Families and Intimate Relationships during COVID-19: Family Networks of Neapolitan Students

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Abstract

Coronavirus pandemic immediately has taken on a global nature, transcending any national border, and unfolding its dramatic effects on every sphere of society: from health to economy, from politics to social relations. The lockdown of States and Regions has obligated everyone to isolation for long months, abruptly putting a stop to several social practices that were finding expression in daily physical places: working activities, education, leisure time, and cultural expressions. Many common efforts were directed to reorganise all these social and productive practices under quarantined time, growing the risk to degenerate on a temporal extension of daily life, and social-space dimension shrinking.

This essay is focused on analysing how lockdown is affecting the daily life of families. Starting from a survey on families of students at University of Naples Federico II, it aims to reflect on family network' dynamics pre and during lockdown.

Keywords: COVID-19 pandemic, family networks, household.

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1. Introduction

The purpose of this essay is to analyse how the lockdown imposed by the Prime Ministerial Decree of 8 March to tackle the COVID-19 pandemic has affected the daily life of families. Specifically, we have considered the families of a group of Neapolitan university students, focusing on relational dynamics and adaptation strategies to the health emergency. The analytical approach of Social Network Analysis (SNA) allowed us, as we will see, to reconstruct family networks during lockdown and compare the structure of relationships with the normal situation. Conducting semi-structured interviews with family members also allowed us to enter the emotional dimension of the lockdown.

Our analysis focuses on family's ability to reorganise itself into new spatial-temporal dimensions, that necessarily involve the reorganisation of relations inside and outside the family. Specifically, what relational dynamics did family face during the pandemic and the lockdown? How did the internal organisation of the family change? To what extent did the economic impact of the pandemic affect the family and what were the most widespread responses? How has the perception of living space in the home changed?

The choice of family as the unit of analysis is based on a few considerations. Family is one of the social actors most directly involved in the dynamics triggered by the COVID-19 pandemic. Whether we are talking about economics or work, domestic or relational issues, whether on a micro or macro scale, family remains a central unit in the changes taking place nowadays. Therefore, it continues to be a privileged object of study for the social sciences.

Family is a complex concept that includes a variety of experiences and relationships (Saraceno, Naldini, 2013). It is first and foremost one of the most important places where the social construction of reality happens, that is, where the natural events of individual life (birth, death, growing up, sexuality, etc.) acquire meaning. More recently the definition of family has become complicated. In contrast to the vision of the evolutionary theories that supported its dissolution, or its reduction into a mere daily living couple, family develops different forms of dynamic adaptation to modernity (Donati, Di Nicola, 2002). It often configures an inclusive structure, open to different bonds of affectivity and affiliation. It is precisely because of the variability of the forms that family can take, that the situational approach is effective in analysing it, as it responds to the opportunity to place family in a specific contest; the place of residence, the structure of the labour market, active social policies are just some of the context-related factors that affect family structures (Donati, Di Nicola, 2002; Di Nicola, 1993).

Usually understood as a social nucleus of two or more people living under the same roof and linked by kinship or affinity, what we call family actually

implies a multiplicity of different meanings and experiences, none of which can be considered exhaustive. The discourse on family can change, in fact, depending on whether we talk about it on a historical or cultural level, as a physical, relational, or symbolic space, and so on. Undoubtedly, an important indicator of the existence of family is cohabitation. However, not all cohabitations are considered and/or define themselves as families. Family evolves in relation to social changes, so old types of family continue to disappear while new ones appear (Saraceno, Naldini, 2013).

The debate on family grew significantly during the 20th century, in parallel with the development of social sciences and the birth of the modern city. Some functionalist anthropologists and sociologists (starting with Malinowski, 1913) have affirmed the universality of family, understanding it as an institution that has specific functions such as care and primary socialization of children. Others have focused attention not so much on the function of family but on its structure, to identify the most stable component and observe the characteristics of the links between family members (Di Nicola, 2017). For example, Laslett's household typology (nuclear family, incomplete nuclear family, family without conjugal structure, extended family, multiple vertical and horizontal family) is based on this approach in order to also outline the changes that occur within it (Laslett, Wall, 1972).

Even in Italy, where family is historically and culturally central, some studies have observed a kind of polarization that on the one hand sees an increase in large families and, on the other an increase in families composed only of a couple. The first case is mainly the result of a trend that has developed since the end of last century, in which adult children (also economically independent) continue to live for a long time in their parents' homes. Instead, the second case refers to the increasingly widespread choice of cohabitation of couples (not only young couples), which also contributes to reducing the marriage rate (Di Nicola, 2017). This cohabitation postpones the marriage contract, and sometimes maternity, in old age (Bagnasco et al., 2013). As a result, the low generation turnover, if on the one hand it facilitates the increase of families of lonely elderly people, on the other hand it dilates the life cycle phases of families (Di Nicola, 2017).

In general, the changes that have occurred in family structure are therefore the result of renewed expectations and a reversal of the value system (Santoro, 2013), within which marriage no longer fulfils the classic function of transition to adulthood. In fact, the elements of fracture or interruption (e.g. divorces and mono-parent families), show how today family paths are discontinuous and unpredictable (Di Nicola, 2017).

These changes observable at the micro-level of family can obviously be traced back to the processes of change at the macro-economic and social level

in recent decades; as anticipated, these have seen the emergence of family models that are increasingly differentiated and in many cases fragmented; this in some people feeds the idea that family as an institution is deeply in crisis (Rossi, 2001). But there are also other interesting keys to interpretation.

Although family remains essentially the basis of the identity and sense of belonging of its members, the processes of individualization involved in modernity have pushed its progressive shift from an institution to a private group, more anchored to the intimate sphere of affection than to tasks and functions of social relevance. In this frame, the attention devoted to how to 'do family' has led to exploring the biography of the individual, not the other way around. In fact, if during the first phase of modernisation family was conceived as a 'sacred' institution, characterised by the division of domestic work within the couple, today it is losing this original function, also as a result of women's participation in the labour market (Ruspini, 2011). In this shift of balances and priorities, the destiny of family stability and changes in mutual relations is at stake. On the analytical level, the concept of 'plural' family has been affirmed (Di Nicola, 2017). In other words, 'family business' would depend on the paths of the individuals and their choices with respect to the times of cohabitation, forms of union, procreation, divorce and the construction of a new nucleus, etc. (Ruspini, 2011). It should also be added that the dismantling of public welfare, as is well known, has exposed the new generations to insecurity and poor protection, delegating the burden of social security to family. In short, as Ruspini points out (2011), family proposes a rather stable model of affectivity and protection, also through temporary and unusual arrangements that suggest widespread models of family conformations. These models extend from the core of cohabitation to parental networks, where strong ties, residential proximity and mutual help are firmly intertwined (Barbagli et al., 2003).

What has been said so far is, in principle, in the line of studies that question Parsons' well-known hypothesis that a growing nuclearisation of family in contemporary society corresponds to a weakening of its functions and the fraying of the kinship. In particular, the correlation between the two dynamics appears to be weaker and weaker; rather, there emerges a constant capacity of family networks (even if anchored to small nuclei) to mobilise support resources, especially in crisis situations. This also emerges in the research we present in this essay, which highlights the family's ability to respond to the pandemic crisis brought about by COVID-19, even in its nuclearised form (sometimes forced by lockdown).

The current health crisis has created a completely new situation compared to the past, forcing families to find sudden adaptation strategies. In this contingency, family is once again at the centre of numerous studies that attempt to analyse the changes taking place and their consequences. A lot of research is

dealing, for example, with the phenomenon of the growth of cases of domestic violence during the pandemic (Usher et al., 2020; Campbell, 2020).

SNA especially in diachronic and situational approach, has proved to be very useful in family studies. As Fortunata Piselli (1995) argues, the network approach allows us to explore the relationship between each individual and their family, in close relation with the relational and ecological context. The behaviour of individuals within family and the articulation of external relations influence each other continuously and therefore, to understand the former, it is necessary to know the latter and vice versa. In addition, the network analysis also allows to consider interrupted relationships that continue to influence the behaviour of individuals. From a methodological point of view the SNA allows a great analytical flexibility (Piselli, 1995). It is suitable for constantly changing objects of study that reorganize themselves in emergency situations, that connect or disconnect to actors according to situations and contexts, both at local and supra-local level.

An early systematization of the SNA was carried out by a group of researchers from the Rhodes-Livingston Institute who applied it to study certain African societies from the 1940s onwards. Under the direction of Max Gluckman, these scholars formed the original nucleus of the Manchester School. These are anthropologists who dealt with the basic social units of which family is the most emblematic type, the privileged object of study as an important social actor in the paths of urbanization, urban and social integration of communities. Let us remember, for example, the well-known research of Elizabeth Bott (1957) on marital roles in London families. Bott was able to demonstrate how the remarkable variation in the ways in which the spouses shared their tasks was mainly attributable to the relational environment in which the families were inserted, i.e. to the network that included all the external relations of the families (friends, neighbours, colleagues, relatives, etc.). Class membership and residence, however important, were not able to explain all the differences. Instead, Bott found a correlation between the degree of connectivity of the total network of households, expressed by the density index[1], and the degree of segregation of marital roles. Specifically, couples with segregated roles presented a close-knit network, i.e. a network where most of the nodes knew each other and often covered the same roles. On the contrary, couples with joint roles configured broad-meshed networks, i.e. networks where most of the nodes did not know each other and did not cover the same roles.

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[1] Density is an index that varies between 0 and 1 and indicates the number of existing ties over the number of all possible ties.

Afterwards, scholars from Harvard University (White, 1963; Wasserman, Faust, 1994) used network analysis to study the social structure, thus taking up the analytical principles of structuralism that the Manchester School had rejected. With *social structure* they referred, in fact, to a persistent model of social relations between social positions, where the basic unit of the analysis is the relationship. The network is therefore defined as a set of nodes (whether individual or collective actors) and links (flows of resources and transfer of goods). The structuralism of Harvard scholars therefore foresees that the behaviours and actions of social actors would only be explainable in relation to their position in the social structure, which exists regardless of the individual actor. Moreover, Harvard structuralism had a mathematical orientation and their research made extensive use of algebraic tools.

For Harvard scholars, family remained at the centre of several strands of research, relating both to the labour market and to urban integration processes. Above all, disputing the dominant thought of the time, their research documented how, even in the modern urban reality of the contemporary metropolis, interpersonal relationships continued to exist and were fundamental for the exchange of information and emotional and material support between the members of the group. An exemplary study in this regard is *The Search for an abortionist* by N. H. Lee (1969), focused on how and through whom women encountered abortion doctors in a context where abortion was illegal.

The hypotheses that guide our research are on two different levels. First, on a purely methodological level we intend to demonstrate how the analytical network approach is still particularly useful in studying the dynamics affecting family. Secondly, we believe that families have developed, and still are developing, strategies to adapt to the emergency condition generated by the COVID-19. This adaptation process, however, is passing through dynamics which are not always homogeneous, but which depend on both structural elements and various factors of a relational nature. On the one hand, family re-adaptation strategies depend on variables such as composition of family nucleus, arrangement of living space, familiarity with new communication technologies, area of residence. On the other hand, they are also influenced by the support system style of family, the distribution of care loads and the organisation of marital roles, individual characters, etc.

2. The stages of the research

The research was carried out remotely in two distinct phases. The first was held within the Social Network Analysis course for the bachelor's degree in Sociology at the University Federico II of Naples. In this phase, the work was

carried out through a close interaction between teacher, tutors, and students, in a laboratory and concerned the configuration and analysis of students' relational networks during COVID-19. It goes without saying that the 'natural' context of these networks is the metropolitan city of Naples where most of the students who took part in the course live. However, the tools and methods with which the research has been conducted are easily exported to other contexts. In perspective, one could think of replicating this research in other Italian cities, perhaps distributed with respect to the North, Centre and South of the country; in this particular contingency, all cities share the emergency situation imposed by the COVID-19 and at the same time express different responses, which could be investigated from a comparative point of view. Moreover, the choice of the set of university students seems to us to be easily replicable in other contexts.

Through the construction of a survey diary, the 35 students[2] of the course took note of their daily contacts, inserting information on the nature and character of the links in a matrix of attributes, for a period of fifteen days (from March 23 to April 6, 2020), during the first lockdown. From these matrices, each student has graphically configured their ego-network with the support of the UCINET software. The objective, at this point in the research, was to study the changes in students' relational networks compared to the pre-lockdown period, thus adopting a situational and diachronic approach. In fact, the students not only distinguished the ties that were preserved during the lockdown from those that were activated during that period, but also identified their usual ties that were not activated during the lockdown. The result of this first phase was the configuration of 35 ego-networks, dense with relational information, which formed the basis for the second phase of the research.

Between June and October 2020, 12 students among those who took part in the laboratory, intrigued and fascinated by this experience, which involved them both as researchers and as the object of research, decided to further develop their work in order to write their thesis. Among them, some have deepened the analysis of family sub-network, collecting and organizing network

data and conducting semi-structured face-to-face interviews with all members of their own network.

Based on the database collected from students both in the laboratory and for the thesis work, we have developed the analysis of which the main results are presented here. In particular, we have isolated data relating to family/parental ties, carried out a structural analysis of these data (gender, age, employment status), configured all family networks and refined the analysis by calculating indices referring both to the structure and morphology of the networks. Furthermore, in addition to the interviews already conducted by the students, we conducted in-depth interviews (via video call) with the students themselves who agreed to be interviewed. In doing so we better explored the emotional dimensions and the family atmosphere during lockdown. In total we have therefore collected 30 interviews and reconstructed 10 family networks. The graphic configuration of the networks was carried out using the UCINET software, which also made it possible to calculate size (Mayhew, Levinger, 1976), density (Scott, 1997) and betweenness (Freeman, 1979) indices. Size refers to the number, in absolute value, of subjects (nodes) present in the network; density measures the degree of compactness of the network, i.e. the ratio between possible links and those actually present in the network; betweenness measures the ability of a node to control the exchange of information or resource flows within a network. These indexes have allowed the comparison in morphological and structural terms between the ten reconstructed family networks and the identification of two particularly emblematic networks, which are precisely the ones we will discuss in this essay.

3.   Family profiles

Due to the pandemic, whole families were forced into their own domestic space. The house represented physically and symbolically a fortress, at the same time expanding its satisfaction not only of primary needs (physiological and security), but also of secondary one (belonging and self-realization) (Maslow, 1954). The house, mainly experienced in modernity as a place of family reproduction and consumption, has strongly recovered a production function in both economic and relational terms. It has become a place of work for family members and a place where old and new ties merged. The sharing of domestic space has limited the availability of personal spaces, which have expanded into virtual realities. The role of new technologies has become central in supporting people during lockdown allowing them to keep the relational field active in compliance with anti-Covid regulations.

Before lockdown, our students lived with their households. In four families the spouses were already separated before COVID-19, so they did not live in the same house. Some heads of family were working in other Italian cities when circumstances forbade them to move back home. However, we can say that families have mostly come together. Let us look at family profiles. Families have an average of 7 members, also considering the presence of elderly members in need of care. There are more women (56,5%) than men (43,5%) in our group of families; the average age of the components is about 40 years old.

As anticipated, an additional item concerned the external relationships that families maintained at COVID-19 time. It is essential to point out that the research has investigated every sphere of relations (friendly, work, and family) in the awareness of both the importance of a complex and increasingly interconnected social system and how much the health crisis had permeated each of them. So, we can say that, while in the other spheres, e.g. friendly, the number of lost ties due to lockdown was significant, family has shown strong cohesion: contacts with relatives were maintained in 91,9% of cases. This data could be explained with the importance of family and its functions in this emergency. It should also be added that family ties are generally multiplex (Kapferer, 1969); they often convey economic and moral support, trust, care services, etc., and above all they promote mutual solidarity (Goodwin, Kai Hou, et al, 2020).

FIGURE 1. *Relationships missed per age groups.*
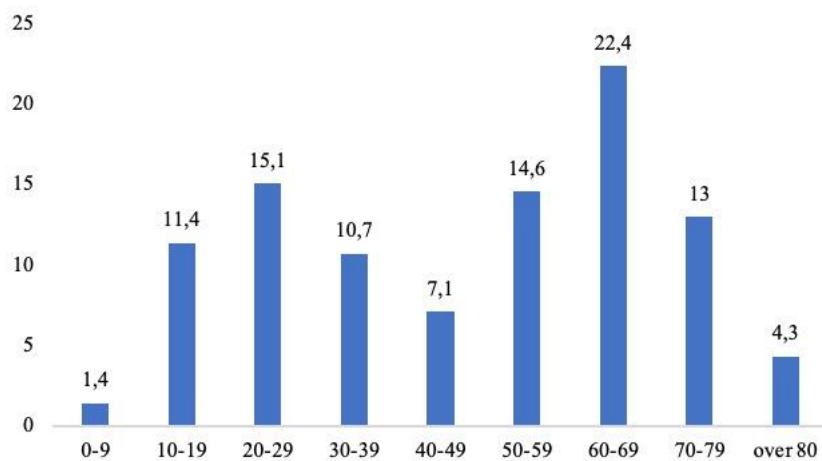
These dynamics are driven by the forced sharing of the same domestic space for a long time. Loss of ties can be explained on the basis of three factors: a) the degree of kinship, b) the need to 'escape' from the family environment by cultivating external relations to it; (c) the use of new technologies. Regarding the first factor, the research shows that most lost contacts concern at least second-degree relatives or acquired relatives (e.g. loss of contact with a cousin or brother-in-law is more frequent than with a sibling).

With respect to the second point, the interviews reveal notes of intolerance for physical relationships limited to the family unit; this leads to 'taking' time away from them to dedicate it to 'external' contacts (acquaintances, friends, colleagues, etc.), with the use of technology. Finally, many contacts with older relatives are lost because they do not use new communication technologies. In fact (Fig.1), most of lost contacts are in the 60-69 age group, where respondents also place most family members who do not use modern messaging or video calling platforms (Wathsapp, Skype or Facebook).

As mentioned, the proportion of lost ties decreases for lower age groups and mainly concerns cousins and grandchildren. Above all, the impossibility of keeping 'ritual' meetings, such as lunch at grandparents' on Sundays, has temporarily put aside some relationships, as emerged from the interviews. The father of a student says:

> I need my family, but I miss a lot my daughter and her sons, during the lockdown. Before I used to spend many hours to them, but right now I must settle for videocalls. I miss other rest of my family too [...] I used to see them at my mother's houses and since I do not love so much phone, in this period I have not been in touch with them… I am looking forward to meeting all of them soon! (interview 1, 28th April 2020).

Need of family is evident in the COVID-19 crisis when, especially, traditional habits are damaged. The result is a major struggle by individuals to adapt their personal life and social system to a new order of meaning.

4. New lifestyles. Habits, roles, concerns

Here we shift our attention to other relevant dimensions that have emerged from the research. These dimensions concern the feelings and perceptions of families in a period of great uncertainty feelings; the function of the spaces in the house that are being readapted; new social practices; traditional roles and the new distribution of tasks within family; variation in wages and consumption.

During the pandemic widespread fear of infection did not hinder people to self-organise their own private and public life from inside their home.

Organising one's house as both a work office and a virtual classroom while preserving privacy proved to be pivotal. However, the need to recover an intimate space is still an aspect mentioned in many interviews. Especially in smaller houses, bedrooms have become *peaceful corners* where many students could focus on studies and external relations with partners, friends, professors, and colleagues. The use of the bedroom has also intensified for the pursuit of new habits. A student recalls:

> I come here (in the bedroom, ed.) to feel safe when I am sad and stressed, or even when my family concerns about COVID-19 become too overblown. I started to draw in this period. I have never done that, but it has been cathartic... I was suffering for my troubles that have been sharpened by the COVID-19. In drawing I found a way to sooth my anxiety and sadness (interview 2, 10thApril 2020).

During lockdown, people have experienced houses as a place in which different practices took shape. Every interviewed told about how the kitchen and the living room become a meeting point for all family members. Small houses have usually represented a limit, forcing people to find new spaces such as balconies, landings, and *terraces where to satisfy the need to be alone with oneself* (interview 3, student). New practices arose and traditional habits were strengthened when leisure activities could not be carried out outside. Many people mentioned the pleasure of cooking together, as most Italian families do, or the excitement in transforming a living room in a gym that would also include siblings and parents in sports activities, or the fun in watching movies together. Isolation offered much time to spend with family, caring for both the children and the elderly, re-evaluating those emotional relationships too often taken for granted. Again, the same student says

> I will remember cooking together with joy, making pizza with my grandmother above all. It was something I had not done for years because there was never the opportunity. I will look back at all this when we'll get back to normal and, for sure, I will try to spend more time with my loved ones and preserve the good habits developed during the lockdown (interview 3, 20th September 2020).

Nevertheless, it is likewise true that family concerns have increased in relation to two crucial dimensions of everyday life: economic and health. As recent studies have highlighted, lockdown effects on family show correlation with the increase in family instability, where social well-being is undermined. Despite these initial considerations, actual performance and impacts cannot be assessed at this stage. Indeed, one can only presume that risks are higher for

poor households who lost their job, or for those mainly exposed to domestic violence (Brown et. al., 2020; Beland et. al., 2020), for whom there might not be any escape hatch.

In addition, COVID-19 has broken traditional family life up into segments. As mentioned above, the house became a place for care, work, and education, as well as a place where distribution of tasks between genders and members has become more equal. Smart working has forced people to stay at home, witnessing a timid signal of new cooperation from a substantial number of men even in housework and childcare.

As we have seen in an interesting survey conducted in three countries (England, Italy, and America), the percentage of men who claim to participate in childcare, and housekeeping (cooking, cleaning, and gardening) showed a significant positive variation (Biroli et al., 2020). In Italy male participation has increased mainly in childcare (17%). Housekeeping would seem dependent on several aspects, such as the employment rate of women, and traditional habits among partner on the division of labour.

Participation in domestic life was another dimension covered by the interviews with our Neapolitan families. Collected data highlights how lifestyles are changing, in line with what exposed so far.

During lockdown, while continuing to work, many fathers shared more domestic tasks with their wives than the usual (shopping, cooking, cleaning, etc.), thus giving sign of growing solidarity within family. Sometime, delegating outside errands to husbands prefigured a family strategy to avoid contagion, reducing the risk exposure of family members as much as possible. The sister-in-law of a student states:

> The marital roles have changed because I have not work. Since only my husband worked, we only let him go out, to avoid contagion, so he also had shopping [...]. He helped me with the children during the weekend because the distance learning was heavy for both my children and me in following them (interview 4, 29th September 2020)

Fear of contagion would seem to upset the way we face everyday life while it feeds anxiety, stress, and depressive symptoms, as observed by recent psychological studies (Crosta et. al., 2020; Torales et al., 2020). Many families have revealed their feelings and concerns about the safety of their loved ones. This was much more common among adults and parents than among younger ones, who were less scared. In fact, other issues emerged among young people such as a certain 'nostalgia for university' or sadness due to the rules of social distancing which precluded the encounter with close partners and friends.

Furthermore, latent stressors are also linked to work and economic uncertainty. Just consider how the health crisis has turned into a socio-economic crisis, leaving many people out of the labour market. In the cases here studied, women lost their jobs more frequently than men; this is because women are more often employed in sectors considered non-essential (sales, call centres, beauticians, etc.). However, we noted that the reduction in household income was not always followed by a fall in consumption. Rather, households have reported an increase in purchases due to limited outings and concern about not finding necessities in grocery shops after the supply rush. The brother of a student claims:

> I have experienced a lot of stress because the work has tripled. My life changed because I was afraid of contagion, of having to go into shops to drop off goods, and of having to get in touch with people. My income increased during the lockdown. But my family income decreased because both my wife and my daughter stopped working, so even though I was earning more money, all the costs fell on myself and increased, including regular bills, rent, and food (interview 5, 15th May 2020).

So far, a plural perspective of lockdown responses emerges, both on the individual and family level. What happens on relational level? How are family networks reconfigured?

5. Family networks in lockdown

The exploration of family relationships was strategic to understand a) whether and how social distancing had an impact on relationships; b) how relationships supported families. Before proceeding with the analysis of family networks, it was essential to further explore the starting family context and its pre-lockdown dynamics. In this section we introduce two emblematic family networks chosen according to dimensional criteria.

The first network concerns Susy's family and has 63 nodes (family members) and 1580 ties (fig.2). In Valeria's family instead there are 19 nodes and 240 ties. Susy's family is composed of 5 people (the orange nodes), but the network is visibly wider because it includes the families of Susy's sister (Elena P.) and brother (Giuseppe P.). In both graphs, the different forms of the nodes indicate family affiliation (maternal lineage, paternal lineage and acquired lineage).

The strength of Susy's network lies in the presence of ties, direct or indirect, between almost all nodes. In fact, the density index is very close to 1 (i.e. the maximum density). Before lockdown, social proximity between all

family members was supported by the many ritual moments of sharing (lunches, free time, and holidays, etc.); in addition, many of them live in the same neighbourhood or in nearby areas.

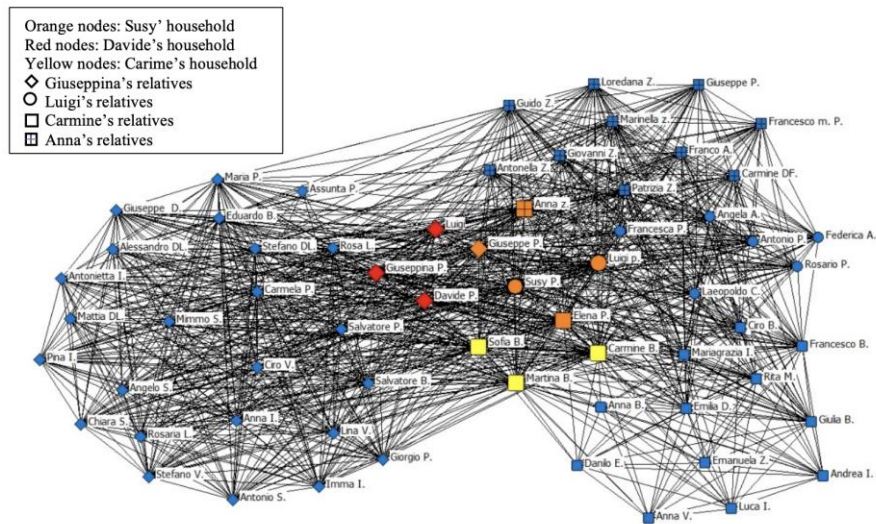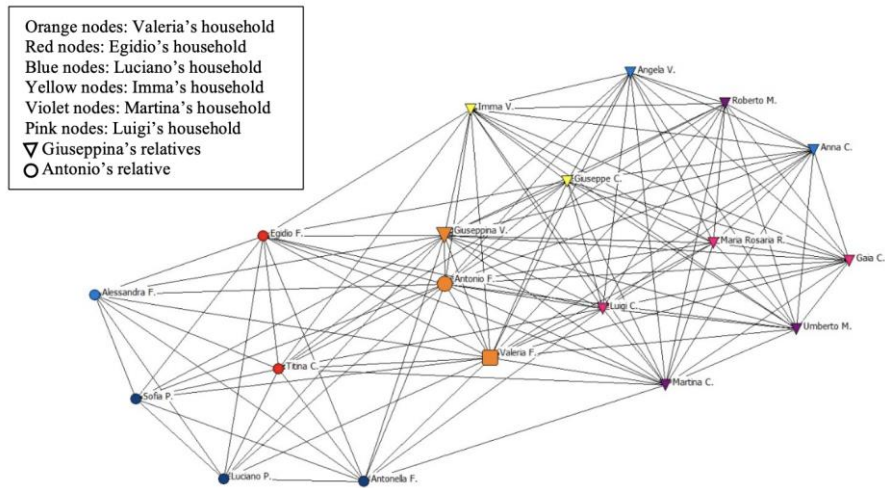FIGURE 2. *Susy's pre-lockdown family network.*

FIGURE 3. *Valeria's pre-lockdown family network.*

The structure of Valeria's family network (fig.3) is different from that of Susy. Valeria is an only child; her family includes maternal and paternal relatives, grandparents, uncles, aunts, cousins and acquired relatives. In particular, on the right side of the network we find the relatives of the maternal line (10 nodes) and on the left side those of the paternal line (6 nodes). As mentioned above, there are 240 ties in this family network, and they show a significant cohesion (0.7). In fact, almost all nodes of the network know each other; the ties that are missing are mainly between second-degree relatives of maternal and paternal branches.

In Valeria's networks, there is only spatial proximity between few nodes. Many of her relatives live far away from each other, between Naples and other Italian cities, so they are used to meet only a few times a year.

However, we can assume that a high cohesion, regardless of the width of the net, can be one of the resistance indexes of the family's compactness. Instead, as we shall see, the type of relationship can make the difference. The higher presence of acquired relatives, in fact, reduces the probability of maintaining compactness in the family structure. On this level, an important role in the network can be played by broker nodes.

Let us look at what happened to these family networks during lockdown. We pay attention to contacts that were maintained, lost, and activated. Susy's network now appears split (fig.4), configuring *a star* around few central nodes. As emerged in the interviews with family members, each of them reunited with their closest relatives, mainly losing contact with acquired relatives. People tend to take shelter in meaningful family relationships during isolation, defining a strategy for dealing with difficult times.

In Susy's network there are still 63 nodes, but 8 of them are now isolated because they have had no more contact with all the others. With respect to this dimension, Susy's network during lockdown is emblematic of what we have said before; in fact, the broken contacts concern second-degree or acquired relatives, with an average age of 60 years and who do not use technology.

Comparing her pre-lockdown network (fig. 2) with the network configured during lockdown (fig.4), we see that the number of active ties drops from 1580 to 140. A lower connection and *lost relationships* cause the cohesion value to drop from about 1 to 0.06.

Looking at the *core* of the network, households involved in the research are quite in connection among them. Everyone in turn have maintained relation with parents, siblings, and grandparents. Two shades of black were used to characterise the ties to indicate the way in which contact between two nodes occurred. Thicker lines represent *face-to-face* contacts (32.1%), while thinner lines represent *virtual* contacts (67.9%). Face-to-face relationships were made possible, in some cases, by living in close contact with relatives. For example,

Giuseppina P. pointed out that her relationships within family have not changed much because she lives in the same building as her parents and uncles, so she has had the opportunity to see them often. In fact, being forced to stay at home, Giuseppina P. had the opportunity to see them even more often than in the past. Another distinguishing feature of this node is that it has the highest brokerage value in the entire network[3]; as you can see from the graph, Giuseppina P. links her family to her husband's.

FIGURE 4. *Susy's family network during lockdown.*
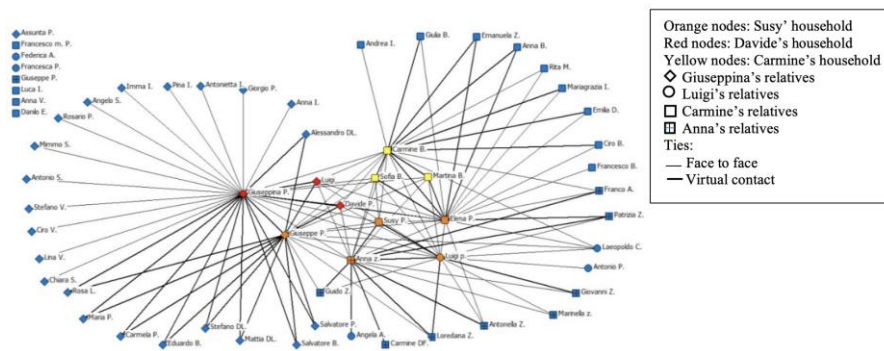
The lockdown condition in some cases has encouraged a much deeper interaction between family members and especially between parents and children. Susy, for example, told us that during lockdown she found herself in a condition of great psychological confusion about her projects, herself, and her relational skills. The isolation, however, allowed her a sort of self-psychotherapy exercise; in fact, Susy started to express her moods through drawing. By showing these drawings to her parents, a channel of strong emotional support was opened with them, which also expanded through Skype to her brother and sister. Hence the fifteen days of lockdown enabled Susy to achieve greater emotional stability and personal security through direct and continuous confrontation with her close family. Concluding her interview, Susy says: *for me, the lockdown was paradoxically lucky!*

However, it is the virtual contacts that are increasing the most during this period, especially thanks to adults who are beginning to experiment with new communication technologies. The video call with relatives helped to alleviate the sadness perceived following the introduction of isolation measures. As

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[3] The Betwenness centrality shows the following scores: Giuseppina P. = 2.8; Elena P. = 0.8; Giuseppe P. and Carmine B. = 0.7. Other people, apart from Giuseppina P. are siblings of Susy who, being in married, connect their family with the acquired ones.

Susy's parents stated, if they had no application for videocalls, they would probably have suffered much more from their other sons.

Now let us look at Valeria's family during lockdown (fig.5). The structure of the network has maintained almost the same shape as before: the number of nodes has not changed (19), but the number of links has dropped from 140 to 111. In this network, family ties, both maternal and paternal, are continuously nurtured. Comparing the cohesion index of Valeria's family network (density=0.35) with that of Susy's family (density=0.06), we can see that Valeria's network is denser. So, now it is Valeria who presents a more compact family network.

In general we can say that during lockdown: a) the number of interrupted contacts was very variable among the families involved in the research; b) family networks characterized by a high degree of density are those that have suffered most in terms of network compactness; c) lost contacts tend to increase according to the degree of kinship.

FIGURE 5. *Valeria's family network during lockdown.*
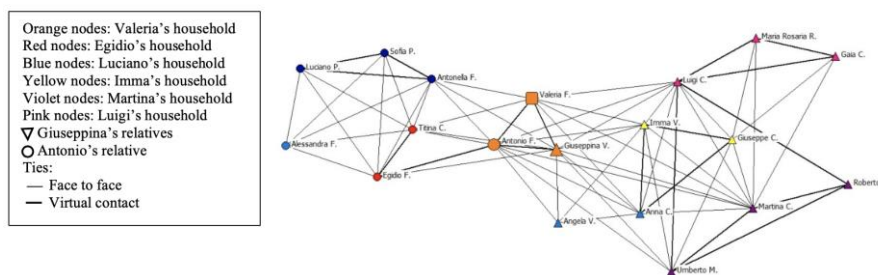
Back to Valeria's family network (fig. 4). we can see that 16.2% of the interactions were face-to-face (the thickest lines) while 83.8% were virtual (thinnest lines). Her family was already familiar with modern digital communication tools since part of the mother's family lives in Sicily and three members of the father's family live in Lombardy. The people interviewed stated that they have intensified their interactions, exchanging information about the pandemic and updates on the condition of the cities where they live.

In general, lockdown has increased the physical and relational distancing especially among those relatives who, for various reasons, did not have systematic attendance before; in these cases family has 'nuclearised' further and the interaction has remained limited to parents and children. Only in a few cases have family members who do not live in the same house been able to see each other, but these were often fleeting encounters. In Valeria's family, this is the

case of her father Antonio F. with his brother Egidio F. and of Luigi C. with his sister, Martina C.

In Valeria's family network, the highest betweenness centrality values are referred to many nodes: Antonio F. (10,6); Giuseppina V. (8,5); Martina C. (5,3); Antonella F. (4,8) and Luigi C. (3,7). Network configuration shows that they are central nodes keeping active interaction between all the other. From the interviews, in fact, these people showed determination in involving the rest of the family in chat or video calls during the quarantine.

On the basis of what has emerged so far, we cannot make broad generalizations, but some considerations are possible. In general, family has kept its relational structure unaltered during the COVID-19 crisis. Its primordial unit has been a place of confinement, in which the interviewees had the opportunity to reflect and modify their natural relationships as well. Susy's father says:

> Sometimes conflicts may have occurred due to age differences or different points of view, but I can say that I spent more time with them, and more affection prevailed [...]. Forced cohabitation has laid us bare and made us better known both in our worth and in our flaws (interview 6, 20th April 2020).

Many ties have been consolidated and have become indispensable resources of material and immaterial support. The intimacy and collaboration shown by husbands at home has increased and is now more evident daily. The functions of the domestic space are a recurring theme in the interviews. Almost always the house becomes the only place where you feel safe. But this same space has also been disrupted by the usual ordinary use and adapted to the new needs of family members, as a student's brother tells us:

> the garage was a place for parking and warehousing, but in this period, I started to frequent it and I decided to renovate it. I would like to create a good space to use for lunches and dinners with relatives and friends as soon as possible. It is crazy how little things are taken for granted (interview 5, 15th May 2020).

In particular, the bedroom loses its connotation of intimacy, to take on that multiple connotations of work space, free time, and also a refuge from the crowded house. In fact, domestic space is often a cause for conflict even among the younger generations who compete for living rooms and bedrooms to watch movies, study, or do other leisure activities. With the passing of the days, the space of the house became a battleground and place of compromises that

charge with high emotional intensity. In any case, the support function of the family network succeeds regardless of the availability of physical home space. Another student recounts:

> during the lockdown, my mother's sister was suddenly widowed, so we welcomed her into our house so as not to leave her alone. But our house is very small. We put a bed for my aunt in the dining room, where during the day we all spend some time. The biggest drawback was the bathroom: only one for six people! (interview 7, 18th September 2020).

The diffusion of new technologies is another important factor that has kept the family network active. Usually seen as a barrier between different generations, at this stage communication technologies are approached with more enthusiasm and curiosity, especially among adults. The mother of a student points this out:

> I always criticized my children when I saw them with mobile phones, but it took the Covid to convince myself. I started using chats, having my son's family in another city. Then my daughter taught me how to navigate and shop on Amazon, and a world opened for me up. Now I feel up with the time (interview 8, 7thMay 2020).

The stories outline interesting factors worth reflecting on and further complicate the analysis of families at the time of COVID-19 pandemic. In this study, the exploration of the family-relational scope was a useful approach to hold together several dimensions of research. Besides, it was a methodology that allowed the reconstruction of family structures and to articulate the analysis of changes from a diachronic perspective.

6. Conclusions

The wider global crisis by COVID-19 is affecting every area of social life and creating uncertainty about the effects that will deploy in the long term. This study on twenty families of Neapolitan students focuses on the effects of the pandemic on the relational tissue of the families who are forced to condense all activities within the domestic space for fifteen days. The analysis used the analytical approach of SNA to reconstruct the relational structures of these families and the forms and dynamics of re-organization of their social networks. Although the results cannot be generalised, they do suggest some reflections.

As already observed in other studies, during the economic conjunctures, families form very dense and connected networks, contrasting with the vision

that supports a gradual deterioration of ties (Requena, 2011). The analysis of our family networks at the time of COVID-19 seems to reconfirm this dynamic.

Firstly, the studied families have provided a certainly positive response and have scrupulously observed the preventive and anti-virus measures. These families have revealed their ability to adapt to the new domestic dimension and in managing this extremely uncertain situation. This ability develops mainly through the re-organization of two fields: that of intra- and inter-family relations; that of living space.

On the first point, in general, we could say that family has kept its relational structure unaltered during the COVID-19 crisis. More specifically, the number of contacts interrupted during the lockdown is very variable; to suffer the most, in term of network compactness, are those family networks usually characterized by a high density degree; moreover, broken bonds tend to grow as a function of the degree of kinship. Within these networks it is mainly women who take on a broker position in the flow of contacts between different areas of the network. Finally, lockdown increases the physical and relational distance between relatives that previously, for various reasons, did not have a systematic attendance. Above all, the impossibility of keeping 'ritual' encounters alive (i.e. *lunch at grandparents' house*) has temporarily shelved some relations. In these cases, the interaction remains limited to parents and children, 'forced' to share the same spaces and spend more time together; relationships often become more intense, bonds become stronger and more dense with communicative, emotional and trusting contents. Emotional support has ensured the well-being of members, just as economic efforts have ensured the satisfaction of essential needs. Within family, mutual help was found (Ayuso et al, 2020; Ayuso, 2012), especially in the many cases where jobs were lost. Only in a few cases have short-term conflicts emerged.

In the management of the domestic tasks, the distribution remains unchanged but registers a greater degree of role sharing; in almost all cases, husbands have contributed to grocery shopping, home, and childcare. The diffusion of new technologies is another important feature that has kept family relationships. In this case- study, during lockdown the use of technology also intensified relations with relatives not usually contacted (for example, those who do not live nearby).

About the second point, we can say that the living space records the deepest adaptive changes. Spaces have also been disrupted by this emergency and adapted to the 'new' needs of family members: the garage became a space for lunches and dinners with relatives and friends; the bedroom loses its connotation of space of intimacy, to assume that multiple space of work, leisure and even shelter. Domestic space is often a cause for conflict even among the younger generations who compete for living rooms and bedrooms to watch

movies, study, or do other leisure activities. In any case, the support function of family network succeeds regardless of the availability of space in the house: even in small houses, relatives who need care and emotional support are welcomed.

In conclusion, this research answers some questions on how family works in crisis situation, but at the same time it opens up new questions regarding the relationship between structure and form of family networks and the ability to adapt to emergency situations. It does not seem trivial to confirm on the one hand the productivity of SNA in capturing the deep, often ambiguous and divergent dynamics of social relations; and on the other hand the unchanged importance of family as a unit of privileged analysis of social facts.

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