# THE INTERGENERATIONAL ACTIVITIES: PERSPECTIVES OF YOUNG GRANDCHILDREN 

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#### Abstract

This research was conducted to determine the activities of young grandchildren with their grandparents and the factors affecting them. The research was conducted on grandchildren aged between 12 and 18 and living in the Keçiören district of Ankara. The sample size of 511 students was determined using a random sampling method in this area of elementary and high school. The questionnaire included the demographic characteristics of the grandchildren and their grandparents, and the geographic distance and frequency of contact between grandparents. The grandchildren were asked about activities undertaken with their grandparents, based on a list of 10 different kinds of possible intergenerational activities. The ranking of the activities undertaken with the grandmothers of participant grandchildren included television viewing (maternal grandmother 32.3\%; paternal grandmother $28.7 \%$ ), religious activities (maternal grandmother $27 \%$; paternal grandmother $25.9 \%$ ), discussions (maternal grandmother $23.6 \%$; paternal grandmother 22.1\%), and traveling (maternal grandmother 20.2\%; paternal grandmother 17.2\%). The ranking of the activities with the grandfathers of participant grandchildren included television viewing (maternal grandfather $29.5 \%$; paternal grandfather $26.1 \%$ ), religious activities (maternal grandfather $23.2 \%$; paternal grandfather $23.2 \%$ ), discussions (maternal grandfather $23.2 \%$; paternal grandfather $21.4 \%$ ), and shopping (maternal grandfather $18.2 \%$; paternal grandfather $16.8 \%$ ). Among the grandchildren, the rate of activities such as doing homework and going to the cinema/theater with their grandparents was very low. In the study, we also examined the impact of factors such as the adolescent's gender, the frequency of contact with their grandparents, the grandparent's age, education level, and perceived health in relation to the activities of grandchildren with their grandparents. For example, in this research shows that one finds a strong positive relationship between intergenerational activities and geographical proximity. The strongest relationships are observed with everyday activities like watching television.


Keywords: Intergenerational activities, intergenerational relations, intergenerational solidarity.
Jel Classification: J12, J13, J18

## NESİLLER ARASI AKTİVİTELER: GENÇ TORUNLAR BAKIŞ AÇISI

## $\ddot{\mathbf{O} z}$

Bu Araştırma genç torunların büyük ebeveynleri ile birlikte yaptıkları aktiviteleri ve bu aktiviteleri etkileyen faktörleri belirlemek amacıyla yapılmıştır. Bu çalışma Ankara ilinin Keçiören Bölgesinde yaşayan 12-18 yaş arasındaki gençlerle yapılmıştır. Çalışmada ilköğretim ve lisede okuyan tesadüfi örnekleme yöntemi ile belirlenen toplam 511 öğrenci örneklem sayısını oluşturmaktadır. Anket formunda genç torunların ve büyük ebeveynlerin demografik özelliklerine, coğrafi uzaklık ve görüşme sıklığına ilişkin sorular yer almaktadır. Ayrıca ankette torunların büyük ebeveynleri yaptıkları 10 nesiller arası faaliyete ilişkin sorular sorulmuştur. Bu araştırmada; ergenlerin büyükbabaları ile her zaman yaptıkları aktiviteler arasında, televizyon izleme (anne tarafından büyükbaba $\% 29,5$; baba tarafından büyükbaba $\% 26,1$ ), dini faaliyetlerde bulunma (anne tarafından büyükbaba $\% 23,2$; baba tarafindan büyükbaba $\% 23,2$ ), bir konu hakkında konuşma (anne tarafından büyükbaba $\% 23,2$; baba tarafindan büyükbaba $\% 21,4$ ), alıșverişe gitmenin (anne tarafından büyükbaba $\% 18,2$ baba tarafından büyükbaba $\% 16,8$ ), önde geldiği bulunmuştur. Torunlara göre büyük ebeveynleri ile ev ödevlerini yapma ve sinema/tiyatroya gitme faaliyetleri çok düşük oranlardadır. Bu araştırmada ayrıca, torunların büyük ebeveynleri ile yaptıkları faaliyetleri etkileyen görüşme sıklığı, büyük ebeveynin yaşı, eğitim düzeyi ve sağlık durumu gibi faktörler araştırılmıştır. Örneğin, çalışmada nesiller arası aktiviteler ile coğrafi uzaklık arasında güçlü bir pozitif yönlü ilişki bulunmuştur. Bu güçlü ilişki televizyon izlemek gibi günlük aktivitelerde görülmektedir.

Anahtar Kelimeler: Nesiller arası aktiviteler, nesiller arası ilişkiler, nesiller arası dayanışma.
Jel Kodları: J12, J13, J18

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## Introduction

The increased life expectancy of older men and women has resulted in an extension of the common life span of grandchildren and their grandparents. A similar trend toward longer overlapping life spans of generations has been observed in other countries. For example, the tradition of late family formation in Switzerland results in relatively high age differences between grandchildren and grandparents, and most grandparents of the grandchildren interviewed were older than 70 years (Höpflinger, Hummel, \& Hugentobler, 2006).
Intergenerational relations take place in all social contexts of everyday life and can be expressed at different levels: among family members living under the same roof or living separately; within social networks of friends, acquaintances, neighbors, and colleagues; and in society as a whole. However, it is within families and communities that older people interact with members of the younger generations, and that the foundations of solidarity are laid (UNECE, 2010).

The Madrid International Plan of Action on Ageing emphasizes that solidarity between generations at all levels-in families, communities, and nations-is fundamental for the achievement of a society suitable for all ages. Solidarity is also a major prerequisite for social cohesion and is a foundation for formal public welfare and informal care systems. Welfare systems rely strongly on intergenerational solidarity as younger generations support older ones (United Nations, 2002).

Family researchers are increasingly examining interactions across generations and, specifically, the relationships between grandparents and grandchildren (Bengtson \& Martin, 2001; Clarke \& Roberts, 2004; Hagestad, 1982). Grandparents usually have a less restricted role than parents since they are free from the daily stress and conflict associated with parenting and from having formal responsibility for the child's welfare (Cunningham, 2011). Research shows that contact between grandparents and their teenage grandchildren play a significant role in each other's lives (EvenZohar \& Sharlin, 2009). Both groups, especially the teenagers, feel that the bond is important (Attar-Schwartz, Tan, \& Buchanan, 2009). In addition, the grandparent-grandchild (GP-GC) relationship is an emotionally close (Ruiz \& Silverstein, 2007) and a long-lasting one and is important to grandchildren's development.

Recent publications describe grandparent-grandchildren relations in a rather positive manner, by referring to the fact that both grandparents and grandchildren play important roles for one another (Askham, Ferring, \& Lamura 2007; Connidis, 2001). Indeed, studies examining intergenerational support have found that the mutual support between grandparents and grandchildens is a significant contributor to elderly and youth individuals' life satisfaction (Silverstein and Bengston, 1994).

A study by Fuentes, Bernedo, and Fernández (2008) focused on the perception of behavioral problems in children raised by their grandparents and found that a majority of boys and girls were in the normal range on scales of externalization and internalization, as well as overall behavioral problems, though some differences were observed as a function of gender and age. Last, on the subject of spending time together, the dyad engage in different recreational activities together that tend to develop affective links and generate satisfaction. This tends to improve the quality of their relationship and develop long-lasting ties for the duration of the grandparent's life as well as that of the grandchild (Kennedy, 1992a). Of course, doing these activities depends on the influence of several variables such as age, the gender of the grandchild, ethnicity, family structure, birth order, geographical proximity, the size of the community that the grandparent lives in, and social strata (Ruiz \& Silverstein, 2007). According to Osuna (2006), age is one predictor of the enforcement style chosen by grandfathers and grandmothers. Studies by Cherlin Furstenberg (1985) indicate that younger grandparents are more likely to be active and committed to their grandchildren, whereas grandparents over 65 tend to be more distant.

Kennedy's study (1992a) concluded that older grandparents participate in activities that do not require much physical force and also observed differences related to gender such as that of grandmothers focusing on family care activities, community activities, and social activities, whereas grandfathers conducting more outdoor and task-related activities. Furthermore, granddaughters tended to share more with their grandparents.

In any case, direct influence is largely related to the grandparent's level of involvement, the influence being greater when the relationship that the two have is closer, and when grandparents act as substitute parents. Grandparents who participate in various activities with their grandchildren and offer support during crisis have more power and influence over them. When this occurs, it allows for value structures with a greater generational perspective (García, Ramírez, \& Lima, 1998). Along these lines, several studies have reported that among grandparents, grandmothers have a greater influence over the development of their grandchildren's values, mainly those related to interpersonal matters such as family ideals and religious beliefs (Roberto \& Stroes, 1992).

Similarly, according to Osuna (2006), grandmothers tend to participate in the most important activities, whereas going for walks and conversing are initiated by both grandmothers and grandfathers. As grandchildren grow up, activities at home, and ongoing activities diminish in favor of more sporadic and public ones. Furthermore, classic studies on this subject have observed that the two maternal grandparents play a more significant role in their grandchildren's lives than their paternal grandparents (Cherlin \& Fustenberg, 1985; Hagestad, 1982; Van Ranst, Verschueren, \& Marcoen, 1995). Also, a more recent study by Castañeda, Sánchez, Sánchez, and Blanc (2004) reports that adult grandchildren perceive that they have learned more from their maternal grandparents than their paternal ones.

In this study we examined the impact of factors such as the grandchildren's gender, the frequency of contact with their grandparents, their geographical proximity, the grandparent's age, grandparent's education level, and grandparent's perceived health on the activities of grandchildren with their grandparents.

## 1. Method

### 1.1.Sample

This study results from a search for young grandchildren between 12 and 18 years of age in the the district of Keçiören in Ankara, this district selected by simple random method from the districts of Ankara province in Turkey. To reach the sample, easily accessible sampling method is used. An easily accessible sampling method is a sampling method on the subjects in the immediate vicinity who are easy to access, available, and volunteering (Erkus, 2013). It collected information about intergenerational activities, from the perspective of young grandchildren. The total sample includes 511 students who identify randomly from the 950 students who attend elementary and high school in these areas.

### 1.2.Instruments

1.2.1. The Demographic Characteristics of the Grandchildrens and the Grandparents: Questions were provided about the grandchildren's age, gender, educational background, and their grandparents' state of being alive, age, and educational level for specification.
1.2.2. The Grandparents' Health Status for Grandchildren: A quadruplet scale has been used for grandchildren to identify their sense of the health status of their grandparents. The scale has four choices such as bad, middle, good, and very good, and the choices have points from 1 to 4 , increasing from bad to very good.
1.2.3. Frequency of Contact with the Grandparents: There is another scale that includes choices that are few and far between: quarterly, monthly, weekly, or more for identifying the frequency of
contact with grandparents. The choice of few and far betweeen has 1 point, whereas weekly or more has 4 points, suggesting that the points increase with frequency of contact.
1.2.4. Geographical Proximity with Grandparents: This is a 4-point Likert scale for identifying geographical proximity with grandparents. The 4-point Likert scale includes the same house, the same neighborhood, the same city but a different neighborhood, and a different city. The same house has 1 point, the different city has 4 points, and the increasing direction is from the same house to the different city.
1.2.5. The Grandchildren's Activities with the Grandparents: To identify these activities, there are 10 alternatives such as discussions, watching TV, shopping, and religious activities. A 5-point Likert scale was used including: never (0), rarely (1), sometimes (2), usually (3), and every time (4). As the means of points increase, so does the status of activities done together.

### 1.3.Data Analysis

The data gathering technique used depended on the face-to-face meeting between the young grandchildren and the researchers, and the duration of the survey was between June 6 and July 6, 2015. Data analysis was conducted using SPSS 24.0. For specification of importance level, there were two analyses performed. To determine the level of significance, a $t$-test with binary groups and a one-way analysis of variance (ANOVA) with triple or more groups was applied. $P$-values obtained by the test results were evaluated at a significance level of $\alpha=0.05$.

## 2. Results

### 2.1.The Demographic Characteristics of The Grandchildrens and Grandparents

$22.9 \%$ of the participants ages were $12,20.7 \%$ were $13,21.1 \%$ were $14,21.6 \%$ were $15-16$, and $13.8 \%$ were $17-18.68 .2 \%$ of the grandchildren were in elementary school and $31.8 \%$ were in high school. A total of $54.4 \%$ of the participants were girls and $45.6 \%$ were boys.
As seen in Table 1, $79.9 \%$ of the grandchildren have a maternal grandmother (GM) who is alive and $70.8 \%$ have a paternal grandfather (GF) who is alive. The rate is $54.8 \%$ for grandchildren with a maternal GF who is alive and $50.8 \%$ for grandchildren with a paternal GF who is alive.
A total of $50.5 \%$ of the grandchildren have a maternal GM whose age is between 61 and 73 and who has an educational level equal or less than primary school at a rate of 76.6\%. A total of 52.3\% of the grandchildren have a paternal GM whose age is equal or less than 65 with an educational level equal to or less than primary school at a rate of $76.5 \%$. The grandchildren's maternal GFs have a rate of $48 \%$ and paternal GFs have a rate of $58.9 \%$ for ages between 66 and 80 .

The grandchildren's maternal GMs have an educational level of equal to or less than primary school at a rate of $57.9 \%$, and the grandcildren's paternal GFs have an educational level of equal to or less than primary school at a rate of $57 \%$ (Table 1).

Table 1: Demographic Characteristics of the Grandchildrens and the Grandparents

|  |  |  | N | \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 12 | 126 | 22,9 |
|  | Grandchildren's Age | 13 | 114 | 20,7 |
|  | Groups | 14 | 116 | 21,1 |
|  | ( $\mathrm{N}=551$ ) | 15-16 | 119 | 21,6 |
| Demographic Characteristics of the |  | 17-18 | 76 | 13,8 |
|  | Grandchildren's Gender | Women | 300 | 54,4 |
|  | ( $\mathrm{N}=551$ ) | Men | 251 | 45,6 |
|  | Education of | Secondary School | 376 | 68,2 |
|  | Grandchildren's $(\mathrm{N}=551)$ | High School | 175 | 31,8 |
|  | Grandmothers | Alive | 440 | 79,9 |
|  | ( $\mathrm{N}=551$ ) | Dead | 111 | 20,1 |
|  | Grandfathers | Alive | 390 | 70,8 |
| State of being alive | ( $\mathrm{N}=551$ ) | Dead | 161 | 29,2 |
| State of being alive | Maternal grandfathers | Alive | 302 | 54,8 |
|  | ( $\mathrm{N}=551$ ) | Dead | 249 | 45,2 |
|  | Paternal grandfathers | Alive | 280 | 50,8 |
|  | ( $\mathrm{N}=551$ ) | Dead | 271 | 49,2 |
|  |  | 60 aged and under | 168 | 38,2 |
|  |  | 61-73 | 222 | 50,5 |
|  |  | 74 aged and over | 50 | 11,3 |
|  |  | 65 aged and under | 204 | 52,3 |
|  | $\begin{aligned} & \text { Grandfathers } \\ & (\mathbf{N}=290) \end{aligned}$ | 66-80 | 164 | 42,1 |
|  |  | 81 aged and over | 22 | 5,6 |
| Age Groups of Grandparents |  | 65 aged and under | 144 | 47,7 |
|  |  | 66-80 | 145 | 48,0 |
|  |  | 81 aged and over | 13 | 4,3 |
|  |  | 65 aged and under | 97 | 34,6 |
|  | Paternal Grandfathers $(\mathbf{N}=\mathbf{2 8 0})$ | 66-80 | 165 | 58,9 |
|  |  | 81 aged and over | 18 | 6,5 |
|  |  | Primary school or less | 337 | 76,6 |
|  | Maternal Grandmother | Secondary school | 66 | 15,0 |
|  | ( $\mathrm{N}=440$ ) | Highschool | 29 | 6,6 |
|  |  | University | 8 | 1,8 |
|  |  | Primary school or less | 298 | 76,4 |
|  | Paternal Grandmother | Secondary school | 63 | 16,2 |
|  | ( $\mathrm{N}=390$ ) | Highschool | 24 | 6,2 |
|  |  | University | 5 | 1,2 |
| Education level of Grandparents |  | Primary school or less | 175 | 57,9 |
|  |  | Secondary school | 67 | 22,2 |
|  | $(\mathrm{N}=302)$ | Highschool | 37 | 12,3 |
|  |  | University | 23 | 7,6 |
|  |  | Primary school or less | 160 | 57,1 |
|  | Paternal Grandfather | Secondary school | 65 | 23,2 |
|  | ( $\mathrm{N}=280$ ) | Highschool | 43 | 15,4 |
|  |  | University | 12 | 4,3 |

Table 2 shows the perceived health status of grandparents, the frequency of contact between grandchildren and grandparents, and the geographical proximity of grandparents. The frequency of contact between a maternal GM and an grandchildren average was 3.04 (SD: 1,23), the frequency of contact with a paternal GM was 3.17 (SD: 1,042), the frequency of contact with a maternal GF was 2.97 (SD: 1,193), and the frequency of contact with a paternal GF was 3.18 (SD: 1,060 ).

Table 2: Means of Perceived Health, Frequency of Contact and Geographic ProximityPerspective of Grandchildren

|  |  | Mean (Std. Dev) <br> Min 1 Max 4) |
| :--- | :--- | :---: |
| Perceived Health | Maternal GM | $2.9118(0,82973)$ |
|  | Paternal GM | $2,7647(0,83653)$ |
|  | Maternal GF | $2,9853(0,76966)$ |
|  | Paternal GF | $2,8382(0,88795)$ |
| Frequency of Contact | Maternal GM | $3,0438(1,12373)$ |
|  | Paternal GM | $3,1752(1,04246)$ |
|  | Maternal GF | $2,9708(1,19399)$ |
|  | Paternal GF | $3,1898(1,06089)$ |
| Geographic Proximity | Maternal GM | $3,0149(0,80399)$ |
|  | Paternal GM | $2,7313(0,90250)$ |
|  | Maternal GF | $3,0426(0,76185)$ |
|  | Paternal GF | $2,7388(0,90885)$ |

### 2.2.Grandchildren's Activities with Grandparents

From the perspective of grandchildren, the activities done together with GPs and GC are shown in Table 3.
Table 3: Means of Activities with Grandparents - Perspective of Grandchildren

| Activities with Grandparents | Maternal GM |  | Paternal GM | Maternal GF | Paternal GF |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Discussions | 2,54 | 1,15 | 2,28 | 1,28 | 2,36 | 1,28 | 2,29 | 1,31 |
| Watching Television | 2,79 | 1,12 | 2,61 | 1,20 | 2,61 | 1,23 | 2,57 | 1,24 |
| Shopping | 2,12 | 1,39 | 1,88 | 1,42 | 1,93 | 1,43 | 1,88 | 1,39 |
| Religious activities | 2,15 | 1,53 | 2,03 | 1,54 | 1,88 | 1,56 | 1,99 | 1,50 |
| Reading | 1,51 | 1,39 | 1,44 | 1,43 | 1,47 | 1,41 | 1,47 | 1,46 |
| Help with homework | 1,06 | 1,42 | 0,91 | 1,36 | 1,09 | 1,39 | 1,13 | 1,48 |
| Visiting a party/festival | 1,69 | 1,43 | 1,52 | 1,37 | 1,49 | 1,40 | 1,38 | 1,36 |
| Go on a walk/play a sport | 1,59 | 1,48 | 1,39 | 1,41 | 1,45 | 1,39 | 1,29 | 1,38 |
| Travelling | 2,00 | 1,47 | 1,72 | 1,48 | 1,64 | 1,47 | 1,58 | 1,45 |
| Going to the cinema/theater | 1,11 | 1,40 | 1,01 | 1,33 | 1,02 | 1,33 | 0,95 | 1,36 |

"Watching TV" (maternal GM: Ave: 2,79 SD: 1,12; paternal GM: Ave: 2,61 SD: 1,20; maternal GF: Ave: 2,61 SD: 1,23 ; paternal GF: Ave: 2,57 SD: 1,24 ) and "discussions" (maternal GM: Ave: 2,54 SD 1,15; paternal GM: Ave: 2,28 SD: 1,28; maternal GF: Ave: 2,36 SD: 1,28; paternal GF: Ave: 2,29 SD: 1,31 ) had the highest averages as activities undertaken with the maternal GM, paternal GM, maternal GF, and paternal GF. Religious activities, shopping, and traveling followed these activities. The activities of visiting a party/festival, going on a walk/playing a sport, reading, going to the cinema/theater, and helping with homework had the lowest averages, respectively. Help with homework is often valued and emphasized not only by the older generation but also by many grandchildren. Howewer, few grandparents were actively involved in this activity (Table 3).
Our study shows that the means of activities between maternal GMs and grandchildren are much greater than the means of activities between paternal GMs and grandchildren. Similarly, the means of activities (except religious activities) between maternal GFs and grandchildren are much greater than activities between paternal GFs and grandchildren (Table 3).
It was found that the activities with GPs who were less than 60 had higher mean activities than others. However, visiting a party/festival and traveling with the maternal GM, shopping, helping with homework, going on a walk/playing a sport, and going to the cinema/theater with the maternal
and paternal GM; however, watching television and shopping activities done together have statistically significant differences between the age of GP $(p<0,05)$ (Table 4).

Table 4: Age of Grandparent and Activities with Grandparents

|  |  | -60 |  | 61-73 |  | 74+ |  | $t$ | $P$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | S.D. | Mean | S.D. | Mean | S.D. |  |  |
| Discussions | Maternal GM | 2,54 | 1,26 | 2,60 | 1,09 | 2,29 | 1,08 | 1,48 | 0,23 |
|  | Paternal GM | 2,37 | 1,28 | 2,12 | 1,28 | 2,59 | 1,22 | 2,47 | 0,09 |
|  | Maternal GF | 2,46 | 1,24 | 2,30 | 1,28 | 2,08 | 1,50 | 0,91 | 0,40 |
|  | Paternal GF | 2,27 | 1,32 | 2,32 | 1,28 | 2,00 | 1,53 | 0,50 | 0,61 |
| Watching Television | Maternal GM | 2,84 | 1,14 | 2,80 | 1,13 | 2,63 | 1,01 | 0,64 | 0,53 |
|  | Paternal GM | 2,67 | 1,14 | 2,56 | 1,27 | 2,41 | 1,33 | 0,74 | 0,48 |
|  | Maternal GF | 2,71a | 1,23 | 2,60a | 1,22 | 1,69b | 1,25 | 4,11 | 0,02* |
|  | Paternal GF | 2,61 | 1,24 | 2,63 | 1,19 | 1,94 | 1,59 | 2,57 | 0,08 |
| Shopping | Maternal GM | 2,31a | 1,41 | 2,05ab | 1,38 | 1,80b | 1,34 | 3,26 | 0,04* |
|  | Paternal GM | 2,12a | 1,37 | 1,59b | 1,41 | 1,91ab | 1,60 | 6,44 | 0,00* |
|  | Maternal GF | 2,08a | 1,44 | 1,88ab | 1,40 | 1,00b | 1,41 | 3,66 | 0,03* |
|  | Paternal GF | 2,10 | 1,32 | 1,76 | 1,41 | 1,67 | 1,57 | 2,04 | 0,13 |
| Religious activities | Maternal GM | 2,15 | 1,58 | 2,16 | 1,54 | 2,12 | 1,36 | 0,01 | 0,99 |
|  | Paternal GM | 2,06 | 1,54 | 1,93 | 1,52 | 2,41 | 1,68 | 1,03 | 0,36 |
|  | Maternal GF | 1,93 | 1,58 | 1,90 | 1,53 | 1,23 | 1,64 | 1,21 | 0,30 |
|  | Paternal GF | 2,06 | 1,49 | 1,96 | 1,50 | 1,83 | 1,65 | 0,23 | 0,79 |
| Reading | Maternal GM | 1,64 | 1,47 | 1,45 | 1,37 | 1,31 | 1,14 | 1,45 | 0,24 |
|  | Paternal GM | 1,55 | 1,45 | 1,29 | 1,36 | 1,68 | 1,70 | 1,84 | 0,16 |
|  | Maternal GF | 1,57 | 1,46 | 1,39 | 1,38 | 1,31 | 1,38 | 0,68 | 0,51 |
|  | Paternal GF | 1,65 | 1,41 | 1,35 | 1,47 | 1,50 | 1,62 | 1,25 | 0,29 |
| Help with homework | Maternal GM | 1,29a | 1,55 | 0,91b | 1,33 | 0,92b | 1,22 | 3,62 | 0,03* |
|  | Paternal GM | 1,06a | 1,43 | 0,71b | 1,21 | 1,00ab | 1,54 | 3,12 | 0,045* |
|  | Maternal GF | 1,17 | 1,44 | 1,00 | 1,35 | 1,23 | 1,42 | 0,63 | 0,53 |
|  | Paternal GF | 1,35 | 1,53 | 0,98 | 1,41 | 1,39 | 1,69 | 2,27 | 0,11 |
| Visiting a party/festival | Maternal GM | 1,92a | 1,52 | 1,59ab | 1,36 | 1,35b | 1,30 | 4,29 | 0,01* |
|  | Paternal GM | 1,67 | 1,38 | 1,37 | 1,31 | 1,23 | 1,51 | 2,83 | 0,06 |
|  | Maternal GF | 1,57 | 1,40 | 1,40 | 1,39 | 1,54 | 1,56 | 0,52 | 0,60 |
|  | Paternal GF | 1,49 | 1,34 | 1,30 | 1,38 | 1,50 | 1,47 | 0,66 | 0,52 |
| Go on a walk/play a sport | Maternal GM | 1,86a | 1,54 | 1,50b | 1,42 | 1,06b | 1,36 | 6,48 | 0,00* |
|  | Paternal GM | 1,63a | 1,45 | 1,10b | 1,29 | 1,27ab | 1,55 | 6,62 | 0,00* |
|  | Maternal GF | 1,55 | 1,40 | 1,36 | 1,38 | 1,38 | 1,50 | 0,71 | 0,49 |
|  | Paternal GF | 1,49 | 1,40 | 1,17 | 1,34 | 1,44 | 1,62 | 1,78 | 0,17 |
| Travelling | Maternal GM | 2,23a | 1,52 | 1,91ab | 1,42 | 1,61b | 1,38 | 4,21 | 0,02* |
|  | Paternal GM | 1,83 | 1,48 | 1,60 | 1,46 | 1,64 | 1,62 | 1,18 | 0,31 |
|  | Maternal GF | 1,79 | 1,51 | 1,55 | 1,41 | 1,15 | 1,57 | 1,72 | 0,18 |
|  | Paternal GF | 1,78 | 1,41 | 1,51 | 1,46 | 1,28 | 1,60 | 1,55 | 0,21 |
| Going to the cinema/ theater | Maternal GM | 1,28a | 1,48 | 1,07ab | 1,35 | 0,71b | 1,24 | 3,32 | 0,04* |
|  | Paternal GM | 1,15a | 1,39 | 0,78b | 1,17 | 1,36a | 1,65 | 4,49 | 0,01* |
|  | Maternal GF | 1,14 | 1,41 | 0,94 | 1,26 | 0,85 | 1,34 | 0,95 | 0,39 |
|  | Paternal GF | 1,16 | 1,41 | 0,80 | 1,31 | 1,28 | 1,45 | 2,76 | 0,06 |

Table 5 shows that the means of activities for the GPs who have an educational level of high school and above are higher than those for GPs with an educational level equal to or less than elementary school. This means that if the educational level increases, the activity mean will increase with the GP.

For almost all activities (except religious activities and going on a walk/playing a sport with the maternal GM), there were statistically significant diffences according to the mean educational level for the maternal and parental GM ( $P<0.05$ ) (Table 5).

The means of activities for the grandchildren with their GF (except discussions and religious activities with their maternal GF, and watching television with their maternal and paternal GF) had statistically significant diffences between educational levels ( $P<0.05$ ) (Table 5).

Table 5: Grandparent Education Level and Activities with Grandparents

|  |  | Less than primary school |  | Secondary school |  | High school |  | $t$ | $\boldsymbol{P}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | S.D. | Mean | S.D. | Mean | S.D. |  |  |
| Discussions | Maternal GM | 2,4 | 1,15 | 2,9 | 1,00 | 2,7 | 1,33 | 5,398 | 0,005* |
|  | Paternal GM | 2,2 | 1,26 | 2,3 | 1,32 | 3,0 | 1,30 | 4,711 | 0,010* |
|  | Maternal GF | 2,4 | 1,23 | 2,2 | 1,28 | 2,5 | 1,38 | 0,597 | 0,551 |
|  | Paternal GF | 2,1 | 1,32 | 2,3 | 1,16 | 2,7 | 1,36 | 4,281 | 0,015* |
| Watching Television | Maternal GM | 2,7 | 1,14 | 3,1 | 0,92 | 3,2 | 1,12 | 5,720 | 0,004* |
|  | Paternal GM | 2,5 | 1,21 | 2,6 | 1,24 | 3,3 | 0,81 | 5,506 | 0,004* |
|  | Maternal GF | 2,6 | 1,16 | 2,5 | 1,27 | 2,7 | 1,40 | 0,350 | 0,705 |
|  | Paternal GF | 2,5 | 1,22 | 2,4 | 1,24 | 2,9 | 1,27 | 2,644 | 0,073 |
| Shopping | Maternal GM | 2,0 | 1,38 | 2,3 | 1,26 | 2,7 | 1,56 | 5,674 | 0,004* |
|  | Paternal GM | 1,8 | 1,41 | 2,1 | 1,41 | 2,5 | 1,35 | 4,856 | 0,008* |
|  | Maternal GF | 1,9 | 1,38 | 1,5 | 1,44 | 2,6 | 1,34 | 11,292 | 0,000* |
|  | Paternal GF | 1,7 | 1,41 | 1,7 | 1,24 | 2,5 | 1,41 | 6,595 | 0,002* |
| Religious activities | Maternal GM | 2,1 | 1,52 | 2,3 | 1,51 | 2,5 | 1,64 | 1,473 | 0,230 |
|  | Paternal GM | 1,9 | 1,54 | 2,4 | 1,49 | 2,7 | 1,47 | 5,603 | 0,004* |
|  | Maternal GF | 1,9 | 1,54 | 1,8 | 1,68 | 2,0 | 1,51 | 0,375 | 0,688 |
|  | Paternal GF | 1,8 | 1,44 | 1,7 | 1,52 | 2,8 | 1,42 | 10,865 | 0,000* |
| Reading | Maternal GM | 1,4 | 1,39 | 1,7 | 1,32 | 2,3 | 1,26 | 7,351 | 0,001* |
|  | Paternal GM | 1,2 | 1,37 | 1,8 | 1,42 | 2,7 | 1,26 | 17,005 | 0,000* |
|  | Maternal GF | 1,4 | 1,41 | 1,3 | 1,36 | 2,0 | 1,37 | 5,719 | 0,004* |
|  | Paternal GF | 1,3 | 1,41 | 1,1 | 1,36 | 2,3 | 1,44 | 13,131 | 0,000* |
| Help with homework | Maternal GM | 1,0 | 1,38 | 1,0 | 1,33 | 1,7 | 1,71 | 4,691 | 0,010* |
|  | Paternal GM | 0,8 | 1,29 | 1,2 | 1,43 | 1,5 | 1,62 | 5,235 | 0,006* |
|  | Maternal GF | 1,0 | 1,35 | 0,9 | 1,23 | 1,5 | 1,61 | 3,393 | 0,035* |
|  | Paternal GF | 1,0 | 1,37 | 1,0 | 1,37 | 1,7 | 1,76 | 5,031 | 0,007* |
| Visiting a party/festival | Maternal GM | 1,6 | 1,42 | 1,8 | 1,32 | 2,4 | 1,52 | 5,794 | 0,003* |
|  | Paternal GM | 1,4 | 1,35 | 1,8 | 1,38 | 2,1 | 1,33 | 6,051 | 0,003* |
|  | Maternal GF | 1,3 | 1,31 | 1,3 | 1,40 | 2,2 | 1,45 | 9,447 | 0,000* |
|  | Paternal GF | 1,2 | 1,30 | 1,2 | 1,26 | 2,0 | 1,52 | 7,738 | 0,001* |
| Go on a walk/play a sport | Maternal GM | 1,5 | 1,47 | 1,8 | 1,43 | 2,1 | 1,60 | 2,783 | 0,063 |
|  | Paternal GM | 1,3 | 1,40 | 1,6 | 1,38 | 2,2 | 1,31 | 6,044 | 0,003* |
|  | Maternal GF | 1,3 | 1,40 | 1,3 | 1,26 | 2,0 | 1,42 | 4,981 | 0,007* |
|  | Paternal GF | 1,2 | 1,32 | 1,2 | 1,34 | 1,9 | 1,48 | 6,056 | 0,003* |
| Travelling | Maternal GM | 1,9 | 1,45 | 2,3 | 1,37 | 2,5 | 1,57 | 5,402 | 0,005* |
|  | Paternal GM | 1,6 | 1,48 | 1,9 | 1,39 | 2,4 | 1,52 | 4,117 | 0,017* |
|  | Maternal GF | 1,5 | 1,41 | 1,4 | 1,50 | 2,3 | 1,45 | 7,765 | 0,001* |
|  | Paternal GF | 1,4 | 1,37 | 1,3 | 1,37 | 2,4 | 1,54 | 12,231 | 0,000* |
| Going to the cinema/ theater | Maternal GM | 1,0 | 1,35 | 1,2 | 1,43 | 1,9 | 1,53 | 8,168 | 0,000* |
|  | Paternal GM | 0,8 | 1,25 | 1,4 | 1,38 | 2,0 | 1,48 | 12,540 | 0,000* |
|  | Maternal GF | 0,9 | 1,29 | 0,7 | 1,13 | 1,6 | 1,51 | 8,531 | 0,000* |
|  | Paternal GF | 0,8 | 1,26 | 0,9 | 1,25 | 1,6 | 1,61 | 7,259 | 0,001* |

The conclusion of the study is that the activity means for the GPs in good health is much greater than the activity means for the GPs in worse health. In other words, as the health conditions improve, the activity rate increases (Table 6).

There are statistically significant differences between almost all activity means (except watching TV with maternal GMs) and perceived health by the maternal and paternal GM ( $P<0.05$ ) (Table 6).

The study shows that there is no statistically significant relationship between religious activities, being helped with homework by the maternal GF, and the perceived health of the maternal GF ( $p>0.05$ ). However, discussion, help with homework, going on a walk/ playing a sport, and going to the cinema/theater with the paternal GF and the perceived health of the paternal GF had a statistically significant relationship ( $\mathrm{P}<0.05$ ) (Table 6).
Table 6: Perceived Health and Activities with Grandparents

|  |  | Bad |  | Good |  | Very good |  | $t$ | $P$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | S.D. | Mean | S.D. | Mean | S.D. |  |  |
| Discussions | Maternal GM | 2,4 | 1,11 | 2,5 | 1,12 | 2,9 | 1,22 | 7,805 | 0,000* |
|  | Paternal GM | 1,9 | 1,19 | 2,4 | 1,23 | 2,6 | 1,41 | 9,617 | 0,000* |
|  | Maternal GF | 2,0 | 1,19 | 2,4 | 1,23 | 2,7 | 1,35 | 6,369 | 0,002* |
|  | Paternal GF | 2,2 | 1,21 | 2,2 | 1,27 | 2,7 | 1,45 | 3,422 | 0,034* |
| Watching Television | Maternal GM | 2,8 | 1,13 | 2,7 | 1,12 | 3,0 | 1,09 | 2,944 | 0,054 |
|  | Paternal GM | 2,4 | 1,27 | 2,7 | 1,11 | 2,9 | 1,25 | 4,245 | 0,015* |
|  | Maternal GF | 2,1 | 1,23 | 2,7 | 1,21 | 2,9 | 1,17 | 8,745 | 0,000* |
|  | Paternal GF | 2,4 | 1,26 | 2,7 | 1,12 | 2,7 | 1,41 | 1,351 | 0,261 |
| Shopping | Maternal GM | 1,8 | 1,44 | 2,2 | 1,30 | 2,4 | 1,42 | 5,955 | 0,003* |
|  | Paternal GM | 1,6 | 1,46 | 1,9 | 1,34 | 2,4 | 1,36 | 9,376 | 0,000* |
|  | Maternal GF | 1,5 | 1,33 | 1,9 | 1,40 | 2,5 | 1,43 | 10,133 | 0,000* |
|  | Paternal GF | 1,7 | 1,42 | 1,9 | 1,29 | 2,0 | 1,54 | 1,457 | 0,235 |
| Religious activities | Maternal GM | 2,0 | 1,51 | 2,0 | 1,50 | 2,5 | 1,56 | 4,581 | 0,011* |
|  | Paternal GM | 1,7 | 1,52 | 2,1 | 1,50 | 2,4 | 1,60 | 4,373 | 0,013* |
|  | Maternal GF | 1,6 | 1,54 | 2,0 | 1,55 | 2,1 | 1,57 | 2,461 | 0,087 |
|  | Paternal GF | 1,9 | 1,46 | 1,9 | 1,51 | 2,3 | 1,53 | 1,477 | 0,230 |
| Help with homework | Maternal GM | 1,4 | 1,30 | 1,4 | 1,33 | 2,0 | 1,53 | 6,928 | 0,001* |
|  | Paternal GM | 1,2 | 1,41 | 1,4 | 1,37 | 1,9 | 1,49 | 6,718 | 0,001* |
|  | Maternal GF | 1,2 | 1,36 | 1,4 | 1,39 | 1,9 | 1,44 | 4,739 | 0,009* |
|  | Paternal GF | 1,5 | 1,51 | 1,3 | 1,38 | 1,8 | 1,52 | 2,026 | 0,134 |
| Visiting a party/festival | Maternal GM | 0,8 | 1,27 | 1,0 | 1,35 | 1,5 | 1,63 | 7,078 | 0,001* |
|  | Paternal GM | 0,6 | 1,18 | 0,9 | 1,28 | 1,5 | 1,64 | 11,693 | 0,000* |
|  | Maternal GF | 1,0 | 1,31 | 1,0 | 1,35 | 1,3 | 1,54 | 1,613 | 0,201 |
|  | Paternal GF | 1,0 | 1,40 | 0,9 | 1,28 | 1,8 | 1,71 | 10,454 | 0,000* |
| Go on a walk/play a sport | Maternal GM | 1,4 | 1,38 | 1,7 | 1,36 | 2,1 | 1,54 | 5,927 | 0,003* |
|  | Paternal GM | 1,2 | 1,25 | 1,6 | 1,35 | 2,0 | 1,46 | 9,598 | 0,000* |
|  | Maternal GF | 1,1 | 1,21 | 1,4 | 1,36 | 2,0 | 1,50 | 8,848 | 0,000* |
|  | Paternal GF | 1,2 | 1,26 | 1,3 | 1,32 | 1,7 | 1,54 | 2,892 | 0,057 |
| Travelling | Maternal GM | 1,3 | 1,43 | 1,6 | 1,44 | 2,0 | 1,52 | 8,573 | 0,000* |
|  | Paternal GM | 1,0 | 1,23 | 1,4 | 1,41 | 2,1 | 1,42 | 18,853 | 0,000* |
|  | Maternal GF | 1,1 | 1,21 | 1,4 | 1,38 | 1,9 | 1,48 | 6,100 | 0,003* |
|  | Paternal GF | 1,2 | 1,32 | 1,2 | 1,31 | 1,7 | 1,55 | 3,518 | 0,031* |
| Going to the cinema/ theater | Maternal GM | 1,8 | 1,42 | 1,9 | 1,45 | 2,5 | 1,45 | 8,797 | 0,000* |
|  | Paternal GM | 1,5 | 1,42 | 1,8 | 1,46 | 2,1 | 1,56 | 4,800 | 0,009* |
|  | Maternal GF | 1,2 | 1,32 | 1,6 | 1,43 | 2,2 | 1,53 | 9,592 | 0,000* |
|  | Paternal GF | 1,5 | 1,39 | 1,5 | 1,45 | 1,8 | 1,55 | 1,474 | 0,231 |
| Going to the cinema, theatre | Maternal GM | 0,9 | 1,30 | 1,0 | 1,33 | 1,6 | 1,55 | 9,638 | 0,000* |
|  | Paternal GM | 0,7 | 1,17 | 1,0 | 1,30 | 1,5 | 1,54 | 9,161 | 0,000* |
|  | Maternal GF | 0,7 | 1,16 | 0,9 | 1,28 | 1,6 | 1,44 | 10,385 | 0,000* |
|  | Paternal GF | 0,8 | 1,28 | 0,8 | 1,22 | 1,4 | 1,61 | 5,525 | 0,004* |

The grandchildren who saw their GPs frequently had a higher activity mean than the others. This situation (except visiting a party/festival with a maternal GM and going to the cinema/theater with both a maternal and paternal GM) is also statistically significant $(P<0.05)$ (Table 7).
Table 7: Frequency Contact and Activities with Grandparents

|  |  | rarely/never |  | once in 3 months |  | at least once a month |  | Once a week or more |  | $t$ | $\boldsymbol{P}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | S.D. | Mean | S.D. | Mean | S.D. | Mean | S.D. |  |  |
| Discussions | Maternal GM | 2,0 | 1,28 | 2,3 | 1,25 | 2,4 | 1,01 | 2,8 | 1,08 | 10,983 | 0,000* |
|  | Paternal GM | 1,4 | 1,10 | 2,4 | 1,17 | 2,1 | 1,17 | 2,6 | 1,25 | 13,831 | 0,000* |
|  | Maternal GF | 1,5 | 1,32 | 2,5 | 1,25 | 2,5 | 1,08 | 2,6 | 1,22 | 8,612 | 0,000* |
|  | Paternal GF | 1,7 | 1,45 | 2,2 | 1,18 | 2,4 | 1,18 | 2,4 | 1,32 | 4,405 | 0,002* |
| Watching Television | Maternal GM | 2,2 | 1,32 | 2,6 | 1,16 | 2,7 | 1,02 | 3,0 | 1,04 | 8,896 | 0,000* |
|  | Paternal GM | 2,0 | 1,26 | 2,6 | 1,21 | 2,6 | 1,04 | 2,8 | 1,15 | 9,288 | 0,000* |
|  | Maternal GF | 1,8 | 1,32 | 2,7 | 1,30 | 2,6 | 1,11 | 2,9 | 1,12 | 8,205 | 0,000* |
|  | Paternal GF | 1,8 | 1,39 | 2,6 | 0,97 | 2,5 | 1,17 | 2,8 | 1,20 | 7,936 | 0,000* |
| Shopping | Maternal GM | 1,9 | 1,41 | 1,9 | 1,42 | 1,9 | 1,41 | 2,3 | 1,36 | 3,167 | 0,000* |
|  | Paternal GM | 1,3 | 1,32 | 1,9 | 1,29 | 1,5 | 1,33 | 2,2 | 1,42 | 7,835 | 0,000* |
|  | Maternal GF | 1,3 | 1,40 | 2,3 | 1,42 | 1,6 | 1,43 | 2,2 | 1,36 | 5,316 | 0,000* |
|  | Paternal GF | 1,3 | 1,44 | 1,9 | 1,44 | 1,6 | 1,37 | 2,2 | 1,33 | 4,864 | 0,000* |
| Religious activities | Maternal GM | 1,6 | 1,59 | 2,1 | 1,48 | 2,1 | 1,53 | 2,3 | 1,50 | 4,009 | 0,010* |
|  | Paternal GM | 1,6 | 1,58 | 2,1 | 1,41 | 1,8 | 1,54 | 2,2 | 1,53 | 1,962 | 0,007* |
|  | Maternal GF | 1,1 | 1,52 | 2,1 | 1,54 | 2,0 | 1,51 | 2,1 | 1,54 | 3,825 | 0,000* |
|  | Paternal GF | 1,9 | 1,66 | 2,3 | 1,19 | 1,9 | 1,63 | 2,0 | 1,47 | 1,964 | 0,089 |
| Reading | Maternal GM | 1,1 | 1,41 | 1,2 | 1,32 | 1,5 | 1,40 | 1,7 | 1,37 | 3,834 | 0,000* |
|  | Paternal GM | 0,9 | 1,14 | 1,4 | 1,41 | 1,4 | 1,37 | 1,7 | 1,48 | 3,543 | 0,000* |
|  | Maternal GF | 0,8 | 1,17 | 1,5 | 1,49 | 1,2 | 1,24 | 1,8 | 1,45 | 5,428 | 0,000* |
|  | Paternal GF | 1,2 | 1,41 | 1,5 | 1,47 | 1,2 | 1,35 | 1,7 | 1,52 | 2,040 | 0,000* |
| Help with homework | Maternal GM | 0,8 | 1,25 | 0,8 | 1,23 | 1,0 | 1,41 | 1,2 | 1,48 | 2,229 | 0,000* |
|  | Paternal GM | 0,6 | 1,07 | 0,9 | 1,44 | 0,9 | 1,44 | 1,0 | 1,36 | 0,914 | 0,000* |
|  | Maternal GF | 0,9 | 1,34 | 1,1 | 1,50 | 0,8 | 1,16 | 1,3 | 1,46 | 1,839 | 0,000* |
|  | Paternal GF | 1,0 | 1,40 | 1,1 | 1,51 | 0,8 | 1,35 | 1,4 | 1,54 | 2,044 | 0,000* |
| Visiting a party/festival | Maternal GM | 1,6 | 1,44 | 1,6 | 1,49 | 1,6 | 1,30 | 1,7 | 1,46 | 0,228 | 0,361 |
|  | Paternal GM | 1,0 | 1,12 | 1,5 | 1,38 | 1,4 | 1,31 | 1,7 | 1,42 | 4,287 | 0,010* |
|  | Maternal GF | 0,9 | 1,13 | 1,6 | 1,56 | 1,5 | 1,36 | 1,6 | 1,40 | 3,055 | 0,001* |
|  | Paternal GF | 0,9 | 1,28 | 1,4 | 1,37 | 1,3 | 1,19 | 1,5 | 1,45 | 2,290 | 0,013* |
| Go on a walk/play a sport | Maternal GM | 1,6 | 1,46 | 1,4 | 1,45 | 1,4 | 1,39 | 1,7 | 1,52 | 0,958 | 0,000* |
|  | Paternal GM | 0,9 | 1,21 | 1,3 | 1,51 | 1,2 | 1,33 | 1,6 | 1,43 | 3,798 | 0,000* |
|  | Maternal GF | 0,9 | 1,14 | 1,5 | 1,50 | 1,3 | 1,25 | 1,7 | 1,44 | 3,820 | 0,000* |
|  | Paternal GF | 0,9 | 1,14 | 1,3 | 1,45 | 1,1 | 1,30 | 1,5 | 1,44 | 2,153 | 0,000* |
| Travelling | Maternal GM | 1,7 | 1,51 | 1,9 | 1,38 | 2,1 | 1,45 | 2,0 | 1,48 | 1,071 | 0,000* |
|  | Paternal GM | 1,2 | 1,35 | 1,7 | 1,57 | 1,7 | 1,44 | 1,9 | 1,48 | 3,371 | 0,000* |
|  | Maternal GF | 0,9 | 1,20 | 1,8 | 1,51 | 1,6 | 1,44 | 1,9 | 1,48 | 4,553 | 0,000* |
|  | Paternal GF | 1,0 | 1,30 | 1,7 | 1,49 | 1,4 | 1,33 | 1,8 | 1,51 | 3,224 | 0,000* |
| Going to the cinema/ theater | Maternal GM | 1,0 | 1,41 | 0,8 | 1,20 | 1,1 | 1,38 | 1,2 | 1,44 | 1,670 | 0,173 |
|  | Paternal GM | 0,7 | 1,18 | 0,7 | 1,16 | 1,1 | 1,35 | 1,1 | 1,39 | 1,767 | 0,135 |
|  | Maternal GF | 0,5 | 0,93 | 1,1 | 1,45 | 0,8 | 1,08 | 1,3 | 1,45 | 4,003 | 0,004* |
|  | Paternal GF | 0,8 | 1,30 | 0,9 | 1,21 | 0,9 | 1,36 | 1,1 | 1,43 | 0,649 | 0,628 |

Grandchildren who lived in the same home or in the same neighborhood had a higher activity mean than grandchildren living in different cities or different neighborhoods.
However, religious activities, visiting a party/festival, and going to the cinema/theater with a maternal and paternal GM, discussions, religious activities with a paternal GF, visiting a
party/festival, and going to the cinema/theater with both a maternal and paternal GF did not have a statistically significant relationship between geographical proximity ( $P>0.05$ ) (Table 8).

Table 8: Geographic Proximity and Activities with Grandparents

|  |  | in the same house |  | the same neighbourhood |  | in the same city |  | Different city or country |  | $t$ | $\boldsymbol{P}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | S.D. | Mean | S.D. | Mean | S.D. | Mean | S.D. |  |  |
| Discussions | Maternal GM | 2,7 | 1,14 | 2,7 | 1,02 | 2,5 | 1,13 | 2,3 | 1,28 | 3,611 | 0,013* |
|  | Paternal GM | 2,9 | 1,07 | 2,4 | 1,21 | 2,4 | 1,36 | 1,8 | 1,16 | 8,608 | 0,000* |
|  | Maternal GF | 2,1 | 1,55 | 2,7 | 1,15 | 2,4 | 1,20 | 2,0 | 1,37 | 4,267 | 0,006* |
|  | Paternal GF | 2,6 | 1,08 | 2,5 | 1,28 | 2,2 | 1,35 | 2,0 | 1,30 | 2,471 | 0,062 |
| Watching Television | Maternal GM | 3,1 | 1,20 | 2,9 | 1,02 | 2,8 | 1,08 | 2,6 | 1,24 | 2,123 | 0,000* |
|  | Paternal GM | 3,1 | 1,02 | 2,8 | 1,12 | 2,6 | 1,22 | 2,3 | 1,27 | 4,476 | 0,000* |
|  | Maternal GF | 2,4 | 1,51 | 2,9 | 1,03 | 2,7 | 1,22 | 2,3 | 1,33 | 3,846 | 0,000* |
|  | Paternal GF | 3,2 | 1,07 | 2,8 | 1,17 | 2,5 | 1,22 | 2,2 | 1,31 | 5,139 | 0,000* |
| Shopping | Maternal GM | 2,8 | 1,40 | 2,1 | 1,34 | 2,1 | 1,39 | 2,0 | 1,43 | 2,433 | 0,000* |
|  | Paternal GM | 2,3 | 1,44 | 2,0 | 1,43 | 1,9 | 1,43 | 1,6 | 1,34 | 3,254 | 0,000* |
|  | Maternal GF | 1,9 | 1,36 | 2,3 | 1,39 | 1,9 | 1,46 | 1,7 | 1,40 | 1,874 | 0,000* |
|  | Paternal GF | 2,5 | 1,23 | 2,0 | 1,33 | 1,8 | 1,43 | 1,6 | 1,41 | 2,994 | 0,000* |
| Religious activities | Maternal GM | 2,1 | 1,58 | 2,3 | 1,46 | 2,2 | 1,54 | 1,9 | 1,56 | 1,373 | 0,501 |
|  | Paternal GM | 2,2 | 1,49 | 2,1 | 1,52 | 2,1 | 1,61 | 1,8 | 1,48 | 0,962 | 0,189 |
|  | Maternal GF | 1,1 | 1,36 | 2,3 | 1,54 | 1,9 | 1,56 | 1,6 | 1,53 | 3,230 | 0,014* |
|  | Paternal GF | 2,4 | 1,53 | 1,9 | 1,47 | 1,9 | 1,52 | 2,0 | 1,51 | 0,910 | 0,286 |
| Reading | $\begin{aligned} & \text { Maternal } \\ & \text { GM } \end{aligned}$ | 1,3 | 1,50 | 1,6 | 1,42 | 1,6 | 1,35 | 1,4 | 1,39 | 0,788 | 0,000* |
|  | $\begin{aligned} & \text { Paternal } \\ & \text { GM } \end{aligned}$ | 1,5 | 1,50 | 1,5 | 1,53 | 1,6 | 1,41 | 1,2 | 1,29 | 1,600 | 0,000* |
|  | $\begin{aligned} & \text { Maternal } \\ & \text { GF } \end{aligned}$ | 0,6 | 1,41 | 1,8 | 1,57 | 1,5 | 1,39 | 1,2 | 1,23 | 3,609 | 0,000* |
|  | $\begin{aligned} & \text { Paternal } \\ & \text { GF } \end{aligned}$ | 2,0 | 1,53 | 1,5 | 1,52 | 1,4 | 1,46 | 1,4 | 1,35 | 1,268 | 0,000* |
| Help with homework | $\begin{aligned} & \text { Maternal } \\ & \text { GM } \end{aligned}$ | 1,1 | 1,63 | 1,2 | 1,44 | 1,0 | 1,41 | 1,0 | 1,38 | 0,513 | 0,000* |
|  | $\begin{aligned} & \text { Paternal } \\ & \text { GM } \end{aligned}$ | 1,2 | 1,33 | 0,9 | 1,41 | 1,0 | 1,38 | 0,7 | 1,25 | 1,602 | 0,000* |
|  | $\begin{array}{\|l\|} \hline \text { Maternal } \\ \text { GF } \\ \hline \end{array}$ | 1,3 | 1,58 | 1,2 | 1,48 | 1,1 | 1,40 | 1,0 | 1,30 | 0,572 | 0,000* |


|  | Paternal GF | 1,5 | 1,50 | 1,3 | 1,57 | 1,1 | 1,45 | 1,0 | 1,40 | 1,148 | 0,000* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Visiting a party/festival | Maternal GM | 2,0 | 1,61 | 1,7 | 1,34 | 1,6 | 1,44 | 1,7 | 1,47 | 0,670 | 0,680 |
|  | Paternal GM | 2,1 | 1,47 | 1,5 | 1,41 | 1,5 | 1,33 | 1,3 | 1,30 | 2,668 | 0,266 |
|  | Maternal GF | 1,0 | 1,85 | 1,8 | 1,34 | 1,5 | 1,44 | 1,3 | 1,32 | 2,208 | 0,504 |
|  | Paternal GF | 1,7 | 1,31 | 1,4 | 1,42 | 1,5 | 1,39 | 1,1 | 1,28 | 1,405 | 0,832 |
| Go on a walk/play a sport | Maternal GM | 1,7 | 1,74 | 1,5 | 1,40 | 1,6 | 1,50 | 1,7 | 1,52 | 0,324 | 0,000* |
|  | $\begin{aligned} & \hline \text { Paternal } \\ & \text { GM } \end{aligned}$ | 1,7 | 1,45 | 1,5 | 1,47 | 1,4 | 1,40 | 1,1 | 1,29 | 2,430 | 0,000* |
|  | Maternal GF | 1,3 | 1,58 | 1,4 | 1,43 | 1,6 | 1,37 | 1,3 | 1,38 | 0,796 | 0,000* |
|  | Paternal GF | 1,5 | 1,42 | 1,3 | 1,39 | 1,4 | 1,41 | 1,2 | 1,35 | 0,243 | 0,000* |
| Travelling | Maternal GM | 2,2 | 1,48 | 1,9 | 1,39 | 2,1 | 1,50 | 2,0 | 1,51 | 0,503 | 0,000* |
|  | $\begin{aligned} & \hline \text { Paternal } \\ & \text { GM } \end{aligned}$ | 2,1 | 1,54 | 1,8 | 1,54 | 1,7 | 1,43 | 1,6 | 1,44 | 1,325 | 0,000* |
|  | Maternal GF | 1,6 | 1,60 | 1,8 | 1,58 | 1,7 | 1,41 | 1,5 | 1,46 | 0,783 | 0,000* |
|  | Paternal GF | 1,8 | 1,51 | 1,7 | 1,49 | 1,6 | 1,42 | 1,5 | 1,46 | 0,291 | 0,000* |
| Going to the cinema/ theater | Maternal GM | 1,3 | 1,46 | 1,2 | 1,40 | 1,1 | 1,38 | 1,1 | 1,45 | 0,247 | 0,864 |
|  | Paternal GM | 1,3 | 1,42 | 1,1 | 1,48 | 1,0 | 1,27 | 0,8 | 1,18 | 1,851 | 0,137 |
|  | Maternal GF | 0,9 | 1,46 | 1,2 | 1,52 | 1,1 | 1,29 | 0,8 | 1,24 | 1,276 | 0,283 |
|  | Paternal GF | 1,0 | 1,24 | 1,0 | 1,46 | 1,0 | 1,37 | 0,9 | 1,31 | 0,121 | 0,948 |

## 3. Discussion

This research was conducted to determine the activities of young grandchildren with their grandparents, and the factors (age of GPs, education of GPs, perceived health of GPs, frequency of contact, and geographical proximity of GPs) affecting these activities. The grandchildren were asked about the activities undertaken with their grandparents, based on a list of 10 different kinds of possible intergenerational activities. While in other studies only activities with selected grandparents were measured, our data presented activities undertaken with all grandparents still living.

The activities most often mentioned are watching television and having discussions with grandparents. Talking and discussing things seem to be particularly important for young grandchildren, as earlier studies indicate (Wilk, 1999; Höpflinger et al., 2006). Additional intergenerational activities mentioned often are religious activities, shopping, and traveling (these are often also a cause for discussion). Visiting a party/festival, going on a walk/ playing a sport, reading, going to the cinema/theater, and helping with homework are additional activities less frequently mentioned (Höpflinger et al., 2006).
Viguer (2010) found that grandchildren indicated that the most frequent activities were taking care of them ( $72.5 \%$ ) and eating together ( $63 \%$ ), whereas the least frequent were going for a walk or to the park together ( $44.7 \%$ ), telling them stories ( $44.7 \%$ ), and talking about the past ( $42.6 \%$ ). They
indicated they never did certain activities; these included bringing them to or picking them up from extracurricular activities ( $64.3 \%$ ), listening to music together ( $53.3 \%$ ), and bringing them to or picking them up from school (48.6\%).

The intergenerational activities most often undertaken were activities undertaken at home, whereas external activities-like visiting a restaurant or traveling-were undertaken only with selected grandparents. Many external intergenerational activities refer only to a minority of grandchildgrandparent relationships (Höpflinger et al., 2006).
Also, in this study, the means of activities done at home with grandchildren and grandparents were in the first place, whereas the means of activities done outside the home with grandchildren and grandparents decreased gradually. It was also found that grandchildren preferred activities undertaken with the maternal grandmother.

Grandmothers continue to be given greater importance in their grandchildren's care than grandfathers, and thus children relate more closely to them from birth. Besides that, families tend to be closer to their maternal side than their parental side, so maternal grandparents have the advantage of spending more time with their grandchildren (Viguer et.al., 2010).

Many studies examine the gender of the grandparent, and kin status (maternal or paternal lineage) shows that grandchildren are significantly closer to and have better relationships with maternal over paternal grandparents. The maternal grandparents were found to be more involved and to have more influential, authority-oriented, and supportive relationships with their grandchildren. Studies also showed that grandchildren were significantly closer to and had more frequent contact with their grandmother over their grandfather (Dubas, 2001; Monserud, 2008; Mueller \& Elder, 2003; Pollet, Nettle, \& Nelissen, 2006; Van Ranst et al., 1995; Wood \& Liossis, 2007; AttarSchwartz et al., 2009).

Other studies show marginal differences between maternal and paternal grandparents and between grandmothers and grandfathers in their relationships with their grandchildren (e.g., Creasey \& Koblewski, 1991; Triado et al., 2005). There is also contradictory evidence suggesting that depending on context there might be stronger family ties between grandchildren and paternal grandparents rather than maternal grandparents (King \& Elder, 1995; Silverstein \& Long, 1998).

High age seems to reduce the intensity of common activities. The results of the German Panorama study indicate a reduced level of intergenerational activities as grandchildren grow older. The median number of activities with the preferred grandfather/grandmother decreases with age: from eight activities among grandchildren aged 10-12, to seven among grandchildren aged 13-15, to six activities at the age of 16-18 (Zinnecker et al., 2003). These results concur with the findings of various other studies (Viguer et al., 2010; Kennedy, 1992; Triado et al., 2000).
Activity means incrementally increase between grandchildren and grandparents depending on the rise of the educational level of the GP. The incremental increase on the means of cultural activities such as reading books and going to the cinema/theater is remarkable.

The intergenerational activities are strongly associated with the perceived health of a grandparent: Healthy grandparents are more active, and this is particularly true for activities like walking, making things, and visiting exhibitions. In addition, discussing values or social trends with the young is positively related to healthy aging. All in all, intergenerational activities (like regular intergenerational contacts) depend on good health, and the development of active grandparenthood in modern society is clearly associated with an extended healthy life-expectancy for older people (Höpflinger et al., 2006). In this study, we also found that, if health conditions improve, activity means increase.

It was found that the frequency of contact between the GP and grandchildren is an important factor for activity means with the GP and grandchildren. A rise in the frequency of contact effects the
means of the activities positively. This supports the findings of Osuna's (2006) study, indicating that the frequency of contact with the grandchild is an important factor because it is directly involved in yielding greater satisfaction with, and having positive effects on, the relationship. When there is more contact, the number of activities done together also tends to increase, making it easier to establish a close, direct relationship between the two, as well as a greater feeling of understanding.
As expected, this research shows that one finds a strong positive relationship between intergenerational activities and geographical proximity. The strongest relationships are observed with everyday activities like watching television.
Geographic distance and frequency of contact between grandparents and grandchildren are also linked in some studies with the quality of the relationship (Kivett, 1985; Mueller \& Elder, 2003). However, there is some evidence that long-distance grandchildren can still feel satisfied and have emotionally close relations with their grandparents (Taylor, Robila, \& Lee, 2005). They may interact through phone calls, correspondence, and face-to-face contact in the holidays. Furthermore, some studies show that although the frequency of contact might decline in the adolescent years, an emotional closeness remains (Taylor et al., 2005; Attar-Schwartz et. al., 2009).

Children who see their grandparents more often feel closer to them, have a more direct relationship with them, have a greater sense of understanding of them, and are more influenced by them (Kennedy, 1992b).

## 4. Implications for practice and policy

Intergenerational solidarity means different things to different people. To some, it simply means that different age groups have a positive view of one another, which raises the important issue of the degree to and the way in which different generations interact. Others stress the importance of consensus between generations on the best way forward (Cunningham, 2011). I believe that we need both to reduce the marginalization of both the young and the old. Intergenerational solidarity is under threat, and social and economic changes may endanger it further.

Solidarity among generations is a key feature of economic, financial, and social systems. However, the rapidly changing demographic context could create tensions between generations and represents a challenge to existing solidarity and cooperation among people of different age groups (UNECE, 2010).
Promoting a fruitful dialogue and cooperation across generations can enforce social connections among people of different ages and acknowledge the role of older persons in contemporary societies.

Older persons, as repositories of their society's history and values, can offer their knowledge and experience while young people, thanks to their better developed technological skills, can contribute by selecting the most appropriate and current tools to put common projects in place.
The cooperation of younger and older persons has numerous positive impacts, e.g., learning new technologies, handing down traditions and local history, and better communication and understanding.

We need to make conscious efforts to foster intergenerational solidarity. Policies should be targeted to strengthen solidarity through equity and reciprocity between generations:

- Policies need to strengthen intergenerational solidarity and unite generations.
- It is necessary to exchange good practices and mutual learning between different generations.
- It is necessary to provide intergenerational activities in schools and communities.
- We should encourage older people to become role models for active aging and to mentor young people.
- Initiatives need to be developed that support intergenerational contact.
- We should recognize the value of volunteering and expand opportunities for young and old people to participate in meaningful volunteer activities.
- We should recognize and support the important role of grandparents.
- We should consider the establishment of an intergenerational council of elders and young people to advise the government on policy.
- We should work with the media to provide realistic and positive images of young people and older people (Cunningham, 2011).


## 5. Limitations

To conclude, we would like to highlight some of the limitations of this study that should be taken into account in future research. One relates to the use of a single source of information, in this case, the grandchildren's perspective. For this reason, information was lacking that could have provided us with the grandparents' perspective about the types of activities undertaken with grandchildren. The data was derived from a small area of Ankara, Turkey, so the sample does not have a very large population. Replication of the study using a much larger, more representative sample is recommended. Finally, we worked with participants from a limited age range, which did not provide a perspective on the relationship at hand beyond puberty. This is a potential opportunity for longitudinal research in the future.

## References

Askham, J., Ferring, D., \& Lamura, G. (2007). Personal relationships in later life. In J. Bond, S. M. Peace, F. Dittman-Kohli, \& G. J. Westerhof (Eds.), Ageing in society: An introduction to social gerontology 3rd ed., pp. 186-208. London: Sage.

Attar-Schwartz, S., Tan, J. \& Buchanan, A. (2009) Adolescents' perspectives on relationships with grandparents: The contribution of adolescent, grandparent, and parent-grandparent relationship variables. Children and Youth Services Review 31, 1057-1066.

Bengtson, V. L., \& Martin, P. (2001). Families and intergenerational relationships in aging societies: comparing the United States with German-speaking countries. Zeitschrift für Gerontologie und Geriatrie, 34(3), 207-217.

Castañeda, P. J., Sánchez, D., Sánchez, A., \& Blanc, S. (2004). Cómo perciben los nietos adultos las relaciones con sus abuelos. Anuario de Psicología, 35, 107-123.

Cherlin, A., \& Furstenberg, F. (1985). Styles and strategies of grandparenting. In V. L. Bengtson, \& J. F. Robertson (Eds.), Grandparenthood pp. 97-116. Beverly Hills, CA: Sage.

Clarke, L., \& Roberts, C. (2004). The meaning of grandparenthood and its contribution to the quality of life of older people. Growing older: Quality of life in old age, eds A. Walker and CH Hennessy, Open University Press, London, 188-208.

Connidis, I. A. (2001). Family ties and aging. pp. 100-135. Thousand Oaks, CA: Sage.
Creasey, G. L. \& Koblewski, P. J. (1991). Adolescent grandchildren's relationships with maternal and paternal grandmothers and grandfathers. Journal of Adolescence, 14, 373-387.

Cunningham, M. (2011) Intergenerational Solidarity and its Role in Shaping the Future. In Reynolds B. and Seán Healy (Eds). I.S.B.N.No: 9781907501050 Published by: Social Justice, Ireland, 84-102.

Dubas, J. S. (2001). How gender moderates the grandparent-grandchild relationship. Journal of Family Issues, 22, 478-492.

Erkuş, A. (2013). Bilimsel Araştırma Süreci. Ankara: Seçkin Yayıncılık.
Even-Zohar, A., \& Sharlin, S. (2009). Grandchildhood: Adult grandchildren's perception of their role towards their grandparents from an intergenerational perspective. Journal of Comparative Family Studies, 167-185.
Fuentes, M. J., Bernedo, I. M., \& Fernandez-Molina, M. (2008). Adolescents in foster care with their grandparents: Parenting styles and family relationships. Journal of Intergenerational Relationships, 5(4), 41-58.
Hagestad, G. O. (1982). Parent and child: Generations in the family. In T. M. Field, A. Huston, H. C. Quay, L. Troll, \& G. E. Finley (Eds.), Review of human development. pp. 485-499. New York: Wiley.

Höpflinger, F., Hummel, C. \& Hugentobler, V. (2006). Teenage grandchildren and their grandparents in urban Switzerland. In: Swiss National Science Foundation for the promotion of scientific research. pp. 140-178. National Research Programme NRP 52.

Kennedy, G. (1992a). Shared activities of grandparents and grandchildren. Psychological Reports, 70, 211-227.

Kennedy, G. (1992b). Quality in grandparent/grandchildren relationship. International Journal of Aging and Human Development, 35, 83-98.
Kivett, V. R. (1985). Grandfathers and grandchildren: Patterns of association, helping, and psychological closeness. Family Relations, 34, 565-571.
Monserud, M. A., (2008). Intergenerational relationships and affectual solidarity between grandparents and young adults. Journal of Marriage and the Family, 70, 182-195.
Mueller, M. M., \& Elder, G. H. (2003). Family contingencies across the generations: Grandparentgrandchild relationships in holistic perspective. Journal of Marriage and Family, 65, 404-417.
Osuna, M. J. (2006). Relaciones familiares en la vejez: Vínculos de los abuelos y de las abuelas con sus nietos y nietas en la infancia. Revista Multidisciplinar de Gerontología, 16, 16-25.
Pollet, T. V., Nettle, D., \& Nelissen, M. (2006). Contact frequencies between grandparents and grandchildren in modern society: Estimates of the impact of paternity uncertainty. Journal of Cultural Evolutionary Psychology, 4, 203-213.

Ruiz, S. A., \& Silverstein, M. (2007). Relationships with grandparents and the emotional wellbeing of late adolescent and young adult grandchildren. Journal of Social Issues, 63(4), 793808.

Silverstein, M., Bengston, V. L. (1994). Does intergenerational social support influence the psychological well-being of older parents? The contingencies of declining health and widowhood. Social Science and Medicine, 38(7), 943-957.
Silverstein, M., \& Long, J. D. (1998). Trajectories of grandparents' perceived solidarity with adult grandchildren: A growth curve analysis over 23 years. Journal of Marriage and the Family, 60, 913-923.

Taylor, A. C., Robila, M., \& Lee, H. S. (2005). Distance, contact, and intergenerational relationships: Grandparents and adult grandchildren from an international perspective. Journal of Adult Development, 12, 33-41.

Triado, C., Villar, F., Sole, C., Osuna, M. J., \& Pinazo, S. (2005). The meaning of grandparenthood: Do adolescent grandchildren perceive the relationship and role in the same way their grandparents do? Journal of Intergenerational Relationships, 3, 101-121.
UNECE (2010). "Advancing intergenerational solidarity", Policy Brief on Ageing, No. 8 August 2012. Available at: http://www.unece.org/fileadmin/DAM/pau/_docs/age/2010/Policy-Briefs/8-Policy-brief_AIS.pdf
United Nations (2002), Political Declaration and Madrid International Plan of Action on Ageing, para. 42, reproduced in the Report of the Second World Assembly on Ageing, Madrid, 8-12 April 2002 (United Nations publication, Sales No. E.02.IV.4).

Van Ranst, N., Verschueren, K., \& Marcoen, A. (1995). The meaning of grandparents as view by adolescent grandchildren: An empirical study in Belgium. International Journal of Aging and Human Development, 41(4), 311-324.

Viguer, P., Meléndez, J., Valencia, S., Cantero, J. \& Navarro, E. (2010) Grandparent-Grandchild Relationships from the Children's Perspective: Shared Activities and Socialization Styles. The Spanish Journal of Psychology, Vol. 13 No. 2, 708-717.

Wilk, L. (1999) Grosseltern-Enkel-Beziehungen, in: Bundesministerium für Umwelt, Jugend und Familie (Hrsg.) Österreichischer Familienbericht, Wien: pp. 253-262.
Wood, S., \& Liossis, P. (2007). Potentially stressful life events and emotional closeness between grandparents and adult grandchildren. Journal of Family Issues, 28, 380-398.
Zinnecker, J., Behnken, I.; Maschke, S. \& Stecher, L., (2003) Null zoff \& voll busy. Die erste Jugendgeneration des neuen Jahrhunderts. Ein Selbstbild, pp. 121-163. Opladen: Leske \& Budrich.


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