

Covid-19 Pandemic: A Qualitative Study on Adolescents' Stress, Anxiety, and Family Communication

ZEYNEP ÇETİN¹¹*Faculty of Health Sciences, Department of Child Development, Hacettepe University, Ankara, Turkey; ORCID ID: <http://orcid.org/0000-0002-1258-3958>
Corresponding author: Zeynep Çetin*

ABSTRACT

Eight high-school students participated in this qualitative study to investigate the adolescents' stress, anxiety, and family communication during the COVID-19 pandemic. To collect data, a list of questions was prepared by the researchers based on experts' opinions, and open-ended interviews were carried out with the participants. Consequently, four models were created and thoroughly investigated. According to the results, the COVID-19 pandemic led to higher levels of stress and anxiety and both positive and negative effects in the adolescents' communication with their families. It seems that the period of social isolation adversely affected the adolescents' interaction with their peers.

Keywords: COVID-19; adolescents; stress and anxiety; family communication

INTRODUCTION

The COVID-19 pandemic isolated individuals from their family and friends, posed communication difficulties and thus exposed people to behavioral problems mainly caused by the unaccustomed conditions of living alone (Brooks et al., 2020). Due to the life-threatening nature of the disease, a change in our lifestyle and reducing social communication was inevitable to prevent the spread of the virus (Everett et al., 2020). Considering the fact that strong social relationships play a key role in the developmental stages of life, it is likely that the pandemic affected teenagers and adolescents. According to Steinberg (2005); Steinberg et al. (2011), adolescence is the period in which individuals experience changes in both emotional and physical characteristics quite intensely. Thus, it is probable that adolescents with such intense emotions are affected more than adults during the pandemic.

Together with national legislations, confinement, curfews, and quarantine were imposed in most of the countries. Quarantine is often accompanied by negative emotions that can cause anxiety, boredom, and/or restlessness (Brooks et al., 2020; Qiu et al., 2020). Thus, quarantine, together with the stress and anxiety that is generally present in the development process of adolescents, caused stronger emotional distress, stress and anxiety, and subsequent problems in family communication during the pandemic (Akoğlu & Karaaslan, 2020).

Stress and Anxiety in Adolescents: Although there are many definitions of stress, it can generally be defined as the biological, physical and mental reaction of the organism to a negative situation (Del Giudice et al., 2018; Endler & Parker, 1990; McEwen & Karatsoreos, 2020). Anxiety, on the other hand, is defined as a state that includes emotional, cognitive and behavioral responses to an uncertain threat anticipation (Grupe & Nitschke, 2013). Johnston (2020) defined stress as feeling overwhelmed due to inability to cope with the situation encountered. However, anxiety does not have an identifiable cause and its treatment usually requires more than just changing the lifestyle. Lazarus (1976) defined anxiety as an emotion within stress. Long-term stress can lead to anxiety (Endler & Parker, 1990).

Stress experienced during adolescence can cause both anxiety and permanent cognitive deficits (Afifi et al., 2016; Goodman et al., 2005; Provensi et al., 2019). Troy and Mauss (2011) stated that stressful life events in adolescence can cause mental health deterioration and lead to negative consequences such as anxiety and depression. Therefore, stressful events during this period are likely to pose a risk to an individual's mental health during adulthood (Lo Iacono & Carola, 2018). In addition, Basut (2006) emphasized the importance of efficient stress-coping ways and positive parental role models during adolescence to reduce the risk of tendency to crime and substance abuse later in life. In this context, the communication and interaction between adolescents and their families is a prominent factor in stress management.

Adolescence and Family Communication: The role of parents in an individual's life is quite substantial in adolescence. Several studies reported that many stress factors affect adolescents (Goodman et al., 2005; Groux et al., 1992; Sigfusdottir et al., 2017). Goodman et al. (2005) stated that stress in the family affects both parenting styles and parent-child relationships. Family communication is a key element for the adolescents while growing into adults. White (1996) reported that adolescents are highly influenced by family communication in their decision-making processes. For this and other similar reasons, family relationships play an important role in adolescent development (De Los Reyes et al., 2019).

The COVID-19 pandemic has caused many social and psychological changes in everyone's lives, including adolescents (McGinty et al., 2020; Sani et al., 2020; Ünver et al., 2020). In particular, families with children faced a great extent of stress due to losses in their financial resources and psychological support for their children (Patrick et al., 2020). Considering that these stress factors affect not only the parents but also the children, it is important to keep the family communication efficient, healthy, and productive to protect the children -and their future life- from undesirable effects of the stress (Brown et al., 2020).

Many studies have been conducted on adolescents during the pandemic (Andrews et al., 2020; Bećirović & Pajević, 2020; Prime et al., 2020; Wray-Lake et al., 2020). However, the communication skills of adolescents during the pandemic are not studied in full depth. Thus, the present study titled "COVID-19 Pandemic: A Qualitative Study on Adolescents' Stress, Anxiety and Family Communication" was planned to fill in the gap in the relevant literature.

Within the scope of this study, we aimed to thoroughly investigate:

- How the pandemic affected the stress and anxiety levels of the adolescents?
- How the family communication of the adolescents changed during the pandemic?
- And to determine the most intense emotions of the adolescents during the pandemic.

MATERIAL AND METHODS

Settings and Participants: The study group consists of 8 high-school students in the 2020-2021 academic year. While forming the study group, we used the "maximum diversity sampling" method as one of the purposeful sampling methods used in qualitative research. So, one girl and one boy were selected from each class of the high school. The diverse sampling enabled us to determine whether there were any common or shared situations.

Research Design: This research was conducted using case study approach as one of the qualitative methods. Creswell (2013) defined qualitative studies as a way to collect and examine non-numerical data in order to narrow a wide research area to an easily ascertainable topic. Data collection process in qualitative studies

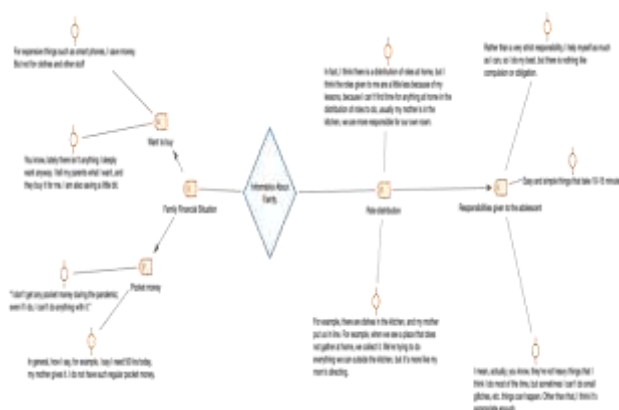
can be completed in three different ways: (a) in-depth, open-ended interviews, (b) written documents and (c) direct observation (Patton, 2014). We used in-depth, open-ended interviews to collect our data because case studies aim to understand and interpret the current situation or to examine the problem in depth (Mohajan, 2018).

Data Collection and Analysis: First, a semi-structured interview form was created by the researchers and five experts were asked for their views and opinions about the questions. The second step was a pilot study conducted on two adolescents to identify the questions that elicited same/similar answers. The pilot study and expert opinion were deemed appropriate to ensure the validity of the obtained data in reflecting the reality, the consistency of the results, and the reliability that indicates the congruity of the data for the purpose of the study. The semi-structured interview form included a total of 11 questions under 3 main themes and also probing questions. 2 specialists in the field of child development were consulted through online interviews or phone calls. Written consent was obtained from the participants and their families. The interviews lasted an average of 30 minutes. First, the tapescript of the interviews was made as a single text document. Then, the data were encoded, themes were identified, the codes were arranged according to themes, and the findings were interpreted (Şimşek & Yıldırım, 2011). To code the themes, two researchers worked independently to code the tapescript. Then, they discussed the codes to develop a new coding framework. Each identified theme was interpreted separately.

We used the MAXQDA software to categorize the interviews within the coding framework and applied the 21 steps of Standards for Reporting Qualitative Research (O'Brien et al., 2014) in our study.

FINDINGS AND DISCUSSION

The financial situation and the harmony within the family are two important factors that can affect adolescents. In order to better evaluate the family situation of our participants, information about their families was collected and grouped under two themes as "Role Distribution" and "Family Financial Situation". The "Information About Family" is represented in Model 1.



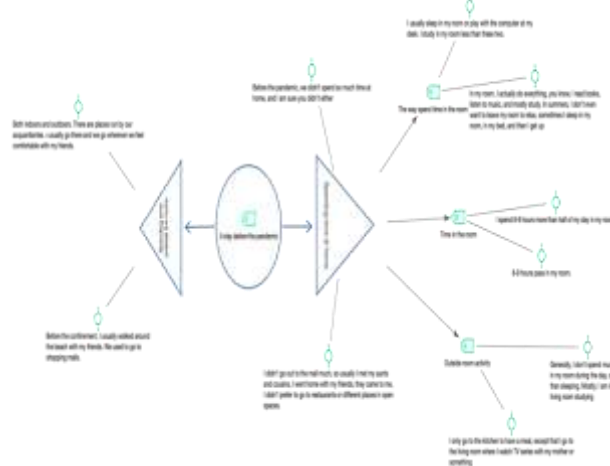
Model 1: Model of the Information About Family

The theme of "Family Financial Situation" included two sub-themes, namely: daily allowance (pocket money) of the adolescents and whether they could buy what they wanted. During the pandemic, not all of the participants received their pocket money, as one said: "I don't get any pocket money during the pandemic; even if I do, I can't do anything with it." It was not only during the pandemic; most of them were not getting pocket money from their parents before the pandemic. One student said: "It is not on a weekly or monthly basis. You know, it is not really regular." Yet, none of the subjects had trouble buying what they wanted to. One student said: "You know, lately there isn't anything

I deeply want anyway. I tell my parents what I want, and they buy it for me. I am also saving a little bit." Another student said: "For expensive things such as smart phones, I save money. But not for clothes and other stuff". The amount of the pocket money that is given to adolescents should be controlled and sufficient to meet their needs. It is known that excessive and uncontrolled pocket money can lead to problems such as substance use (Kumar et al., 2014; Mohan et al., 2005; Punitha et al., 2014). Kumsa et al. (2020) stated that difficulties in receiving pocket money may have negative effects on students' academic success and behaviors (Ardiansyah et al., 2017).

Regarding the theme of "Role Distribution", although there was no distinct set of rules, the adolescents had some responsibilities at home. One student said: "There is not much distribution of roles actually." And another said: "Well I think there is a distribution of roles at home, but I think the roles assigned to me are a little less than others...". There was no clear description of the responsibilities given to the adolescents participating in the study, yet they did not have any difficulty in fulfilling their responsibilities. "I mean, they are not difficult things..." and "Easy and simple things that take 10-15 minutes" were the answers of two participants. However, one subject expressed that he needed to take care of his younger brother, which was exhausting for him: "It is tiring because the age difference between the two of us is so much that whatever interests me is boring for him, and the other way around. He always wants to do the same things and I get bored". When assigning responsibilities to adolescents, it is important to bear in mind that the assignments should be within the capabilities of the adolescents to avoid potential negative effects on their development. While trying to fulfill the duties and responsibilities expected by their parents, adolescents may have the false notion that their needs are less important than those of others. This can cause them to ignore their own needs, interests, and relationships later in life (Köyden, 2015). Through appropriate responsibilities, adolescents acquire self-discipline and learn to implement it to achieve their goals (Taşdemir & Dağistan, 2014). It is reported that assigning responsibilities beyond their capabilities can lead to several problems in adolescents' lives (Demir et al., 2005).

Examining how the participants spent their time before the pandemic revealed two main themes, namely time spent at home (consisting of three sub-themes) and outside home. The model for adolescents whiling their time before the pandemic is given as Model 2.



Model 2: Adolescents' time structuring model before the pandemic

Before the pandemic, our participants usually spent their out-of-home time with their friends and in the school. One of the participants said: "Before the confinement, I usually walked around the beach with my friends. We used to go to shopping malls." Another one said: "I used to wake up early at about 7-7.30, I used

to be at school from 8 to 15:30. After school, sometimes I would meet with my friends and go for a walk, sometimes I would visit my aunts, sometimes I would come home and study depending on the schedule of my next day, but generally I used to have an active day". When in contact with their peers, adolescents can better express themselves and through helping, sharing and spending time with their friends, they get a better understanding of their personality and values. Thus, peer relationships have an important place in adolescence (De Water et al., 2017; Roach, 2019; Van Harmelen et al., 2020). However, the COVID-19 crisis has posed restrictions in social communications and adversely affected the interaction between friends (Rogers et al., 2021).

Owing to their developmental age, adolescents have a strong tendency to social communication and interaction outside the home rather than spending time at home. Blakemore and Mills (2014) stated that adolescence is an important period in social interaction. One of our participants said: "Before the pandemic, we didn't spend so much time at home, and I am sure you didn't either". 3 different sub-themes were identified regarding the time they were homebound due to the pandemic: the time they spend in their room, the way they spent their time in their room, and the time they spend outside their room. Our participants spent most of their time -around 8-9 hours a day- in their rooms dealing with either technological devices or studies. One of the participants said: "In my room, I actually do everything, you know, I read books, listen to music, and mostly study. In summers, I don't even want to leave my room to relax, sometimes I sleep in my room, in my bed, and then I get up". Another one said: "I have a TV in my room so I can play video games or watch movies. I spend time lying in my bed until sleep time". Parents play a major role in managing the leisure time activities of adolescents (Hutchinson et al., 2003). It is reported that when adolescents are alone, they engage more in watching TV and other media more than when they are with their peers (Larson, 1995).



Model 3: Model of the effects of the pandemic on adolescents

When asked about the time they spent out of their room, one participant said: "I only go to the kitchen to have a meal, except that I go to the living room where I watch TV series with my mother or something". Another one said: "Generally, I don't spend much time in my room during the day, other than sleeping. Mostly, I am in the living room studying". It seemed that the adolescents did not engage in common activities with their parents other than daily routines. Alt (2015) stated that parenting practices such as parent-child communication have a great impact on the well-being of children and adolescents. According to Alt and Boniel-Nissim (2018), adolescents may exhibit problematic behaviors if family communication is inefficient. Therefore, spending too much time in their room by themselves can increase the risk of breaking away from their families or exhibiting problematic behaviors in the future.

Spending high-quality and effective time outside their room with their parents is effective in the well-being of adolescents.

Regarding the most adverse impacts of the pandemic on adolescents, we observed two main themes and five sub-themes. The model for the effects of the pandemic is given in Model 3.

Our participants stated that during the confinement, most of their days were monotone, routinized, and quite boring as one said: "It's generally boring and I get tired of doing nothing. I'm always trying to find something to do, but I can't". It is reported that most of the students find online classes boring (Livana et al., 2020; Tanu Wijaya, 2020). This gets more pronounced considering the fact that the students were forced to stay home due to the pandemic.

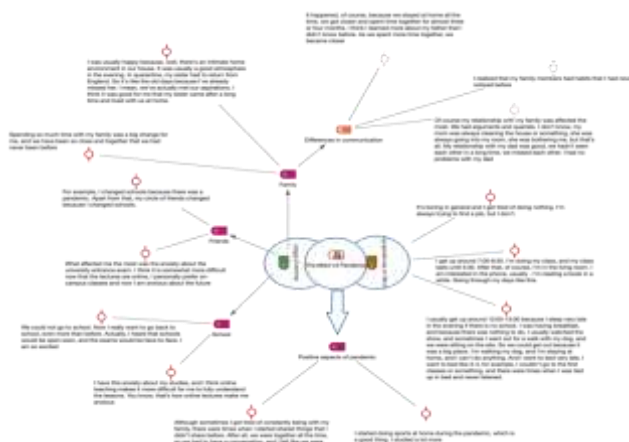
When asked about the negative impacts of the pandemic, our participants mentioned family-related, friends-related, and school-related effects. As a family-related effect, the pandemic had caused changes in the communication of the adolescents with their families. One of the participants said: "Of course my relationship with my family was affected the most. We had arguments and quarrels. I don't know, my mom was always cleaning the house or something, she was always going into my room, she was bothering me, but that's all. My relationship with my dad was good, we hadn't seen each other in a long time, we missed each other. I had no problems with my dad". According to our participants, there was an increase in cleaning behaviors. Rundle et al. (2020); and Signorelli and Fara (2020) stated that, the COVID-19 pandemic caused a rise in hygiene awareness and importance. An increase in obsessive cleaning behaviors due to the COVID-19 pandemic are reported in the literature (Fernández et al., 2020; Kurt-Demirbaş & Sevgili-Koçak, 2020). Although the COVID-19 pandemic is an external stressor outside the family system, given the vagueness of the situation, it is likely to be perceived as a major stressor for many parents and children (Brown et al., 2020). On the other hand, the children started to spend more time with their parents due to the crisis, which helped them realize more about the character, temper, and nature of their family members. For instance, one participant said: "It happened, of course, because we stayed at home all the time, we got closer and spent time together for almost three or four months. I think I learned more about my father that I didn't know before. As we spent more time together, we became closer". Another participant said: "I realized that my family members had habits that I had never noticed before". It seemed that the adolescents and their families did not have close-knit relationships before the pandemic. Home quarantine -as a preventive measure against the spread of the COVID-19 disease-brought parents and children together at homes as one participant said: "Spending so much time with my family was a big change for me, and we have been so close and together that we had never been before". The pandemic had a positive impact on family communications, which positively contribute to the overall family atmosphere (Noller & Bagi, 1985).

Friendships enable adolescents learn how to overcome difficulties, control their behaviors, and approach the opposite sex (Şahin & Özçelik, 2016). The circle of friends, which has a significant impact on the social development of the adolescents (Bayhan & Işıtan, 2010; Kim & Chun, 2018), was tightened due to the pandemic. "What affected me the most was that I could no longer meet my close friends and buddies. We used to meet very often, learn a lot from each other, and basically grow up together. I mean, we could not get together anymore, and I felt sad. It truly affected me", said one participant. Likewise, replacing on-campus classes with online lectures created a distance between friends. Feeling very pleased with the possibility of the reopening of schools, one participant said: "We could not go to school. Now I really want to go back to school, even more than before. Actually, I heard that schools would be open soon, and the exams would be face-to-face. I am so excited". Attending school from early childhood helps children develop both communication and academic skills. Our participants expressed their concern, anxiety and stress regarding their academic success. One of them said:

"What affected me the most was the anxiety about the university entrance exam. I think it is somewhat more difficult now that the lectures are online, I personally prefer on-campus classes and now I am anxious about the future". Another student expressed his concern as: "I have this anxiety about my studies, and I think online teaching makes it more difficult for me to fully understand the lessons. You know, that's how online lectures make me anxious".

Nevertheless, some studies have reported positive effects of the pandemic (Kamdi & Deogade, 2020; Sandín et al., 2020). Likewise, our subjects also stated that the pandemic had some positive effects such as: "I started doing sports at home during the pandemic, which is a good thing. I studied a lot more" and "Although sometimes I got tired of constantly being with my family, there were times when I started shared things that I didn't share before. After all, we were together all the time, so we had to have a conversation, and I felt like we were getting closer". Despite the fact that spending the whole confinement period at home with family members could be boring at times, our participants seemed to recognize its positive aspects.

We investigated the areas in which our participants experienced the most changes. The model regarding the changes experienced during the pandemic is given as Model 4.



Model 4: Model of change in adolescents in the pandemic

The changes caused by the pandemic comprised two main themes and 7 sub-themes. Some of the participants stated that there was an increase in their inner thinking during the pandemic as one said: "I have a lot of time to spend by myself. I am alone more than before. For some reason I started writing more and more. I started thinking about myself and the pandemic. I started thinking about my friends". Another one said: "I have a strange feeling of being overwhelmed, as if everything is coming on top of each other. I feel like crying for no good reason. This feeling is so intense that I can't be happy at all". It seemed that they had more "self-talk" during the pandemic. However, prolonged loneliness and negative self-talk can lead to inefficient or problematic communication between individuals. Moreover, mental health is likely to be negatively affected as a result of the decrease in interactions between people due to the pandemic (Orben et al., 2020).

It seemed that the pandemic caused an increase in self-awareness among the adolescents, which can be due to an increase in inner thinking. "I mean, I think I grew into a mature person in this period. I feel it so vividly" said one participant. There is a positive relationship between adolescents' self-awareness and their social skills, capabilities, and academic skills (Karamad et al., 2020; Turan & İskender, 2020). However, our participants also mentioned about the negative changes in their emotions as one said: "Well, I have contrast emotions in one moment. It is strange. Some days, I get up fresh and happy, and spend a nice day. Other

days, I feel down and sad, especially if I have an exam. It is very different, so I cannot say I am always happy or sad, my feelings are constantly fluctuating. I cry at home because of lockdown". It is known that infectious diseases have negative effects on the mental and psychological well-being of individuals (Restubog et al., 2020). While the COVID-19 crisis brought about many changes, social isolation was the most pronounced one among all. One participant said: "It is a big change. I cannot spend time with my friends anymore. I started to study more as I am constantly at home". Brooks et al. (2020) stated that social distancing might lead to individual difficulties, as friends and relatives can no longer visit each other, and physical contact should be avoided.

Regarding the strongest emotions that the adolescents experienced, we identified sub-dimensions, namely anxiety and impatience. Social interactions with peers play an important role in the psychosocial adaptation of adolescents (Tillfors et al., 2012). As social interaction decreased to a minimum due to the pandemic, the adolescents had elevated levels of anxiety and stress. One participant said: "... seriously, when my close friends and relatives were diagnosed with COVID-19, I realized how serious it was, and then I felt worried and scared". Another one said: "First I thought that my stress was due to the burden of lessons, exams, and homework. But then I realized that even when I was studying well, I had the same feelings [stress, anxiety]". Our participants reported that during the pandemic they were petulant and short-tempered. Lee (2020) stated that as a result of COVID-19, it is predicted that children and adolescents may experience anxiety, depression and/or stress-related symptoms due to unprecedented disruptions in their daily lives. Therefore, adolescents are quite likely to experience higher levels of stress. Two of our participants responded as: "These feelings [stress and anxiety] were the most intense when people below 20 years of age were prohibited from leaving their homes. It was overwhelming when there was a long period that I could not go out at all" and "I mean, I was really overwhelmed when we could not leave the house for 3 months. Now that we can go out on weekdays (though not on weekends) I feel a lot better. But when we stayed at home for 3 full months, I was experiencing these [stress and anxiety] to a great extent". It is known that the COVID-19 crisis caused an increase in stress and anxiety levels due to prolonged social isolation (Pakpour & Griffiths, 2020; Satici et al., 2020).

CONCLUSION

Within the scope of the research, four main themes were created: information about family, life before the pandemic, the effects of the pandemic, and changes and emotions. Based on these main themes, the results are as following:

The theme of "Family Financial Situation" was divided into two sub-themes: pocket money of the adolescents and whether they could buy what they wanted to. Both before and during the pandemic, the adolescents did not get pocket money on a regular basis, so they were dependent on their parents for buying things. This prevented them from extravagancy. Having financial difficulties during adolescence can affect individuals' self-esteem and withdraw them from sharing the same environment with their friends.

Within the theme of "Role Distribution", we observed that the adolescents were given responsibilities within the family. However, lack of a specific set of rules caused the responsibilities seem meaningless for the adolescents. The responsibilities that are assigned to young adults should be meaningful, practical, and within their capabilities. It is also important to bear in mind that assigning too much or too little responsibilities are harmful for young adults in their future lives.

Within the theme of "Before the pandemic", we observed that our participants generally spent most of their time outside the home usually with their friends and in the school. While at home, they were mostly in their rooms. During adolescence, social interactions are mostly based on the concept of relations with friends and peers. In other words, communication with friends is

prioritized over family interactions. The pandemic and consequent home confinement restricted the adolescents' social interactions and caused them to spend more time on their own in their rooms watching movies and TV series. They only left their rooms for basic daily routines such as having a meal. As a result of home-confinement, some participants reported an increase in the time and activities they shared with their families.

Within the theme of "effects of the pandemic", family, friends, and school-related issues were observed. Being at home and lack of contact with friends led to an increase in the communication between children and parents. This increased communication enabled them to recognize some behavior styles of their family members that were previously unknown to them. The switch to online teaching exposed students to stress over their academic success on one hand, and further restricted their social contacts on the other hand.

According to our participants, during the home confinement, the days were monotonous and quite boring. They found it difficult to entertain themselves with fun activities at home; thus, after attending online lectures in the mornings, they spent the majority of their time with technological devices such as tablets and smart phones.

Regarding the positive aspects of the pandemic, our participants reported an increase in doing sports, studying, and communicating with their families. The adolescents, who shared less with their families before the pandemic, started to spend more time with their parents and strengthen their family communication.

Within the theme of "Changes caused by the pandemic", four sub-themes were identified. As a result of being at home -and mainly in their rooms- our participants stated that their internal thinking and self-awareness increased. Thus, they are likely to behave more consciously and mindfully. However, prolonged loneliness may pose a risk of negative emotional changes that can affect an individual's communication skills. It seems that the stress levels of the adolescents increased with different emotional changes.

The emotional states of anxiety and impatience were what our participants experienced the most. This seems to be related to the national rule according to which home confinement was mandatory for teenagers and adolescents. The social isolation along with the curfews gave rise to anxiety and impatience and increased the likelihood of elevated levels of stress.

Based on our research, the following recommendations seem to be useful for adolescents, families and relevant professionals:

- Families should be informed about the potential negative impact of the pandemic on the parent-child communication. Trainings on effective communication methods should be provided to strengthen family communication.
- Families should be provided with a list of productive and fun activities in which all family members are engaged.
- Professional academic coaches should provide necessary guidance for the adolescents to cope with their school-related stress.
- Online teaching should be more interactive to preserve a certain extend of communication.
- Necessary measures should be taken to allow peer interaction within the curfew rules for the adolescents.

Limitations: Although this study provided important insights, it has some limitations that need to be addressed. Data could not be collected through face-to-face interviews given the current crisis. Moreover, the study sample included adolescents from different cities; thus, when interpreting the results, socio-cultural differences between cities in Turkey should be taken into account. Most of the challenges, problems, and responses were generally common among children with average social and financial backgrounds. Future studies are recommended to include more comprehensive groups to yield more generalizable results.

REFERENCES

1. Afifi, T. D., Afifi, W. A., Merrill, A. F., & Nimah, N. (2016). 'Fractured communities': uncertainty, stress, and (a lack of) communal coping in Palestinian refugee camps. *Journal of Applied Communication Research*, 44(4), 343-361. <https://doi.org/10.1080/00909882.2016.1225166>
2. Akoğlu, G., & Karaaslan, B. (2020). COVID-19 ve İzolasyon Sürecinin Çocuklar Üzerindeki Olası Psikososyal Etkileri. *İzmir Katip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*, 5(2), 99-103. <https://dergipark.org.tr/en/pub/ikcusbfd/issue/55773/736666>
3. Alt, D. (2015). First-Year Female College Students' Academic Motivation as a Function of Perceived Parenting Styles: A Contextual Perspective. *Journal of Adult Development*, 22(2), 63-75. <https://doi.org/10.1007/s10804-014-9201-2>
4. Alt, D., & Boniel-Nissim, M. (2018). Parent-Adolescent Communication and Problematic Internet Use: The Mediating Role of Fear of Missing Out (FoMO). *Journal of Family Issues*, 39(13), 3391-3409. <https://doi.org/10.1177/0192513X18783493>
5. Andrews, J. L., Foulkes, L., & Blakemore, S.-J. (2020). Peer Influence in Adolescence: Public-Health Implications for COVID-19. *Trends in Cognitive Sciences*, 24(8), 585-587. <https://doi.org/https://doi.org/10.1016/j.tics.2020.05.001>
6. Ardiansyah, P., Bhisma, M., & Pawito, P. (2017). Effect of Personal Factors, Family Support, Pocket Money, and Peer Group, on Smoking Behavior in Adolescents in Surakarta, Central Java. *Journal of Health Promotion and Behavior*, 2(2), 98-111.
7. Basut, E. (2006). Stres, başa çıkma ve ergenlik. *Çocuk ve Gençlik Ruh Sağlığı Dergisi*, 13(1), 31-36.
8. Bayhan, P., & Işıtan, S. (2010). Ergenlik döneminde ilişkiler: Akran ve romantik ilişkilere genel bakış. *Sosyal Politika Çalışmaları Dergisi*, 20(20), 33-44. <https://dergipark.org.tr/en/pub/spcd/issue/21108/227337>
9. Bećirović, E., & Pajević, I. (2020). Behavioral Addictions in Childhood and Adolescence - Pandemic Knocking Door. *Psychiatr Danub*, 32(3), 382-385.
10. Blakemore, S.-J., & Mills, K. L. (2014). Is Adolescence a Sensitive Period for Sociocultural Processing? Annual review of psychology, 65(1), 187-207. <https://doi.org/10.1146/annurev-psych-010213-115202>
11. Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*, 395(10227), 912-920. [https://doi.org/https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/https://doi.org/10.1016/S0140-6736(20)30460-8)
12. Brown, S. M., Doom, J. R., Lechuga-Peña, S., Watamura, S. E., & Koppels, T. (2020). Stress and parenting during the global COVID-19 pandemic. *Child Abuse & Neglect*, 110(2). <https://doi.org/https://doi.org/10.1016/j.chiabu.2020.104699>
13. Creswell, W. J. (2013). *Research Design Qualitative, Quantitative and Mixed Research Design 4th Edition*. SAGE Publications.
14. De Los Reyes, A., Ohannessian, C. M., & Racz, S. J. (2019). Discrepancies Between Adolescent and Parent Reports About Family Relationships. *Child Development Perspectives*, 13(1), 53-58. <https://doi.org/https://doi.org/10.1111/cdep.12306>
15. De Water, E., Burk, W. J., Cillessen, A. H. N., & Scheres, A. (2017). Substance use and decision-making in adolescent best friendship dyads: The role of popularity [https://doi.org/10.1111/sode.12227]. *Social Development*, 26(4), 860-875. <https://doi.org/https://doi.org/10.1111/sode.12227>
16. Del Giudice, M., Buck, C. L., Chaby, L. E., Gormally, B. M., Taff, C. C., Thawley, C. J., Vitousek, M. N., & Wada, H. (2018). What Is Stress? A Systems Perspective. *Integrative and Comparative Biology*, 58(6), 1019-1032. <https://doi.org/10.1093/icb/icy114>
17. Demir, N., Baran, A., & Ulusoy, D. (2005). Türkiye'de Ergenlerin Arkadaş-Akran Grupları İle İlişkileri ve Sapmış Davranışlar: Ankara Örneği. *Bilgi*, 32, 83-108. <https://dergipark.org.tr/en/pub/bilgi/issue/25372/267802>
18. Endler, N. S., & Parker, J. D. A. (1990). Stress and anxiety: Conceptual and assessment issues. *Stress Medicine*, 6(3), 243-248. <https://doi.org/https://doi.org/10.1002/smi.2460060310>
19. Everett, J., Colombatto, C., Chituc, V., Brady, W., & Crockett, M. (2020). The effectiveness of moral messages on public health behavioral intentions during the COVID-19 pandemic.
20. Fernández, R. S., Crivelli, L., Guimet, N. M., Allegri, R. F., & Pedreira, M. E. (2020). Psychological distress associated with COVID-19 quarantine: Latent profile analysis, outcome prediction and mediation analysis. *Journal of Affective Disorders*, 277, 75-84. <https://doi.org/https://doi.org/10.1016/j.jad.2020.07.133>
21. Goodman, E., McEwen, B. S., Dolan, L. M., Schafer-Kalkhoff, T., & Adler, N. E. (2005). Social disadvantage and adolescent stress.

- Journal of Adolescent Health, 37(6), 484-492. <https://doi.org/https://doi.org/10.1016/j.jadohealth.2004.11.126>
22. Groun, M. W., Thomas, S. P., & Shoffner, D. (1992). Adolescent stress and coping: A longitudinal study. *Research in Nursing & Health*, 15(3), 209-217. <https://doi.org/https://doi.org/10.1002/nur.4770150307>
 23. Grupe, D. W., & Nitschke, J. B. (2013). Uncertainty and anticipation in anxiety: an integrated neurobiological and psychological perspective. *Nature Reviews Neuroscience*, 14(7), 488-501. <https://doi.org/10.1038/nrn3524>
 24. Hutchinson, S. L., Baldwin, C. K., & Caldwell, L. L. (2003). Differentiating Parent Practices Related to Adolescent Behavior in the Free Time Context. *Journal of Leisure Research*, 35(4), 396-422. <https://doi.org/10.1080/00222216.2003.11950003>
 25. Johnston, J. (2020). Stress and anxiety. *Veterinary Nursing Journal*, 35(8), 217-217. <https://doi.org/10.1080/17415349.2020.1850798>
 26. Kamdi, P. S., & Deogade, M. S. (2020). The hidden positive effects of COVID-19 pandemic. *International Journal of Research in Pharmaceutical Sciences*, 11(Special Issue 1). <https://doi.org/https://doi.org/10.26452/ijrps.v11iSPL1.2712>
 27. Karamad, J., Fallah, V., & Salimi, L. (2020). Develop a Narrative Philosophy Education Program and Evaluate its Effectiveness on Moral Intelligence, Epistemological Beliefs and Emotional Self-awareness in Adolescents. *Iranian Journal of Educational Sociology*, 3(2), 96-109. <http://iase-idje.ir/article-1-848-en.html>
 28. Kim, H. H. S., & Chun, J. (2018). Analyzing Multilevel Factors Underlying Adolescent Smoking Behaviors: The Roles of Friendship Network, Family Relations, and School Environment [https://doi.org/10.1111/josh.12630]. *Journal of School Health*, 88(6), 434-443. <https://doi.org/https://doi.org/10.1111/josh.12630>
 29. Köyden, D. (2015). Ebeveynleşme Olgusunun Depresyon, Kaygı, Öfke ve Obsesif İnanış Biçimleriyle İlişkinin İncelenmesi [Unpublished Master's Dissertation, Hacettepe University]. Ankara.
 30. Kumar, V., Talwar, R., Roy, N., Raut, D., & Singh, S. (2014). Psychosocial Determinants of Tobacco Use among School Going Adolescents in Delhi, India. *Journal of addiction*, 2014, 170941-170941. <https://doi.org/10.1155/2014/170941>
 31. Kumsa, M. J., Lemu, B. N., & Nguse, T. M. (2020). Lack of pocket money impacts Ethiopian undergraduate health science students learning activities. *PLoS ONE*, 15(12), e0243634. <https://doi.org/10.1371/journal.pone.0243634>
 32. Kurt-Demirbaş, N., & Sevgili-Koçak, S. (2020). 2-6 yaş arasında çocuğu olan ebeveynlerin bakış açısıyla Covid-19 salgın sürecinin değerlendirilmesi. *Eurasian Journal of Researches in Social and Economics*, 7(6), 328-349. <https://dergipark.org.tr/en/pub/asead/issue/55211/750920>
 33. Larson, R. (1995). Secrets in the bedroom: Adolescents' private use of media. *Journal of Youth and Adolescence*, 24(5), 535-550. <https://doi.org/10.1007/BF01537055>
 34. Lazarus, R. S. (1976). *Patterns of adjustment* (3-rd ed.). McGraw-Hill.
 35. Lee, J. (2020). Mental health effects of school closures during COVID-19. *The Lancet Child & Adolescent Health*, 4(6), 421. [https://doi.org/https://doi.org/10.1016/S2352-4642\(20\)30109-7](https://doi.org/https://doi.org/10.1016/S2352-4642(20)30109-7)
 36. Livana, P., Mubin, M. F., & Basthomi, Y. (2020). "Learning Task" Attributable to Students' Stress During the Pandemic Covid-19. *Jurnal Ilmu Keperawatan Jiwa*, 3(2), 203-208. <https://doi.org/http://dx.doi.org/10.32584/jik.v3i2.590>
 37. Lo Iacono, L., & Carola, V. (2018). The impact of adolescent stress experiences on neurobiological development. *Seminars in Cell & Developmental Biology*, 77, 93-103. <https://doi.org/https://doi.org/10.1016/j.semcdb.2017.09.040>
 38. McEwen, B. S., & Karatsoreos, I. N. (2020). What Is Stress? In A. Choukèr (Ed.), *Stress Challenges and Immunity in Space: From Mechanisms to Monitoring and Preventive Strategies* (pp. 19-42). Springer International Publishing. https://doi.org/10.1007/978-3-030-16996-1_4
 39. McGinty, E. E., Presskreischer, R., Han, H., & Barry, C. L. (2020). Psychological Distress and Loneliness Reported by US Adults in 2018 and April 2020. *JAMA*, 324(1), 93-94. <https://doi.org/10.1001/jama.2020.9740>
 40. Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*, 7(1), 23-48.
 41. Mohan, S., Sankara Sarma, P., & Thankappan, K. R. (2005). Access to pocket money and low educational performance predict tobacco use among adolescent boys in Kerala, India. *Preventive Medicine*, 41(2), 685-692. <https://doi.org/https://doi.org/10.1016/j.ypmed.2005.01.013>
 42. Noller, P., & Bagi, S. (1985). Parent—adolescent communication. *Journal of Adolescence*, 8(2), 125-144. [https://doi.org/https://doi.org/10.1016/S0140-1971\(85\)80042-7](https://doi.org/https://doi.org/10.1016/S0140-1971(85)80042-7)
 43. O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med*, 89(9), 1245-1251. <https://doi.org/10.1097/acm.0000000000000388>
 44. Orben, A., Tomova, L., & Blakemore, S.-J. (2020). The effects of social deprivation on adolescent development and mental health. *The Lancet Child & Adolescent Health*, 4(8), 634-640. [https://doi.org/https://doi.org/10.1016/S2352-4642\(20\)30186-3](https://doi.org/https://doi.org/10.1016/S2352-4642(20)30186-3)
 45. Pakpour, A. H., & Griffiths, M. D. (2020). The fear of COVID-19 and its role in preventive behaviors. *Journal of Concurrent Disorders*, 2(1), 58-63.
 46. Patrick, S. W., Henkhaus, L. E., Zickafoose, J. S., Lovell, K., Halvorson, A., Loch, S., Letterie, M., & Davis, M. M. (2020). Well-being of Parents and Children During the COVID-19 Pandemic: A National Survey. *Pediatrics*, 146(4). <https://doi.org/10.1542/peds.2020-016824>
 47. Patton, M. Q. (2014). Nitel Araştırma ve Değerlendirme Yöntemleri (M. Bütün & S. Demir, Trans.). Pegem Akademi Yayıncılık.
 48. Prime, H., Wade, M., & Browne, D. T. (2020). Risk and resilience in family well-being during the COVID-19 pandemic. *The American psychologist*, 75(5), 631-643. <https://doi.org/10.1037/amp0000660>
 49. Provensi, G., Schmidt, S. D., Boehme, M., Bastiaanssen, T. F. S., Rani, B., Costa, A., Busca, K., Fouhy, F., Strain, C., Stanton, C., Blandina, P., Izquierdo, I., Cryan, J. F., & Passani, M. B. (2019). Preventing adolescent stress-induced cognitive and microbiome changes by diet. *Proceedings of the National Academy of Sciences*, 116(19), 9644. <https://doi.org/10.1073/pnas.1820832116>
 50. Punitha, V. C., Amudhan, A., Sivaprakasam, P., & Rathnaprabhu, V. (2014). Pocket Money: Influence on Body Mass Index and Dental Caries among Urban Adolescents. *Journal of clinical and diagnostic research* : JCDR, 8(12), JC10-JC12. <https://doi.org/10.7860/JCDR/2014/10498.5310>
 51. Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *General Psychiatry*, 33(2), e100213. <https://doi.org/10.1136/gpsych-2020-100213>
 52. Restubog, S. L. D., Ocampo, A. C. G., & Wang, L. (2020). Taking control amidst the chaos: Emotion regulation during the COVID-19 pandemic. *Journal of Vocational Behavior*, 119, 103440. <https://doi.org/https://doi.org/10.1016/j.jvb.2020.103440>
 53. Roach, A. (2019). A concept analysis of adolescent friendship. *Nursing Forum*, 54(3), 328-335. <https://doi.org/https://doi.org/10.1111/nuf.12332>
 54. Rogers, A. A., Ha, T., & Ockey, S. (2021). Adolescents' Perceived Socio-Emotional Impact of COVID-19 and Implications for Mental Health: Results From a U.S.-Based Mixed-Methods Study. *Journal of Adolescent Health*, 68(1), 43-52. <https://doi.org/https://doi.org/10.1016/j.jadohealth.2020.09.039>
 55. Rundle, C. W., Presley, C. L., Militello, M., Barber, C., Powell, D. L., Jacob, S. E., Atwater, A. R., Watsky, K. L., Yu, J., & Dunnick, C. A. (2020). Hand hygiene during COVID-19: Recommendations from the American Contact Dermatitis Society. *Journal of the American Academy of Dermatology*, 83(6), 1730-1737. <https://doi.org/https://doi.org/10.1016/j.jaad.2020.07.057>
 56. Şahin, Ş., & Özçelik, Ç. (2016). Ergenlik dönemi ve sosyalleşme. *Cumhuriyet Hemsirelik Dergisi*, 5(1), 42-49. <https://www.academia.edu/download/57864145/5000127608-5000373989-2-PB.pdf>
 57. Sandín, B., Valiente, R. M., García-Escalera, J., Campagne, D. M., & Chorot, P. (2020). Psychological impact of the COVID-19 pandemic: Negative and positive effects in Spanish population during the mandatory national quarantine [COVID-19; coronavirus; anxiety; depression; distress; sleep problems; intolerance of uncertainty; media exposure; positive effects.]. 2020, 25(1). <https://doi.org/10.5944/rppc.28107>
 58. Sani, G., Janiri, D., Di Nicola, M., Janiri, L., Ferretti, S., & Chieffo, D. (2020). Mental health during and after the COVID-19 emergency in Italy. *Psychiatry and Clinical Neurosciences*, 74(6), 372-372. <https://doi.org/https://doi.org/10.1111/pcn.13004>
 59. Satici, B., Saricali, M., Satici, S. A., & Griffiths, M. D. (2020). Intolerance of Uncertainty and Mental Wellbeing: Serial Mediation by Rumination and Fear of COVID-19. *International journal of mental health and addiction*, 1-12. <https://doi.org/10.1007/s11469-020-00305-0>
 60. Sigfusdottir, I. D., Kristjánsson, A. L., Thorlindsson, T., & Allegrante, J. P. (2017). Stress and adolescent well-being: the need for an

- interdisciplinary framework. *Health Promotion International*, 32(6), 1081-1090. <https://doi.org/10.1093/heapro/daw038>
61. Signorelli, C., & Fara, G. M. (2020). COVID-19: Hygiene and Public Health to the front. *Acta bio-medica : Atenei Parmensis*, 91(3-S), 7-8. <http://europepmc.org/abstract/MED/32275261>
<https://doi.org/10.23750/abm.v91i3-S.9507>
62. Şimşek, H., & Yıldırım, A. (2011). Sosyal bilimlerde nitel araştırma yöntemleri. Seçkin Yayıncılık.
63. Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends Cogn Sci*, 9(2), 69-74. <https://doi.org/10.1016/j.tics.2004.12.005>
64. Steinberg, L. D., Vandell, D., & Bornstein, M. H. (2011). *Development: Infancy Through Adolescence*. Wadsworth Cengage Learning.
65. Tanu Wijaya, T. (2020). How chinese students learn mathematics during the coronavirus pandemic. *IJERI: International Journal of Educational Research and Innovation*(15), 1-16. <https://doi.org/10.46661/ijeri.4950>
66. Taşdemir, M., & Dağistan, G. (2014). Çocuklara sorumluluk kazandırmada ebeveynlerin bhtg yaklaşımını uygulama durumları: bir durum çalışması. *Electronic Turkish Studies*, 9(8), 47-71. <http://search.ebscohost.com/login.aspx?direct=true&db=obo&AN=99531386&site=eds-live&authtype=ip,uid>
67. Tillfors, M., Persson, S., Willén, M., & Burk, W. J. (2012). Prospective links between social anxiety and adolescent peer relations. *Journal of Adolescence*, 35(5), 1255-1263. <https://doi.org/https://doi.org/10.1016/j.adolescence.2012.04.008>
68. Troy, A. S., & Mauss, I. B. (2011). Resilience in the face of stress: emotion regulation as a protective factor. In B. T. Litz, D. Charney, M. J. Friedman, & S. M. Southwick (Eds.), *Resilience and Mental Health: Challenges Across the Lifespan* (pp. 30-44). Cambridge University Press. <https://doi.org/10.1017/CBO9780511994791.004>
69. Turan, M. E., & İskender, M. (2020). The Relationship Between Career and Talent Development Self-Efficacy with Metacognitive Awareness, Life Satisfaction and Perceived Social Support from Friends. *Ekev Akademi Dergisi*(84), 435-448. <https://doi.org/http://dx.doi.org/10.17753/Ekev1626>
70. Ünver, H., Arman, A., Ayaz, A., & İlbasmış, Ç. (2020). COVID-19 pandemic-onset anorexia nervosa: Three adolescent cases. *Psychiatry and Clinical Neurosciences*, 74, 659-673. <https://doi.org/10.1111/pcn.13160>
71. Van Harmelen, A. L., Blakemore, S. J., Goodyer, I. M., & Kievit, R. A. (2020). The Interplay Between Adolescent Friendship Quality and Resilient Functioning Following Childhood and Adolescent Adversity. *Adversity and Resilience Science*. <https://doi.org/10.1007/s42844-020-00027-1>
72. White, F. A. (1996). Parent-Adolescent Communication and Adolescent Decision-Making". *Journal of Family Studies*, 2(1), 41-56. <https://doi.org/10.5172/jfs.2.1.41>
73. Wray-Lake, L., Wilf, S., Kwan, J. Y., & Oosterhoff, B. (2020). Adolescence during a pandemic: Examining US adolescents' time use and family and peer relationships during COVID-19. *PsyArXiv*. <https://doi.org/10.31234/osf.io/7vab6>