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The impact of the COVID-19 pandemic on important relationships in Hungary

Abstract:

In the present study, we applied a new name generator question to map the most important adult relationships for the ego. We describe the egocentric networks that emerge as well as their variation across sociodemographic groups and the changes in the type, frequency and quality of relationships before the COVID-19 pandemic and in 2021 as reflected by the personal experience of the respondents. We have a closer look at friendship ties in particular.

The analysis uses the database of the research project “The social impact of the COVID-19 pandemic”. The data was collected online between 29 November 2021 and 11 December 2021 using a quota method among the Hungarian population aged 18-65 with internet access, with a sample size of 1,000. The quota was defined by age, gender, type of municipality and educational attainment based on the population data provided by the KSH.

According to the results, 4.6% of respondents were completely

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isolated, and respondents named an average of 5.5 persons important to them. The dominance of close family ties is very strong. The proportion of personal contacts dropped significantly during the quarantine periods, with the quality of the contacts remaining largely unchanged or deteriorating. A third of respondents mentioned a friend as one of the most important people to them. Friendly relationships are more fragile than family relationships, with young people and women in particular reporting higher rates of loss of friendships.

Introduction

The present study is essentially exploratory, using a new name generator question² to map the most important adult (over 18 years old) relationships of the respondents, and to identify the basic characteristics of these important networks of relationships. As the data collection took place at the beginning of the fourth wave, more than one and a half years after the outbreak of the Covid-19 pandemic, we also tried to collect retrospective data on changes in the contact networks and in the type, frequency and quality of important individual contacts. However, due to the limitations of the data collection, we can only aim to analyse the closest, most important contacts, which, using Dunbar's terminology, allows us to delineate the support group and partly the sympathy group (Dunbar 2018), and tries to answer, at least partially, the question regarding what happened to very important ties in the first two years of the pandemic.

Background

Interpersonal networks are not static and can change as a result of both individual and social factors. An important factor in the disruption or weakening of relationships is the change in the context of the relationship (Mollenhorst et al 2014), i.e. no longer attending the same class, working in

2 A method to map ego-centric interpersonal networks.

a different job. However, the time spent together in the context also plays a very important role (Bzdok-Dunbar 2020). As distancing, quarantine and lockdowns were the most important tools in the management of the Covid-19 pandemic, especially until vaccines became widely available, the discussion of the possible effects on personal relationships and networks of relationships and their spill-over effects, especially on mental health, have been present in the scientific discourse practically from the beginning (e.g. Pléh 2021, Bzdok - Dunbar, 2020, Fiorillo et al. 2020, Gloster et al. 2020), since forced social isolation on such a massive scale all over the world has not been experienced by humans before. However, a big question is how long the effects of the closures will last, as the mental health status of the population does not seem to have improved as much as expected despite the lifting of restrictions (Eurofound 2022). Distancing measures have been shown to have lead to a significant decrease in network size in many countries during the first wave of the pandemic in spring 2020 (e.g. Jarvis et al. 2020, Zhang et al. 2020, Bosetti et al. 2020, Latsuzbaia et al. 2020), and data have shown increased vulnerability (albeit for different reasons) of certain groups, especially young people and the elderly (Kaspersy 2020, Eurofound 2020).

Close relationships require commitment and emotional closeness, which is a time- and energy-consuming task to develop and maintain. The time invested in a relationship and the emotional closeness of the relationship are thus interrelated (Dunbar 2018), hence the long-standing use of length of time as an indicator of relationship closeness (e.g. Marsden - Campbell 1984), alongside frequency and multiplexity of contact, emotional closeness and other dimensions. Also relevant to the relational effects of the COVID-19 pandemic is the fact that relationships in which, for whatever reason, we are unable to „invest“ sufficient resources are likely to become more fragile, especially if we have not yet had sufficient time to make them truly close.

Feld (1981) argues that relationships are formed and bound by

shared activities in shared contexts (e.g. school, workplace); research over the past decades suggests that these are a major contributor to the persistence of relationships: the lack of opportunities to meet often leads to relationship breakdown, and in this sense, the lack of institutionally „forced” interactions and little time spent together increases the chances of relationship breakdown (Möllenhorst et al 2014). Pléh mentions as a general trend that confinement reinforces strong relationships, whether family or friends, while other, looser relationships are marginalised (Pléh 2021). We also know that physical distancing often results in emotional distancing (Bzdok - Dunbar 2020). And the measures taken to address the pandemic have locked most people into their households, mainly with family relations, for significant and prolonged periods of time.

Mainly researchers from the US compare the impact of the Covid-19 pandemic to that of previous natural disasters, and the lessons from these have been used to infer the effects of the pandemic on relationships. In addition to the size of contact networks, composition also plays a significant role in coping with a crisis. Hurlbert et al. (2000) found that during Hurricane Andrew, kinship ties provided more and more frequent support, but kinship ties did not provide access to certain resources, and more diverse ties were needed after the initial phase of the crisis. Similar conclusions were reached after the Mississippi River flooding in the Midwest in 2008 (Casagrande et al. 2015).

A panel study conducted in the United States in 2019 and 2020 on a non-representative sample found that the number of very close contacts did not change significantly during the analysed phase of the COVID-19 pandemic, but the composition of contact networks did: the number of close friends and colleagues decreased, while the number of very close family members increased in core networks (Kovacs et al. 2021). In May 2020, Dávid et al. (n.d.) compared Hungarian data collected using the contact diary method with data collected using a similar

method in 2015 and found that the number of face-to-face contacts per day remained broadly unchanged. However, on the one hand, the proportion of those completely isolated doubled (mostly among the youngest and the elderly), while on the other hand, the number of family contacts increased and the number of contacts with friends decreased.

In a survey (Bíró-Nagy-Szászi 2021) which took stock of the first year of the pandemic in Hungary and also looked at relationships, 70% of respondents reported no change in their social relationships during the quarantine periods, 19% reported a strengthening of family relationships and 16% reported a strengthening of their relationship with their partner, while 8% reported a deterioration in their family relationship and 5% reported a deterioration in their relationship with their partner. 19% of respondents reported a decline in their friendships, while 7% reported strengthening. One of the surprising results of the Hungarian Youth Survey 2020 was that, for the first time, the lack of friendships and communities was listed in fourth place on the map of the most pressing problems of young people, and satisfaction with friendships also decreased (Székely 2021).

We intended to find out more about these processes by gathering data with a new name generator.

Methods

The data used in this study were collected as part of a larger study on the social impact of the Covid-19 pandemic, organised in 2021 at the Institute of Sociology of the Centre for Social Sciences. Researchers in the study developed a questionnaire that examined, among other things, physical and mental health, housing, labour market conditions and social relationships in relation to the pandemic. The survey was conducted online between 29 November 2021 and 11 December 2021, with a sample of 1,000 people (using the NRC market research

company's web panel)³. The data analysed in this study were collected at the time of the 4th wave (Figure 1), with mask use being made mandatory again from 20 November 2021. The purple frame in Figure 1 indicates the time of data collection.

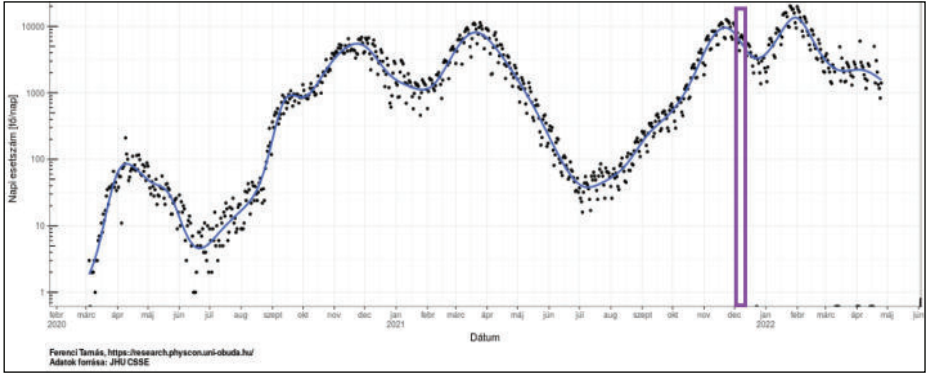


Figure 1: Waves of the Covid-19 pandemic in Hungary

Source: Ferenci Tamás (Óbudai University), <https://research.physcon.uni-obuda.hu/COVID19MagyarEpi/> v0.59

The target population was the Hungarian adult population aged 18-65 with internet access (~5.43 million people). Quotas by age, gender, type of municipality and educational attainment ensured that the sample was a good approximation of the Hungarian population along these dimensions. The data were also weighted by age, gender, type of settlement, region and educational attainment.

The block on interpersonal relationships asked respondents about the relationships respondents considered most important by asking the following question: How many people over the age of 18 are very important to you in your life? Respondents could name a total of 10 such persons, for whom the questionnaire also included additional

3 TUKEB permission number: IV/8531-1/2021/EKU

name interpreting questions such as the type of relationship (partner, child, parent, other relative, friend, colleague, neighbour, other), the sex of the person in the relationship, their age, whether they live in the same municipality as the respondent and for how long they have known each other. The questionnaire also asked how they predominantly kept in touch before and during the Covid-19 outbreak (face-to-face, by phone or online), how often they met and how the respondent rated their relationship on a scale of 1 to 10, with 1 being very poor and 10 being very good.

The questionnaire then also asked “Was there anyone you would have mentioned among the people most important to you before the Covid-19 outbreak but did not mention now among the people important to you?” Two such persons could be named, and respondents were also asked about the type of contact, the sex of the contact, their age, and whether they lived in the same municipality. In addition, a further question asked “Why did your relationship break down?” Respondents could choose from the following categories: (1) He died, (2) He moved away, (3) We grew apart, (4) We no longer have the time/desire to meet, (5) I am disappointed, (6) Other, and so on.

Results

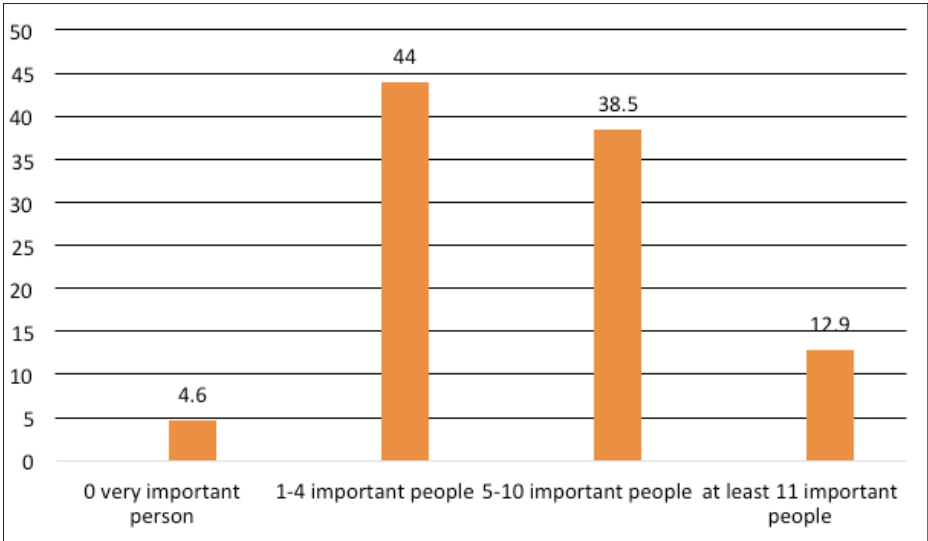


Figure 2: The distribution of the number of very important relations (%) (N=997)

On average, respondents mentioned 5.5 (95% CI: 5.3-5.8) people important to them (Figure 2). Men mentioned 5.1 (95% CI: 4.8-5.5) and women 5.9 (95% CI: 5.5-6.3) people. A total of 5,219 people important to them were named by the 997 respondents. There is a slight predominance of women in the number of persons named (alters), with 53% of the persons mentioned as important being women. A quarter of the “most important others” are persons living in the same household as the respondent, and the networks of contacts are geographically bound, as more than half of the persons mentioned live in the same municipality as the respondent.

The prominence of family relations in Hungarian society is reflected by the fact that more than 80% of the people important to the respondents have some form of kinship relation with the respondent:

11.3% of those mentioned are partners (including spouses), 12% are adult children, 16.2% are parents, 14.7% are adult siblings and 26.5% are other relatives, which may include both distant family members and members of the partner's family. In comparison, the share of other, non-kin relationship types is negligible among the most important relationships: friends are the most numerous such group, accounting for 14.6% of important relationships, colleagues for 2.2% and neighbours for 1.4%.

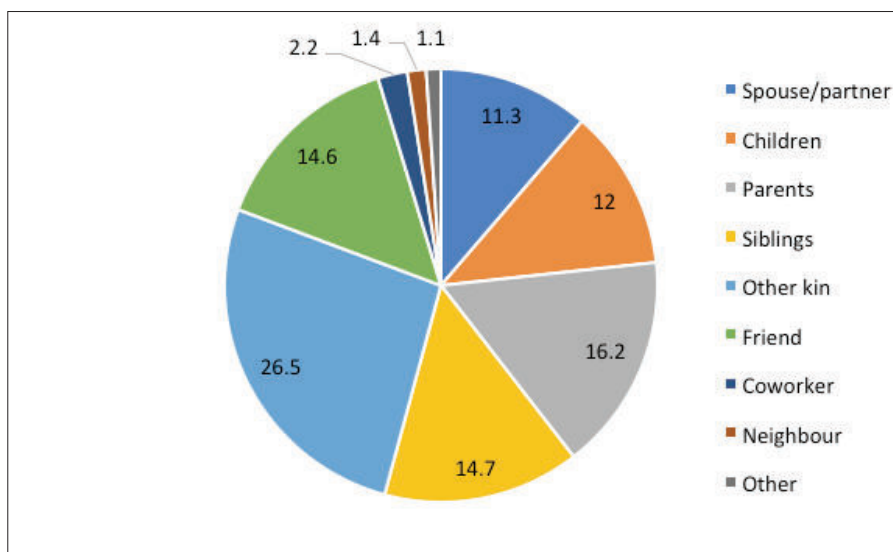


Figure 3: The share of important alters (N=5219) by primary role relation to respondent, %

Most of the important contacts are old, very long-standing. Less than a year before the survey, i.e. certainly during the Covid-19 pandemic, 3.5% of the relationships mentioned as important were established. A further 2.4% of relationships are 1-2 years old, 7.4% 3-5 years old, 10.4% 6-10 years old and 18.3% 11-20 years old. However, 58% of the

relationships have been in place for more than 20 years. Obviously, we know a good number of our relatives from birth or from the birth of the relatives mentioned, so, given that the respondents and the persons mentioned were at least 18 years old, this figure should not surprise us in light of the role relationships (Figure 3).

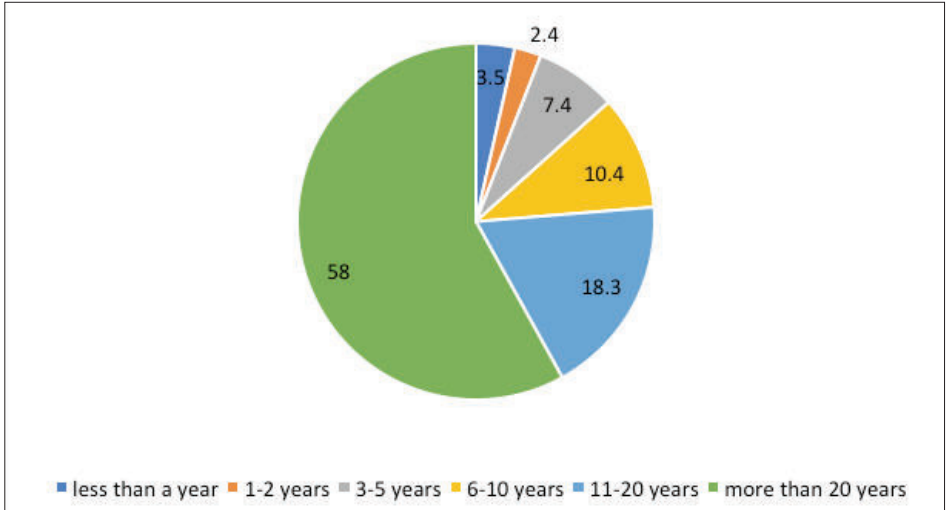


Figure 4: The share of important alters (N=5219) by the length of the relationship with the respondent, %

Looking at the composition of the respondents' networks, the surveyed adults most often consider their partner as important, with 57% mentioning their partner as one of the most important persons, but parents (53.7%), children (32.7%), siblings (47%) and other relatives (46.5%) are also among the most frequently mentioned categories. So-called "chosen" relationships, such as friends (31.9%), or even colleagues (9.1%) or neighbours (6.1%), are on average much less important. The most important relationships are the closest family relationships: partner, parent, sibling, child; the frequency of mentioning children is probably so low because the instrument asked specifically about people aged 18 and over. Previous research (Albert et al. 2021) has found

that the proportion of friendships among important relationships is increasing, but as the current data show, there is still a significant gap of around 20% between the frequency of mentioning close family relationships (partner, parent, sibling) and that of friends.

The presence of different types of relationships and the size of the networks vary significantly across socio-demographic groups. Women are more likely than men to mention their adult children or other relatives, but also more likely to mention their partners. The prevalence of partners is lowest among the youngest age group, but they mention their parents as the most important contact. Although our study has no data in this regard, the decrease in the frequency of mentioning parents with increasing age may be related to the death of parents. The prevalence of children is almost a mirror image of that of parents: 68.4% of 50-65-year-olds mentioned their children as an important relationship. The frequency of mentioning siblings also decreases with age. The importance of other relatives starts to increase again at an older age after a low point in the mid-30s. The presence of friends declines sharply with age, while that of co-workers less steeply.

Looking at the differences in the mention of friends by demographic group, while women and men mention the same proportion of friends among their important contacts, the proportion decreases with age, in line with previous findings, and increases with educational attainment. Looking at the differences by type of settlement, the data show that people living in Budapest are much more likely to have a friend (44.9%), compared to those living in towns (28.5%) and villages (30.3%). In terms of labour market status, students (46.5%) and the unemployed (41.1%) have the highest proportion of people who mention a friend, while retired people (23%) and those on child care benefits (26.6%) are the most isolated along this dimension.

Partners

65.2% of respondents are in a relationship. A surprisingly high proportion of respondents in a relationship, 19.3%, did not mention their partner among the people they care about most.

In terms of the deterioration in respondents' relationships, we could find no trace of the otherwise documented significant increase in relationship violence (Sólyomfi 2021, Szabó - Virág 2022) or in divorce filings: an almost negligible proportion, only 1.4%, mentioned their partner among the persons important to them before the Covid-19 pandemic but no longer important at the time of the interview, the reason being the death of the partner in two cases, but in the other cases the deterioration or dissolution of the relationship ("we have grown apart", "I am disappointed in him", "we cannot meet", "he has moved away").

Of course, the breakdown of the relationship could have occurred even though the former partner is still considered among the most important people, as indicated by the fact that in the other categories of relationship types, former partner or spouse was mentioned in several cases. Those who ranked their partner as the most important person to them were largely satisfied with their relationship: before the outbreak and during the closures, 66% rated their relationship as a 10 on a scale of 10, with a further 11% rating it as a 9 or 8. The perceived, recall-based quality of the relationship remained unchanged during the pandemic in the majority of the above cases (85%), and if we allow for a minimal (2 degree) variation, this figure is 98%. The reason for this „rosy” diagnosis of the situation is likely to be that a large proportion of those in a poor-quality relationship did not even mention their partner among the people most important to them.

Changes in the type, frequency and quality of contacts, compared to the period before the COVID 19 outbreak

Contact with the most important individuals was mostly face-to-face both before and after the outbreak of Covid 19, although the proportion of face-to-face contact decreased significantly during the closures, while the proportion of telephone and online contact increased.

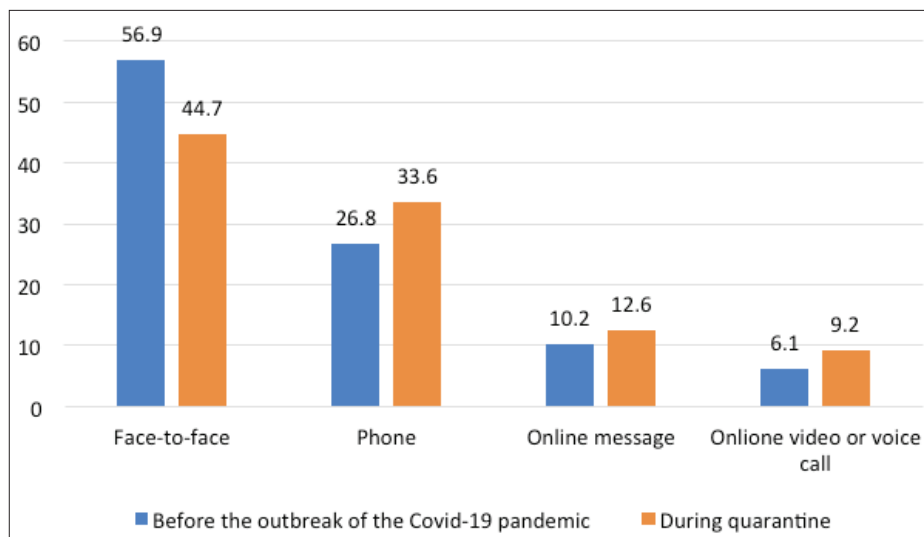


Figure 5. Typical type of contact before March 2020 and during the closures, %

In the vast majority of cases (81.5%), the type of contact did not change, with the largest proportion of contacts changing from face-to-face meetings to telephone contact (16%).

Frequency of contact was originally a seven-category variable, from which we created a new variable that gave the frequency of contact as the number of times a person met their contact per month (before and during the pandemic). From this, we could calculate how much the number of meetings had changed. The frequency of contact decreased by 0.49 ± 0.23 per month at the 95% confidence level for the whole

sample. The frequency even increased for those living in the same household (0.54 ± 0.53), and the frequency of encounters for those not living in the same household decreased slightly more than the average (-0.77 ± 0.25). Comparing the two groups, the change in the frequency of contact was significantly different ($p < 0.001$).

The quality of the relationships could be rated by the respondent on a 10-point scale both before and during the pandemic. From this, two types of indicators were generated to characterise the change in the quality of the relationship: one is the difference between the two values entered (a number between -10 and 10), and the other is a variable that only tells us whether the relationship has deteriorated (-1), not changed (0) or improved (1). Figure 11 shows that, overall, the quality of the most important relationships has not changed in the vast majority of cases (83%), but where it has, it has tended to worsen. The quality of the relationship decreased by 0.100 ± 0.027 at the 95% confidence level. Wilcoxon's test for relationship quality showed a significant deterioration in relationship quality ($p < 0.001$). It can be seen that there is a significant deterioration in the type and frequency of contact and in the quality of relationships, but the effect size is small, with the vast majority of relationships remaining unchanged.

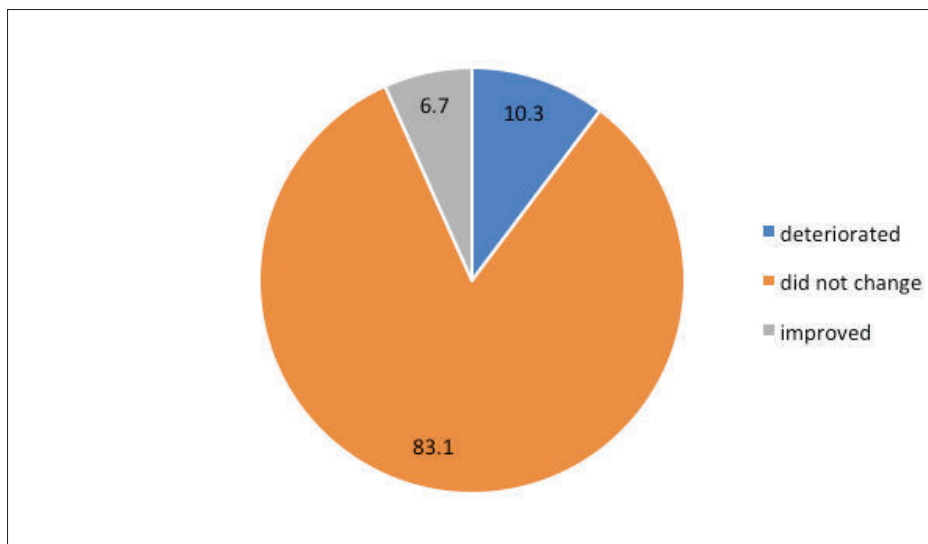


Figure 6. Changes in the quality of contacts comparing the periods before March 2020 and during the closures, %

During the COVID-19 pandemic, the quality of friendships decreased (from 8.48 to 8.27), but some demographic groups showed a more pronounced decrease than others: most notably, 30-39 year-olds (change: -0.32), those not working due to illness or disability (-0.33), housewives (-0.34) and the unemployed (-0.30). The least pronounced decrease was seen among 18-23 year-olds (-0.05), those on childcare leave (0) and the retired (-0.09).

Lost important contacts

17.5% of respondents had lost at least one relationship by December 2021 that was considered very important before March 2020. This rate is 20.1% among women (95% CI: 16.6%–23.65%), and 14.7% (95% CI: 11.5%–17.8%) among men. Women are therefore 1.5 times more likely (95% CI: 1.1-2.4) to have lost an important relationship compared to men. Using cross-tabulation analysis and logistic regression by age,

education, type of settlement, number of household members and sense of loneliness, no similar associations were found.

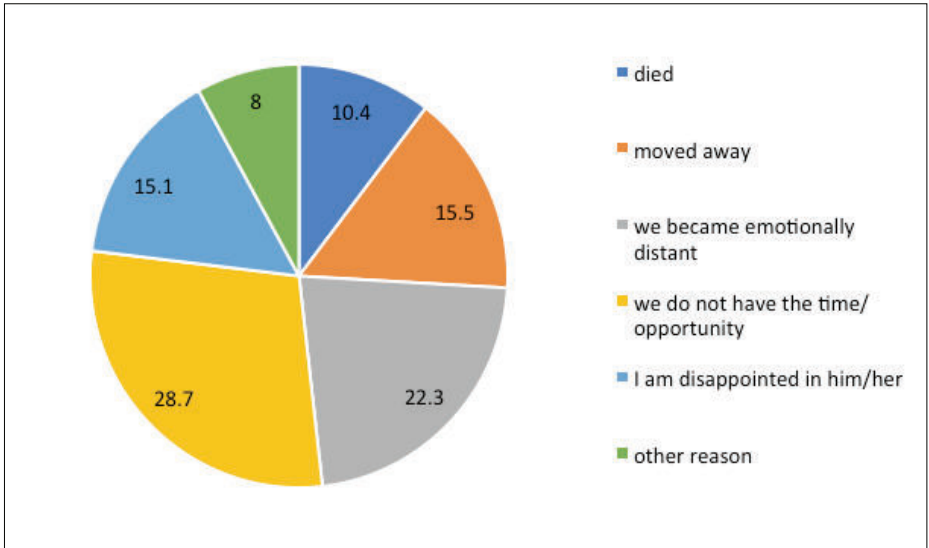


Figure 7. Reasons for losing important relationships (N=251), %

Respondents reported a total of 251 relationships that would have been their most important before the epidemic but were no longer so at the time of the survey. As mentioned in the introduction, the most frequent reason is that there was no longer time/effort to maintain the relationship (28.7% of the relationships concerned). The second most frequently mentioned reason is emotional detachment (22.3%), which can also be a cause and a consequence of the lack of or infrequent encounters. As there are very few cases, these are rather indicative, but there is also an increased involvement of friendships among broken relations, especially among women, young people and people with secondary education. Friendly relationships are more vulnerable than family relationships, with friends being the most frequently mentioned

(5.9%) among the relationships lost during the Covid-19 epidemic, followed by parents (3.7%) and other relatives (3.1%)

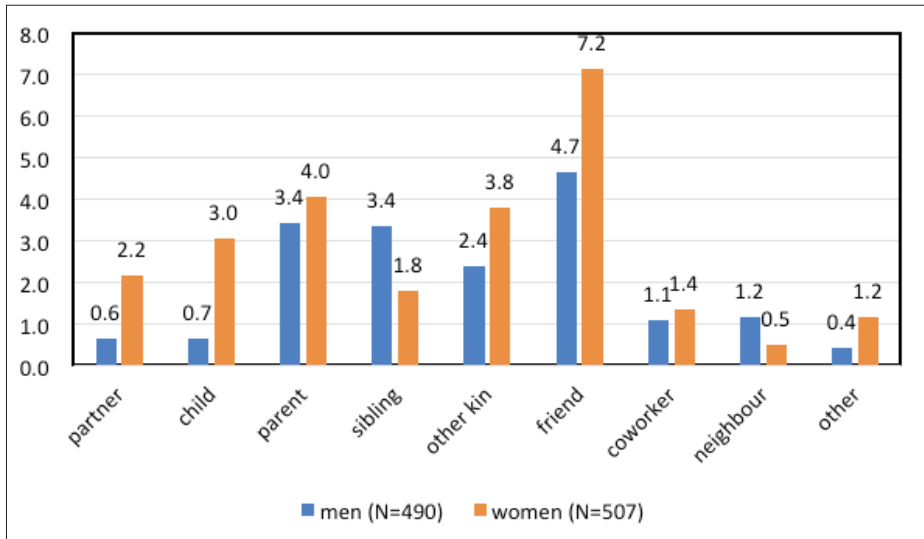


Figure 8. Lost important relationships by role relation (N=251), %

When looking specifically at the reasons for the termination of friendships (N=93), we see that there is a higher proportion of relationships that ended because the parties no longer had the time/opportunity to meet (38,7%). This result indicates the changing importance of friendships, i.e. friendships seem to be less compatible with the changed lifestyle due to the pandemic situation.

Women were more likely than men to have lost a friend during the pandemic period (7,2% of women and 4,7% of men have lost a friend), which is particularly interesting since they have a higher proportion of having only a single friend in their network of very important others. In addition, research prior to the Covid-19 pandemic (Albert et al. 2020) reported a narrowing of the difference in the number of friends between men and women, i.e. while men traditionally had more

friends, this difference was no longer significant in the 2018 data. In contrast, the present results point in the direction that the Covid-19 pandemic has reinstated the gender gap in this regard, with a higher proportion of women having lost friends. This is in line with some Hungarian research (e.g. Fodor et al., 2021, Geambaşu et al., 2020) and a growing number of international studies (e.g. Czymara et al., 2021, Reichelt et al., 2021, Hipp - Bünning, 2021) on this topic, namely, that women were in many respects more severely affected by the pandemic than men. For this reason, many fear a reversal of the progress made towards gender equality in recent decades (EIGE, 2021).

By age, the youngest age group is most affected by the loss of a friend. While 4-6% of the other age groups cited a friendly relationship broken at the time of the epidemic, 16.4% of 18-23-year-olds did so. This is also linked to differences in labour market status, as the results show that 24% of those in school reported a break-up of a friendship, compared to 3-5% of those in paid work and other inactive groups. These results highlight the vulnerability of young people and specifically young people who are students. Among the youngest age group, there are those who finished their secondary education during the virus and started their university studies (or continued their studies in other forms). In their case, new studies often started only online or, if they started semesters in face-to-face education, their schooling often ended up online. In other words, the young people concerned were less (or not at all) able to take advantage of the opportunities to get to know each other in their new training environment, and any new contacts they may have made or had during their previous secondary education could be more easily lost, as they no longer shared the same institutional environment (and new contacts were not built). A further possible explanation for the difference between young people studying and working is that distance learning is more isolating than working remotely (an online class is different from an online work meeting, where you may be freer

to talk to others). These findings also support the importance of the contexts and the length/strength of the relationship mentioned in the introduction to the study.

When we examine the probability of losing a friend in a logistic regression model, we see that the differences between women and men and between age groups are significant even when controlling for other variables (Table 1). That is, women were more likely than men, 18-23-year-olds were more likely than those aged 30 and over have lost a friend during the pandemic. The higher rate of loss of friends among women may be explained by the multiplication of their responsibilities in terms of caring for others during the pandemic period and the associated reduction in women's free time. This explanation is also supported by the interaction effects shown in Table 2, which shows a significant difference between the two sexes only for 30-39-year-olds, with the highest proportion of young children, and 50-65-year-olds with older children who moved home temporarily during the epidemic, and who often had to care for elderly parents..

In the second model, we included labour market status instead of age group (the two cannot be tested simultaneously due to the low number of cases and the correlation between the two variables). The regression results confirm that those in education were significantly more likely to have lost a friend compared to all other groups (those in paid work, the unemployed, retired or other inactive status).

Model 1			Model 2			
	AME	p	ci95	AME	p	ci95
Sex (ref. males)						
Women	0.04	0.03	0.00,0.07	0.04	0.01	0.01,0.07
Age group (ref. 18-23)						
24-29	-0.08	0.13	-0.19,0.03			
30-39	-0.11	0.03	-0.21,-0.01			
40-49	-0.10	0.06	-0.20,0.00			
50-65	-0.10	0.06	-0.20,0.00			
Educational level (ref. primary)						
secondary	0.03	0.08	-0.00,0.07	0.03	0.13	-0.01,0.07
tertiary	0.01	0.47	-0.02,0.05	0.01	0.58	-0.03,0.05
Settlement type (ref. Budapest)						
city	-0.05	0.08	-0.10,0.01	-0.05	0.06	-0.10,0.00
village	-0.04	0.18	-0.10,0.02	-0.04	0.16	-0.09,0.02
Labour market status (ref. In education)						
In gainful employment				-0.19	0.02	-0.34,-0.03
Unemployed				-0.18	0.03	-0.34,-0.02
Retired				-0.20	0.01	-0.36,-0.05
Other inactive				-0.20	0.01	-0.36,-0.04
N			996		996	
Pseudo R ²			0.05		0.07	

Dependent variable: Did you have a friend whom you would have mentioned before the outbreak of the Covid-19 pandemic but now you do not mention him/her? (0=no N=929; 1=yes N=67). AME= average marginal effects, ci95=95% confidence intervals.

Table 1: Binary logistic regression models - Probability of losing a friend during the Covid-19 epidemic

Model 3			
	b	p	ci95
Sex (ref. males)			
Women	0.03	0.03	0.00,0.07
Age group (ref. 18-23)			
24-29	-0.09	0.11	-0.20,0.02
30-39	-0.11	0.03	-0.21,-0.01
40-49	-0.10	0.06	-0.20,0.00
50-65	-0.10	0.06	-0.20,0.00
Educational level (ref. primary)			
secondary	0.03	0.11	-0.01,0.07
tertiary	0.01	0.47	-0.02,0.05
Settlement type (ref. Budapest)			
city	-0.05	0.08	-0.10,0.01
village	-0.04	0.16	-0.10,0.02
Sex – age interaction			
women # 18-23	0.10	0.30	-0.09,0.30
women # 24-29	-0.02	0.70	-0.11,0.07
women # 30-39	0.07	0.00	0.02,0.11
women # 40-49	-0.04	0.25	-0.10,0.03
women # 50-65	0.06	0.01	0.01,0.11
N		996	
Pseudo R2		0.08	

Dependent variable: Did you have a friend whom you would have mentioned before the outbreak of the Covid-19 pandemic among your closest relations but now you do not mention him/her? (0=no N=929; 1=yes N=67), AME= average marginal effects, ci95=95% confidence intervals.

Table 2: Binary logistic regression models - Probability of losing a friend during the Covid-19 epidemic – with interaction effects (sex and age)

Discussion

In our exploratory analysis, we used the name generator of important contacts to present the state of the close egocentric contact networks of the working-age, internet-using, Hungarian adult population at the end of 2021. 4.6% of respondents were completely isolated, with respondents naming an average of 5.5 people important to them. The dominance of close family ties is very strong and indicates the traditional nature of the relationship structure. However, most of these relationships are very close indeed, both in terms of the quality of the relationship and the length of time it has lasted. Contact with key ties was mostly face-to-face both before and after the Covid-19 outbreak, although the proportion of face-to-face contacts decreased significantly during the closures, while the proportion of telephone and online contacts increased. People living in the same household were more likely to be in contact during the closures than before, while people living in a different household were less likely to be in contact than before. The quality of key contacts remained overwhelmingly unchanged, scoring very highly, but where they changed, they tended to deteriorate. It is possible, however, that the method used, especially when used for retrospective data collection, does not give a realistic picture. A higher-than-expected proportion of people who used to have face-to-face contact switched to telephone contact and a lower proportion to online messaging.

There was also an increased deterioration in the quality and frequency of contacts that were previously personal but which were maintained in other ways as a result of the epidemic. Women were more likely than men to have lost a relationship that was important to them, probably not unrelated to the increased burden of caring and other responsibilities. Although our study focuses on mapping the closest relationships, even in this narrowest range of relationships, the importance of the reduction in opportunities for contact is highlighted,

as this and the closely related distancing are two of the main causes of relationship breakdown, i.e. social isolation should and could be combated by creating and supporting opportunities for contact. At the time of writing this paper, the Covid-19 pandemic is still not over, and it is important to continue to monitor its effects, including its consequences on the formation of networks of relationships and their evolution over time.

Several types of friendships have been distinguished since antiquity (see Albert - Dávid 2007 for details). For the purposes of our study, since the questionnaire was designed to capture the most important human relationships for the respondent, we have not listed the looser friendships, but rather the close, „real/true” (meaningful) ones, i.e. we describe changes in this emotionally closer field. It cannot be ruled out that trends observed in this narrower circle of friends are more pronounced in the looser, more distant circle of friends, which may be even more problematic in terms of social integration.

Overall, it can be concluded that the pandemic period has led to a weakening of friendships and, in some cases, to their disintegration. On the one hand, the loss of a friend was more pronounced among young people (and specifically among those aged 18-23 and, in this context, students), women (and specifically among women aged 30-39 and 50-65). Young people generally have more friends than older age groups, so the greater likelihood of losing a friend may be explained by the fact that they also named looser ties among their friends, which (due to their lower degree of closeness) are more affected by the epidemic situation.

Women were also more likely than men to have lost contact with a friend during the pandemic, a finding that may be related to the multiplication of caregiving tasks during the Covid-19 epidemic (Fodor et al., 2021, Geambaşu et al., 2020) and thus the marginalisation of friendships. This hypothesis is supported by the results of the

questionnaire survey, which showed significant differences between the two sexes for the 30-39 and 50-65 age groups. While for women in their 30s, the care and education of children who are already in nursery, kindergarten or school at home may have caused an increase in burden and a decrease in leisure time; the same may have been the case for those aged 50-65 who had to care for older children (moving home from college or renting) or elderly parents. The higher rate of loss of friends among women also points towards a reversal of the gender gap in the number of friends. While men have traditionally had more friends than women, the gap has disappeared in recent years (Albert et al. 2020). However, the Covid epidemic appears to have broken this trend, which should be a key area of future research. Overall, the quantitative results of the study showed that friendships were the most vulnerable of the important personal relationships during the epidemic.

A limitation of our study is that our sample is representative only of the population with internet access. In a sample representing the whole population, there may be greater differences in the data regarding the decline in face-to-face contact. In addition, the over-65s are not included in the present study, who are also less likely to use the internet, although previous research suggests that they, along with young people, are also considered to be at high risk of the negative impact of the epidemic and of losing friends.

References

- Albert F. – Dávid B. (2007) Embert barátjáról. A barátság szociológiája. Budapest: Századvég.
- Albert, F. – Dávid, B. – Tóth, G. (2020): Hány barátja van Önnek? A barátok számának alakulása három évtized alatt (1986–2018) *Socio.hu* 10(3): 3–30. <https://socio.hu/index.php/so/article/view/826/830>
- Albert F. – Koltai J. – Dávid B. (2021) The increasing importance of friends: Changes in core discussion network composition in post-communist Hungary between 1997 – 2015. *Social Networks* 66, 139-145. <https://doi.org/10.1016/j.socnet.2021.02.005>
- Bíró-Nagy, A. – Szászi, Á. (2021) Koronavírus és válságkezelés: A magyarok tapasztalatai egy év után. Friedrich-Ebert-Stiftung and Policy Solutions. <http://library.fes.de/pdf-files/bueros/budapest/17768.pdf>
- Bosetti, P., Huynh B-T., Abdou Y.A., Sanchez M., Eisenhauer C., Courtejoie N., Accardo J., Salje H., Guillemot D., Moslonka-Lefebvre M., Boëlle P-Y., Béraud G., Cauchemez S., & Opatowski L. (2020) Lockdown impact on age-specific contact patterns and behaviours in France. medRxiv reprint. doi: <https://doi.org/10.1101/2020.10.07.20205104>
- Bzdok, D. – Dunbar, R. (2020): The Neurobiology of Social Distance. *Trends in Cognitive Sciences*, 24, 717–733, DOI: 10.1016/j.tics.2020.05.016, [https://www.cell.com/trends/cognitive-sciences/fulltext/S1364-6613\(20\)30140-6](https://www.cell.com/trends/cognitive-sciences/fulltext/S1364-6613(20)30140-6)
- Casagrande, D. G., McIlvaine-Newsad, H., & Jones, E. C. (2015). Social networks of help-seeking in different types of disaster responses to the 2008 Mississippi river floods. *Human Organization*, 74(4), 351.
- Czymara, C. S., Langenkamp, A., Cano, T. (2021) Cause for concerns: gender inequality in experiencing the COVID-19 lockdown in Germany, *European Societies*, 23:sup1, S68-S81, DOI: 10.1080/14616696.2020.1808692
- Dávid, B., Herke, B., Huszti, É., Tóth, G., Túry-Angyal, E., & Albert, F. (2023). Reshaping Social Capital During the Pandemic Crisis: Age Group Differences in Face-to-Face Contact Network Structures. *Social Inclusion*, 11(1). <https://doi.org/10.17645/si.v11i1.6002>

- Dunbar, R. I. M. (2018) The Anatomy of Friendship, Trends. Cognitive Sciences, 22, 32–51. <https://dx.doi.org/10.1016/j.tics.2017.10.004>.
- EIGE (2021) Gender Equality Index 2021. Publications Office of the European Union
- Eurofound (2020) Living, working and COVID-19. COVID-19 series, Publications Office of the European Union, Luxembourg
- Eurofound (2022), Fifth round of the Living, working and COVID-19 e-survey: Living in a new era of uncertainty, Publications Office of the European Union, Luxembourg.
- Feld, S.L. (1981) The Focused Organization of Social Ties. American Journal of Sociology 86:1015-35.
- Fiorillo, A. et al. (2020): Effects of the Lockdown on the Mental Health of the general Population During the COVID-19 Pandemic in Italy: Results from the COMET Collaborative Network. European Psychiatry, 63, 1, 1–11. <https://doi.org/10.1192/j.eurpsy.2020.89>, <https://bit.ly/3CyJwXd>
- Fodor, É. Gregor, A. Koltai, J., Kováts, E. (2021) The impact of COVID-19 on the gender division of childcare work in Hungary, European Societies, 23:sup1, S95-S110, DOI: 10.1080/14616696.2020.1817522
- Geambaşu, R., Gergely, O., Nagy, B. and Somogyi, N. (2020) *Qualitative Research on Hungarian Mothers' Social Situation and Mental Health During the Time of the Covid-19 Pandemic*. Corvinus Journal of Sociology and Social Policy, 11 (2). pp. 151-155. DOI <https://doi.org/10.14267/CJSSP.2020.2.11>
- Gloster et al. (2020): Impact of COVID-19 Pandemic on Mental Health: An International Study. PLOS ONE, 15, 12:e0244809. <https://doi.org/10.1371/journal.pone.0244809>, <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0244809>
- Hipp, L., Bünning, M. (2021) Parenthood as a driver of increased gender inequality during COVID-19? Exploratory evidence from Germany, European Societies, 23:sup1, S658-S673, DOI: 10.1080/14616696.2020.1833229
- Hurlbert, J. S., Haines, V. A., & Beggs, J. J. (2000). Core networks and tie activation: What kinds of routine networks allocate resources in nonroutine situa-

- tions? *American Sociological Review*, 65(4), 598–618. doi:10.2307/2657385
- Jarvis, C.I., Van Zandvoort, K., Gimma, A. et al. (2020) Quantifying the impact of physical distance measures on the transmission of COVID-19 in the UK. *BMC Med* 18, 124. <https://doi.org/10.1186/s12916-020-01597-8>
- Kovacs, B. – Caplan, N. – Grob, S. – King, M. (2021) Social Networks and Loneliness During the COVID-19 Pandemic. *Socius* doi:10.1177/2378023120985254
- Latsuzbaia, A., Herold, M., Bertemes, J.-P., & Mossong, J. (2020) Evolving social contact patterns during the COVID-19 crisis in Luxembourg. *PLoS ONE* 15(8), e0237128. <https://doi.org/10.1371/journal.pone.0237128>
- Marsden, P.V., Campbell, K.L. (1984) Measuring Tie Strength, *Social Forces*, 63 (2), 482–501, <https://doi.org/10.1093/sf/63.2.482>
- Mollenhorst, G., Volker, B., Flap, H. (2014) Changes in personal relationships: How social contexts affect the emergence and discontinuation of relationships, *Social Networks* 37, 65–80, ISSN 0378-8733, <https://doi.org/10.1016/j.socnet.2013.12.003>
- Pléh, Cs. (2021) Az embert körülvevő kapcsolati háló és a járvány próbatevése *Magyar Tudomány* 182(10), 1317–1334 DOI: 10.1556/2065.182.2021.10.4
- Reichelt, M., Makovi, K., Sargsyan, A. (2021) The impact of COVID-19 on gender inequality in the labor market and gender-role attitudes, *European Societies*, 23:sup1, S228–S245, DOI: 10.1080/14616696.2020.1823010
- Sólyomfi A. H. (2021) A Magyarországon regisztrált bűncselekmények változásának alakulása a COVID-19 járvány időszakában. *Studia Mundi – Economica* 8(3), 86–96. <https://doi.org/10.18531/Studia.Mundi.2021.08.03.86-96>
- Szabó J., Virág Gy. (2022) Szerelem a járvány idején. Családon belüli erőszak a COVID-19 első hulláma alatt Magyarországon. *Belügyi Szemle* 70(1), 7–34. <https://doi.org/10.38146/BSZ.SPEC.2022.1.1>
- Székely, L. (szerk). (2021) Magyar fiatalok a koronavírus-járvány idején – Magyar Ifjúság Kutatás 2020. Enigma 2001 Kiadó és Médiaszolgáltató Kft. Budapest.

Zhang, J., Litvinova, M., Liang, Y., Wang, Y., Wang, W., Zhao, S., Wu, Q., Merler, S., Viboud, C., Vespignani, A., Ajelli, M., & Yu, H. (2020) Changes in contact patterns shape the dynamics of the COVID-19 outbreak in China. *Science*. Jun 26;368(6498),1481-1486. doi: 10.1126/science.abb8001. Epub 2020 Apr 29. PMID: 32350060; PMCID: PMC7199529.