strongly and attach importance to the feelings and thoughts of the others, in contrast to his former hard and unrelated attitude.

Chelsea's positive approach towards Norman brings to mind the theory of social exchange. According to this theory, people form relationships in order to get some prizes, where Chelsea's award can be thought to be regular and positive emotional experiences within the family, and indirectly, she can be happy following this exchange. Considering Erikson's development theory, it is thought that Chelsea has made positive progress for the isolation phase crisis.

Self-Esteem

It can be stated that individuals with self-esteem, one of Satir's essential concepts, are more functional in the family and happier in their individual lives, more determined and balanced. In this context, in order to be a better example of self-esteem, an analysis of a scene from the movie is given below.

Minute 60: Norman's statement to Bill that "I'm impressive" demonstrates that Norman's level of self-esteem is quite high.

Considering Erikson's psychosocial development theory, it is thought that Norman's high self-esteem is a crucial element in overcoming the crisis of despair against integrity, which is the underlying crisis of Phase 8 of the said theory. When the role theory, which is one of the social psychological theories, is taken into consideration, it can be inferred that the past returns of Norman's roles occupy an essential place on the basis of self-esteem.

Self-Value

The concept of self-value, which is close to the concept of self-esteem, is fundamental in determining the individual position in life and within the family. Below, there is the equivalent of the concept of self-value, which is one of the basic concepts of the Satir family therapy, with a scene from the movie.

Minute 91: Chelsea's discourse, "he would have been a better son than me", points to her perception of her own self-value.

Chelsea's discourse brings to mind the crisis of the fifth phase of Erikson's theory of psychosocial development. It was thought that Chelsea's perception of her own self-value could be related to her identity confusion.

Some Other Evaluations in Terms of Late Adulthood and Adulthood Theories on the Movie

First, according to Kuhlen's development theory, the human life cycle can be seen as an "expansion and contraction curve". When this theory is taken into consideration, it is observed that Norman is in the stage of "contraction" in his life, and anxiety and unhappiness increase accordingly.

Second, according to Jung's life stages, after the age of 40, people should turn to themselves, focus

on the meaning of life, and listen to their unconscious to reveal their dreams. When Jung's developmental theory is taken into consideration, it can be thought that Norman, unconsciously or under the influence of the unconscious, returns to his inner world in this context, causing an indifferent type of communication and problematic in external world relations.

Third, according to the theory of social withdrawal, late adulthood is a period in which both the individual and society experience mutual separation. Norman's retirement can be considered as a typical example of social rupture in the theory of withdrawal, given the social roles and general behavior patterns.

Fourth, Erikson's theory of psychosocial development (phase 8), is related to self-integrity, and self-integrity is the acceptance of the whole life as it is with all positive negative aspects and even the idea of death. In order for this level to be healthy, the 7th phase must be completed in a healthy way. Norman teaches Billy fishing, and it brought to mind the productivity phase of Erikson's developmental theory in its seventh stage, which was thought to be a favorable situation in overcoming the crisis of the same universe. The same situation can be inferred that Norman is the "source of wisdom" considering Jung's developmental theory.

Fifth, in the context of the activity theory, while the active individual is reported to be more satisfactory than the passive individual, Ethel, who is active throughout the movie, has a more satisfying life than the passive Norman.

Finally, when many developmental and later adulthood theories, especially Buhler's theory, are taken into consideration, it is observed that Norman and Ethel have declined in the natural curve.

Conclusion

There are very few studies in our country about Virginia Satir's family therapy theory, which is one of the most important theories in the literature on the approach to the family phenomenon, which includes some of the essential concepts of the modern era, such as freedom, equality, and individuality. Virginia Satir's family therapy theory can be used not only in the field of family counseling but also in many different areas. In this study, later adulthood phenomenon is examined from the common point of view of the basic concepts of Satir's theory together with other adulthood theories in the literature. In this respect, especially the film analysis method, which has been used more effectively recently, has been preferred as the method of the study, and "On Golden Pond" movie, which deals with later adulthood, was examined as it is related to the subject of the study. In the movie examined, the equivalents of the basic concepts of Virginia Satir's family therapy and many concepts of later adulthood and adulthood theories have been found.

The fact that the primary method of the study is the film analysis method and ultimately the fact that the research object is fiction and not a family consisting of individuals in real later adulthood is considered to be one of the scientific limitations of the study, and it is thought that the study may be an essential source for understanding and sampling the basic concepts of Virginia Satir's family therapy. Likewise, it is thought that this study is significant in terms of understanding of adulthood and later adulthood as it includes many perspectives on these phenomena from many perspectives as an example of both Satir's theory and the basic concepts of late adulthood theories.

References

Akcay, C. (2011). *Old Age: Concepts, Theories, and Preparation (Yaslilik: Kavramlar, Kuramlar ve Yasliliga Hazirlik)*. Istanbul: Kriter Publishing House.

Baran, A. G. (2004). Sociology of Old Age [Yaslilik Sosyolojisi]. In V. Kalinkara (Ed.), *Aging: Interdisciplinary Approach, Problems, Solutions [Yaslilik: Disiplinler Arasi Yaklasim, Sorunlar, Cozumler]* (pp. 35-57). Ankara: Odak Yayın Evi.

Bitter, J. R. (1988). Family mapping and family constellation: Satir in Adlerian context. *Individual Psychology: Journal of Adlerian Theory, Research & Practice, 44*(1), 106-111.

Buhler, C. (1957). About the goal-structure of human life: Theoretical considerations. *Dialectica, 11*(1), 187-205.

Cheung, G., & Chan, C. (2002). The Satir model and cultural sensitivity: A Hong Kong reflection. *Contemporary Family Therapy, 24*(1), 199-215. Crossref.

Dermer, S. B. & Hutchings, J. B. (2000). Utilizing movies in family therapy: Applications for individuals, couples, and families. *The American Journal of Family Therapy, 28*, 163-180. Crossref.

Durak, M. (2019). Psychosocial and Cognitive Development in Old Age [Yaslilik Doneminde Psikososyal ve Bilissel Gelisim]. In H. Bacanlı & S. Terzi (Eds.), *Adulthood and Old Age: Development and Psychology [Yetiskinlik ve Yaslilik: Gelisimi ve Psikolojisi]* (5th ed., pp. 205-236). Ankara: Pegem Academy.

Emiroglu, V. (1995). *Aging and Social Adaptation of the Older Adults [Yaslilik ve Yaslinin Sosyal Uyumu]*. Ankara: Safak Matbaacılık.

Erikson, E. H. (1968). Identity: *Youth and Crisis* (1st ed.). New York: W.W. Norton & Company, Inc.

Gilbert, B. (Producer) & Rydell, M. (Director). (1981). On Golden Pond. [Motion picture]. USA: ITC Entertainment.

Hooymann, N. & Kiyak, A. (1991). *Social Gerontology: A Multidisciplinary Perspective* (2nd. ed.).Washington, DC: Allyn & Bacon.

Innes, M. (2002). Satir's therapeutically oriented educational process: A critical appreciation. *Contemporary Family Therapy, 24*(1), 35-56. Crossref.

Isik, C. (2002). *Nursing Home and Old Age: In the Case of Izmir Metropolitan Municipality Zubeyde Hanım Nursing Home [Huzurevi ve Yaslilik: Izmir Büyüksehir Belediyesi Zubeyde Hanim Huzurevi Orneginde]*. (Unpublished Master's Dissertation). Ege University, Graduate School of Social Sciences, Izmir.

Kalinkara, V. (2004). *Aging: Interdisciplinary Approach, Problems, Solutions [Yaslilik: Disiplinler Arasi Yaklasim, Sorunlar, Cozumler]* (1st ed.). Ankara: Odak Yayınları.

Kalinkara, V. (2016). *Basic Gerontology: The Science of Aging [Temel Gerontoloji: Yaslilik Bilimi]* (3rd ed.). Ankara: Nobel Yayınevi.

Lee, B. K. (2002). Congruence in Satir's model: Its spiritual and religious significance. *Contemporary Family Therapy, 24*(1), 57-78. Crossref.

Onur, B. (1991). *Developmental Psychology [Gelisim Psikolojisi]*. Ankara: Imge Kitabevi.

Satir, V. (1964). *Conjoint Family Therapy: A Guide to Theory and Technique* (4th ed.). USA: Science & Behavior Book.

Satir, V. (2001). *The New Peoplemaking [Insan Yaratmak: Aile Terapisinin Basyapiti]* (S. Yeniceri, Trans. 1st ed.). Istanbul: Beyaz.

Satir, V., & Baldwin, M. (1983). *Satir Step by Step: A Guide to Creating Change in Families*. Palo Alto, CA: Science & Behavior Books.

Satir, V., Banmen, J., Gerber, J., & Gomori, M. (1991). *The Satir Model: The Family and Beyond*. Palo Alto, CA: Science & Behavior Books.

Senol-Durak, E., & Fisiloglu, H. (2007). An overview to Virginia Satir family therapy approach with the method of film analyses [Film analizi yontemi ile Virginia Satir aile terapisi yaklasimina bir bakis]. *Türk Psikoloji Yazıları, 10*(20), 43-62.

Thompson, J. D. (1976). *Organizations While Working: The Scientific Foundation of Management Theory in Society [Orgutler Calisirken: Yonetim Teorisinin Toplum Bilimsel Temeli]* (U. Sozen & T. Ucok, Trans.). Ankara: Kalite Matbaası.

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The quantitative, qualitative and mixed-method research approaches are welcome from disciplines including but not limited to education, gerontology, geriatrics, nursing, care and hospice, social work, psychology, sociology, biology, anthropology, economics and business administration, engineering, gerontechnology, law, human rights, public policy, architecture, women studies, rehabilitation, and dietetics.

Prospective authors are cordially invited to contribute clearly written original empirical research manuscripts, reviews, brief report, hypothesis & theory, clinical trial, case report or discussion, short communications, and case studies, general commentary, debates and controversies, care facility and services, book review, editorial or guest editorial and erratum including innovative practices from the field as well as relevant philosophical and ethical perspectives on long-term care and older adults.

The review process for submitted manuscripts has been planned **not to exceed four months.** All research articles submitted to the journal will undergo **rigorous peer review**, based on initial editor screening and anonymous refereeing by two peers.

Scientific and Ethical Responsibility

Authors, as they contribute to the academic-scientific article on the cover page, share the scientific and ethical responsibility. After acceptance of manuscripts, then is confirmed that it belongs to the Journal and copyright passes on the publisher.

Authors should ensure accepting scientific and ethical responsibility by avoiding unacceptable or improper behaviors of falsified research, fraudulent data, paraphrasing, duplication, and blatant plagiarism. Authors should also keep in mind the terms emphasizing “ageism” need to be avoided in using to describe the population. Discrimination based on age should be avoided by considering two statements:

> *“Elderly is not acceptable as a noun and is considered pejorative by some as an adjective. Older person is preferred. Age groups may also be described with adjectives: gerontologists may prefer to use combination terms for older age groups (young-old, old-old, very old, and oldest old), which should be used only as adjectives. Dementia is preferred to senility; senile dementia of the Alzheimer’s type is an accepted term” (The American Psychological Association, Section 2.17 Age, p. 69).*

> *“Age.–Discrimination based on age is ageism, usually relevant to older persons. Avoid using age descriptors as nouns because of the tendency to stereotype a particular group as having a common set of characteristics. While in general the phrase the elderly should be avoided, use of the elderly may be appropriate (as in the impact of Medicare cuts on the elderly, for example). Otherwise terms such as older person, older people, elderly patients, geriatric patients, older patients, aging adult, or the older population are preferred” (The American Medical Association, Inclusive Language Section, 9.10.3, p. 268).*

The **Copyright Transfer Form** should be signed by all the authors.

Preparation of Manuscripts

Only the articles sent online can be evaluated. The authors should submit their manuscripts online via the journal’s website at http://agingandlongtermcare.com. In addition, the authors can register to the link www.journalagent.com/jaltc site to send the article and track the progress of evaluation.

Information about the application should be entered into the system in nine complete steps: (1) Manuscript and Abstract Information (2) Affiliation(s) (3) Author(s) (4) Corresponding Author Information (5) Manuscript

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ORCID is part of the wider digital infrastructure needed for researchers to share information on a global scale. In this respect, the authors should use an internationally recognized ORCID identification number to avoid difficulties that occasionally arise as a result of similarities in names and surnames also to enable transparent and trustworthy connections between researchers

The latest version of The American Psychological Association (APA) Style, namely the APA 6th Edition, should be followed when formatting articles. The manuscript file must be double spaced, including the references and tables, and the text should be left justified. Tables and figures must be fully prepared for publication according to APA guidelines. Detailed information on the latest APA Style can be found on the following website: http://www.apastyle.org

Language:

It is recommended that authors use American English spelling.

Length of Articles:

The whole manuscript must not exceed maximum 8000 words, including abstract, keywords, key practitioners message, the article itself, tables and figures, and references.

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Articles should be double-spaced excluding abstracts, notes and references and should be submitted in 12pt Times New Roman font.

Title Page and Abstract:

The **title** should consist of 30 or fewer words.

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Keywords must include a minimum of 5 to 8 words and/or phrases.

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Reference Citation:

Reference citations in the text and in the reference list proper should follow conventions listed in the Publication Manual of the American Psychological Association latest edition (6th ed.), referred to hereinafter as the APA Manual. Provide a reference or bibliography that lists every work cited by you in the text. It is recommended that authors use Citation Management Software Programs for reference citation; please look at web pages of EndNote (www.endnote.com), RefWorks (www.refworks.com), Papers (www.mekentosj.com), Zotero (www.zotero.org), and Mendeley (www.mendeley.com).

Journal Articles:

Lo, C. L., & Su, Z. Y. (2018). Developing multiple evaluation frameworks in an older adults care information system project: A case study of aging country. *Journal of Aging and Long-Term Care, 1*(1), 34-48. doi:10.5505/jaltc.2017.65375.

Edited Book:

Whitbourne, S. K. (Ed.) (2000). *Wiley Series on Adulthood and Aging. Psychopathology in Later Adulthood*. Hoboken, NJ, US: John Wiley & Sons Inc.

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Book Section:

Bowen, C. E., Noack, M. G., & Staudinger, U. M. (2011). Aging in the Work Context. In K. W. Schaie & S. Willis (Eds.), *Handbook of the Psychology of Aging (7th Ed.)* (pp. 263-277). San Diego: Academic Press.

Web Page:

Borji, H. S. (2016, 25.07.2016). Global Economic Issues of an Aging Population. Retrieved from http://www.investopedia.com/articles/investing/011216/4-global-economic-issues-aging-population.asp.

Figures and Tables:

Figures and tables should be numbered using Arabic numerals. The same information should not appear in both a figure and a table. Each table and figure must be cited in the text and should be accompanied by a legend on a separate sheet.

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Vision and Mission

The major goal of the ***Journal of Aging and Long-Term Care (JALTC)*** is to advance the scholarly contributions that address the theoretical, clinical and practical issues related to aging and long-term care. The ***JALTC***, while making efforts to create care services for older people at the best quality available that are more humane, that pay special attention to people's dignity, aims from the perspective of the whole aging process- to discuss Social Care Insurance as a human right, to contribute care for older people to be transformed into an interdisciplinary field, to integrate care services for older people and gerontological concepts and to create more effective collaboration between them, to enhance the quality of care services for older people and the quality of life of caregivers from medical, psychological and sociological perspectives, to highlight the cultural factors in care for older people, to increase the potential of formal and informal care services, to provide wide and reachable gerontological education and training opportunities for caregivers, families and the older people.

Aims and Scope

"National Association of Social and Applied Gerontology (NASAG)"has recently assumed responsibility for the planning and introduction of a new international journal, namely, the **Journal of Aging and Long-Term Care (JALTC)**. With world societies facing rapid increases in their respective older populations, there is a need for new 21st century visions, practices, cultural sensitivities and evidenced-based policies that assist in balancing the tensions between informal and formal long-term care support and services as well as examining topics about aging.

The **JALTC** is being launched as the official journal of the **NASAG**. The preceding journal aims to foster new scholarship contributions that address theoretical, clinical and practical issues related to aging and long-term care. It is intended that the **JALTC** will be the first and foremost a multidisciplinary and interdisciplinary journal seeking to use research to build quality-based public policies for long-term health care for older people.

It is accepted that aging and long-term care is open to a diverse range of interpretations which in turn creates a differential set of implications for research, policy, and practice. As a consequence, the focus of the journal will be to include the full gamut of health, family, and social services that are available in the home and the wider community to assist those older people who have or are losing the capacity to fully care for themselves. The adoption of a broader view of aging and long-term care allows for a continuum of care support and service systems that include home base family and nursing care, respite day care centers, hospital and hospice care, residential care, and rehabilitation services. It is also crucial to be aware that life circumstances can change suddenly and dramatically resulting in the need for transitional care arrangements requiring responsive, available, accessible, affordable and flexible health care service provision.

For further assistance and more detailed information about the JALTC and the publishing process, please do not hesitate to contact Editor-in-Chief of the JALTC via sending an e-mail: editor-in-chief@jaltc.net
Editor-in-Chief: Emre SENOL-DURAK

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