Changes in Child Discipline Strategies in Iran During the Outbreak of COVID-19

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Abstract
During the prolonged COVID-19 pandemic, anxiety and depression were common among caregivers and parents more prone to adopt harsh disciplinary techniques when angry or stressed. The purpose of this study was to investigate if there are any differences in parents’ disciplinary strategies following social distancing efforts during the COVID-19 pandemic. An online questionnaire was completed by a convenience sample of parents (N = 605) and mothers (n = 533; 88.1%) aged 37.80 years old (SD = 5.66; range = 20–59) who lived with children aged 6–12 years in Iran during the COVID-19 pandemic. Iran’s Multiple Indicator Demographic and Health Survey questionnaire was used to gauge child discipline. There was an increase in shaking (1.8%), shouting and yelling (15.5%). The findings of this study serve as a reminder to researchers and government officials that child abuse and violence are more likely to occur during stressful times and provide the scientific foundation for the development of tailored psychological treatment.

Keywords
children, COVID-19, child discipline, child abuse, child mental health, social distancing

Introduction
The first case of COVID-19 was discovered in Wuhan, China in December 2019 (Singhal, 2020; World Health Organization, 2020; Zu et al., 2020). The first case of COVID-19 in Iran was discovered in February 2020. By December 27th, 2021, Iran had more than 6 million confirmed cases (World Health Organization, 2021). Social distancing, quarantine, and closing of schools, universities, mosques, shrines, shopping centers, big markets, sports venues, swimming pools, parks, and museums were all implemented to slow the spread of the virus (Abdi & Mirzaei, 2020; Ministry of Health and Medical Education, 2020). People were encouraged to stay at home and self-quarantine (Abdi & Mirzaei, 2020). To respond to localized peaks in infections, each province imposed its own restrictions. The government restricted travel to provinces with high COVID-19 prevalence, and drivers traveling to those cities were fined.

Although social distancing is a useful tool to break the transmission chain and reduce new cases, it has some disadvantages as well (Duan et al., 2020; Humphreys et al., 2020; Liu et al., 2020; Saurabh & Ranjan, 2020; Spinelli et al., 2020; Usher et al., 2020). It is an unfamiliar and unpleasant experience that includes separation from friends and family, as well as a change in daily routines (Duan et al., 2020; Ye, 2020). It has also been shown to trigger psychosocial issues, especially in vulnerable populations. While all humans are at risk of psychological damage when held in isolation, children and adolescents (Duan et al., 2020), older adults, ethnic groups, those from lower socioeconomic groups, females, and those with pre-existing mental health problems are the most vulnerable in these circumstances (Perrin et al., 2009; Usher et al., 2020; Ye, 2020). Long-term home confinement has some negative consequences for children’s physical and mental health (Brooks et al., 2020; Ye, 2020). Aside from psychological problems such as anxiety and behavioral issues in children (Duan et al., 2020), quarantine and social distancing caused an increase in the rate of child abuse and domestic violence (Humphreys et al., 2020; Mazza et al., 2020; Spinelli et al., 2020).

Primary and secondary pupils make up one third of the population in Iran (Statistical Center of Iran, 2016a, 2016b). Due to social distancing strategy, children remained at home and spent more time with their parents, which may have led to a change in the relationship between parents and their children (Russell et al., 2020; Spinelli et al., 2020).

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Exposure to a wide range of disasters has a detrimental effect on familial mental health and can result in extended periods of elevated anxiety and depressive symptoms (Cluver et al., 2020; Humphreys et al., 2020; Suffren et al., 2021; Tan et al., 2021). Studies have shown that children of extremely distressed parents, or caregivers who suffer from their own negative mental health consequences as a result of the disaster, have the worst outcomes (Russell et al., 2020; Suffren et al., 2021). The COVID-19 pandemic could have unanticipated consequences for people’s mental wellbeing as well as unknown consequences for child-parent relationships (Russell et al., 2020; Ye, 2020). Child discipline strategies of parenting might have changed, and methods of teaching and nurturing that help children achieve competence, self-control, self-direction, and compassion could be affected due to the wide range of changes in parent-child relationships during the COVID-19 pandemic.

Given the situation in the pandemic, some concerns have been raised about child behavior management, including discipline strategies used to teach appropriate behavior and protect children and others from the negative consequences of challenging behavior. Corporal punishment is the use of physical force with the purpose of causing pain to a child without injury in order to correct or control their behavior (Holden, 2020; Straus & Donnelly, 2017). Aversive disciplinary strategies, such as corporal punishment and shouting at or shaming children, are only moderately effective disciplinary tactics in the short term and ineffective in the long run (Sege et al., 2018). In general, many studies have shown that physical punishment has adverse effects on children’s health. It increases child aggression and antisocial behavior, lowers cognitive ability and self-esteem, and increases mental health problems along with the risk of physical abuse (Glicksman, 2019; Kavan et al., 2018), ultimately degrading the parent-child relationship (Gershoff & Larzelere, 2002; Gershoff et al., 2018; Glicksman, 2019; Grogan-Kaylor, Ma, et al., 2018). Child, parent, family, social environment, and sociocultural determinants influence parental corporal punishment. (Holden, 2020; Taraban & Shaw, 2018). As numerous studies have shown parents are more likely to use aversive techniques of discipline such as slapping when they are angry or irritable, depressed, fatigued, stressed or generally expressing negative emotions (Cheng et al., 2018; Child & Health, 1998; Graziano et al., 1996; Grogan-Kaylor, Burlaka, et al., 2018; Taraban & Shaw, 2018).

According to the Hoffman theory, three discipline categories can be distinguished: 1) Induction refers to strategies in which a parent gives explanations or reasons for requiring a child to alter their behavior (for example, by pointing out the behavior’s painful consequences for others). The parent attempts to induce the child to voluntarily comply. 2) Power assertion is defined as behavior that puts significant external pressure on a child to behave according to the parent’s desires. Physical punishment, deprivation of material objects or privileges, use of direct force, or the threat of any of these are all examples of corporal punishment. Rather than relying on the child’s inner resources (e.g., empathy, guilt, shame, or love), the parent punishes the child physically or materially, or relies on the child’s fear of punishment. 3) Love withdrawal is defined as a nonphysical expression of a parent’s disapproval or anger against their child, with the implication that love will not be restored until the child behaves according to the parent’s wishes (for example, ignoring, isolating, or rejecting the child) (De Veer, 1991; Hoffman et al., 1973). In this study, we focused on the first and second categories with questions on physical punishment, deprivation, and giving explanations.

Studies have shown that effective strategies for influencing a child’s behavior include positive reinforcement to increase appropriate behavior, extinction (planned ignoring) for most low-level problematic behaviors, and time-out from reinforcement for more problematic behaviors (Kavan et al., 2018; Smith, 1995; Strahun et al., 2013). Child disciplinary strategies should be tailored to a child’s age and growth, teach the child to regulate their behavior, protect them from harm, improve their cognitive, socioemotional, and executive functioning skills, and reinforce the behavioral patterns taught by the child’s parents and caregivers (Child & Health, 1998; Nieman & Shea, 2004; Sege et al., 2018). The use of positive or negative verbal reprimand, as well as privilege restriction, are nonphysical punishment strategies. Verbal reasoning is another type of nonphysical discipline in which the parent explains to the child why their behavior is unacceptable (Gershoff et al., 2010; Grogan-Kaylor et al., 2021).

Studies discussed psychological dimensions of the parent-child relationship in the COVID-19 epidemic and concluded that the increase of stress in parents increases the likelihood of burnout and child abuse (Imran et al., 2020; Shirzadi et al., 2020; Zadašfar et al., 2021). Anxiety and depression are prevalent among caregivers during the lockdown period (Farajzadeh et al., 2021). Ranjbar et al. (2021) evaluated the effects of lockdown and school closure on children’s lifestyle, with a particular focus on leisure and sleep patterns. They found that screen time has increased and even sleep duration and pattern have changed (Ranjbar et al., 2021). COVID-19 related stress is associated with parental reports of neglectful, harsh, and positive discipline practices (Connell & Strambler, 2021). The effects of the COVID-19 pandemic on parental perceived stress and child abuse potential were investigated in western U.S. parents. Findings show that higher levels of perceived stress are linked to an increased risk of child maltreatment. In addition, more parental support and perceived control are linked to decreased reported stress and risk of child abuse. There are racial and ethnic disparities in perceived stress, but not in mental health risk or child abuse risk (Brown et al., 2020). In the Netherlands, parental behavior...
was compared with pre-pandemic levels and it was reported that harsh parenting increased during COVID-19 (Sari et al., 2021). To the best of our knowledge, changes in child disciplinary strategies during COVID-19 have not been studied in Iran. Therefore, the aim of this study is to determine changes in disciplinary strategies in parenting before and during the pandemic.

Methods

Participant

We conducted an internet-based cross-sectional study in 2020 in the period from September 26 to November 8 in Iran. Iran is a Western Asia country at the crossroads of Arab and Central Asian civilizations. The social codes, behaviors, and beliefs of Iranians vary greatly from region to region. Diverse cities have different reputations, while different rural communities can have almost different traditions and values. The primary religion practiced in Iran is Islam and two most common sects of Islam are Sunni and Shi’i, with Shi’i Islam being practiced by the vast majority of Iranians. Iran has an estimated population of 84 million people, with more than 25 million of them being children. Mothers are the main caregivers of children and the parenting roles have traditionally fallen more on females in Iran.

Using convenience sampling in all provinces around the country, parents participated in this study. Parents of children aged 6 to 12 years who lived with children in Iran during the COVID-19 pandemic and had internet access were eligible to participate in our study. We sent the link of the questionnaire to parents/caregivers and 605 questionnaires were completed from 31 provinces (participation rate = 81%).

Instruments

The set of questionnaires involved in this study was mainly composed of two sections. Aside from demographic questions, we used Iran’s Multiple Indicator Demographic and Health Survey (IRMIDHS) instrument (Rashidian et al., 2014). Demographic questions included questions on gender, age, household location (name of province), occupation and education of parents, whether they have a place for their kids to play, communication with relatives during the COVID-19 pandemic, usage of electronic devices, and internet access.

Rashidian et al. developed and validated a set of questionnaires to study Iranians’ health status (Rashidian et al., 2014) which included a Child Discipline Checklist (Appendix 1). The checklist consists of 13 questions to assess parents’ and caregivers’ discipline strategies (Rashidian et al., 2014). The participants responded “yes” or “no” to each statement. The main question was “Have you or anyone else in your household used the following methods on your kids or not?” This question was followed by 12 statements and a question about the respondent’s belief in corporal punishment for the proper upbringing of the child.

In order to collect data about child discipline strategies before and during the COVID-19 pandemic, we repeated each statement twice, and participants responded to each statement according to pre- COVID-19 and COVID-19 statuses.

Procedures

The questionnaire was designed by Porsline (an online Persian survey maker), and the generated link was shared with liaisons on social media (i.e., WhatsApp, Instagram). We identified individuals who had access to the parents of children aged 6 to 12 in each of the 31 provinces. They served as a go-between for the researchers, and using the snowball method, we identified potential participants and invited them to respond to the questionnaire.

Ethical Consideration

The study was approved by the Ethics Committee of the Iranian Scientific Association of Social Work (case number: 98/D/248). All participants received an informed consent form and signed the form prior to responding to the questionnaire. The participants were informed that the research was conducted by a research team at the University of Social Welfare and Rehabilitation Sciences. They could contact the research team via WhatsApp if they had questions. In order to respect the rights of the participants, the questionnaires were completed and analyzed anonymously. Participation in the research was voluntary, and participants could withdraw from the research at any time.

Analysis

We analyzed the data using SPSS 26. A descriptive analysis was used to explore the distribution of different variables and to summarize the demographic characteristics. The Wilcoxon Signed Ranks Test was conducted to analyze the difference in child discipline strategies before and during the COVID-19 pandemic. Statistical significance was established as \( p < .05 \).

Results

From the total sample (\( N = 605 \)), most of the parents were in the age range of 34–41 years, and more than 88% of the parents who participated in the study were mothers. Among parents, more than 45% had at least 16 years of successful education (primary school (5 years), lower secondary school (3 years), upper secondary school (3 years) and pre-university education (one year)). Almost half of the parents had two children, and most children were between the ages of 6 and 9. Most parents also reported that their children
had access to cell phones, while they may have had access to other electronic devices as well. We classified the sample sources by residential areas and divided the provinces of Iran into 9 regions. Most of the completed questionnaires were related to region 5 (Tehran, Alborz, Qom, Markazi, Qazvin, and Zanjan provinces). More than 45% of parents were housewives, and about 66% reported having relationships with other relatives. Table 1 provides more details about the demographic characteristics of the participants. The response rate was 35%.

Near half of the participants reported that they have 2 children, and internet access for children is close to 70%, while about 62% of respondents reported having a place for children to play, such as a yard or garden. However, it is not clear whether or not Internet access is given to children solely for educational purposes.

As shown in Table 2, we analyzed child disciplinary strategies before and during the COVID-19 pandemic, and the results showed that some strategies were significantly more in use than before. The results of Wilcoxon Signed Ranks Test analyses showed that five had significant differences in comparison to before the COVID-19 pandemic ($p < .05$). These included: denying a privilege, forbidding what the child likes, or not allowing them to leave the house, shouting, yelling, or screaming at the child, Assigning another task to the child, Calling the child stupid, inept, or something like that, Smacking or slapping the child’s face, head or ears.

Among all respondents, 63 (10.4%) reported having started a deprivation of privileges strategy (taking away privileges or possessions) since the advent of the COVID-19 pandemic. There was also a rise in shaking (1.8%), shouting and yelling (15.5%), assigning another task (6.6%), hitting with a hard object (1.7%), insulting (4.3%), slapping or smacking (3.5%), beating or hitting (1.3%), and there was a fall in explaining strategy (1.1%). As it is listed in Table 2, the difference was not significant in all variables. 6.3 percent of the participants agreed that corporal punishment was necessary to discipline a child.

**Discussion**

We studied child discipline strategies among Iranian parents during the COVID-19 outbreak and the results showed that major changes in lifestyle due to COVID-19 led to changes in child-parent relationships, and some child discipline strategies have changed significantly. Parents used more power assertion strategies such as physical punishments like shaking, slapping, and also shouting and insulting in comparison to before the COVID-19 pandemic.

Many factors could have contributed to this situation, one being that family members spend increasingly more time together. Parents work from home or have lost their jobs, while children stay at home and take lessons online. This additional interactive time with family largely takes place in a small, confined area. On average, about 60% of Iranian households live in houses of 100 square meters or less, (Statistical Center of Iran, 2016a, 2016b) and as our findings show, almost 38 percent of participants do not have a dedicated space for children to play. This is a major concern because constraints on children’s play, both indoors and outdoors, are considered adverse to a child’s healthy development (Easthope & Tice, 2011; Evans, 2006).

As mentioned earlier, the COVID-19 outbreak and social distancing marked the beginning of distance learning in Iran. The teaching approach has shifted radically and has become virtual despite the fact that essential educational infrastructure, both in terms of hardware and implementation, has yet to be established by trained personnel for virtual education. During the pandemic, teachers lacked expertise in how to use educational software effectively and were not given effective e-learning training approaches to properly engage students in online classes (Ghafourifard, 2020).

Child safety and protection are as crucial now as they have always been. Adults find it difficult to maintain rapport with children and check on their welfare due to lockdowns and social distancing measures. The findings of this study showed that child abuse seems to be on the rise in Iran. According to Iranian Law on the Protection of Children and Adolescents, any form of physical or mental abuse or harassment, as well as the purchase, sale, illegal exploitation, or employment of children and adolescents, are punishable by fines and imprisonment, deeming the perpetrator a criminal. This rule applies to anyone under the age of eighteen years old. In Iran, some organizations, NGOs and programs are in charge of child protection and safeguarding. The State Welfare Organization conducts a "Social Emergency Program" across the country. Services are also provided to caregivers in order to prevent revictimization of children. Social emergency services were available during the COVID-19 pandemic and both hotline and home-based interventions were delivered to all clients.

School nurses are tasked to protect and promote student health, facilitate optimal development, and advance students’ academic success. The results of this study showed that during the epidemics where social distancing policies are implemented, the likelihood of domestic violence against children increases. In such situations, school nurses and school social workers should assess the child’s parent-child relationship and the incidence of child abuse. It is imperative to address child abuse in the personalized care plan designed for each student and provide appropriate supportive responses in the process. Communication with the child’s caregiver is also essential to ensuring the student’s safety and well-being. School nurses and school social workers can assist students and their families in accessing health care services as needed. School staff should be educated and trained on how to detect abused students and refer them to the school nurses and social workers. Child abuse prevention and response to domestic violence during
Table 1. Demographic Characteristics of Parents and Children Under Study - \((N = 605)\).

| Variables                                      | No.  | percent | M ± SD     |
|------------------------------------------------|------|---------|------------|
| Parent gender (completing the questionnaire)   |      |         |            |
| Female                                         | 533  | 88.1    |            |
| Male                                           | 72   | 9.11    |            |
| Child gender                                   |      |         |            |
| Girl                                           | 318  | 52.6    |            |
| Boy                                            | 287  | 47.4    |            |
| Parent age in years                            |      |         | 37.80 ± 5.66|
| 20–27                                          | 10   | 1.8     |            |
| 28–34                                          | 159  | 26.3    |            |
| 35–41                                          | 306  | 50.6    |            |
| 42–48                                          | 101  | 16.8    |            |
| 49–59                                          | 29   | 4.9     |            |
| Parents’ education                             |      |         | 4.42 ± 14.12|
| Primary School                                 | 39   | 6.6     |            |
| High School                                    | 88   | 14.4    |            |
| Bachelor                                       | 170  | 28.1    |            |
| Master                                         | 286  | 47.2    |            |
| Ph.D.                                          | 22   | 3.7     |            |
| Parents’ job                                   |      |         |            |
| Housewife                                      | 287  | 47.4    |            |
| Businessperson                                 | 161  | 26.6    |            |
| Teacher                                        | 63   | 10.4    |            |
| Physician                                      | 4    | 0.7     |            |
| Worker                                         | 5    | 0.8     |            |
| Retired                                        | 5    | 0.8     |            |
| Unemployed                                     | 15   | 2.5     |            |
| Other                                          | 65   | 10.7    |            |
| Number of children                             |      |         |            |
| One child                                      | 178  | 29.4    |            |
| Two children                                   | 301  | 49.8    |            |
| More than two children                         | 126  | 20.9    |            |
| Child age in years                             |      |         | 8.63 ± 1.853|
| 6–9                                           | 398  | 65.8    |            |
| 10–12                                         | 207  | 34.2    |            |
| Communication with relatives during the COVID-19 pandemic | 405 | 66.9 |         |
| Electronic devices used by the child           |      |         |            |
| Cellphone                                      | 437  | 72.2    |            |
| Tablet                                         | 239  | 39.5    |            |
| Laptop or computer                             | 160  | 26.4    |            |
| X Box                                          | 52   | 8.6     |            |
| Other                                          | 83   | 13.7    |            |
| None                                           | 53   | 8.8     |            |
| Child permission to use internet               | 422  | 69.8    |            |
| Place to play (playground, yard, etc.)         | 376  | 62.1    |            |

*Provinces of residence of the participants

| Region   |        |         |
|----------|--------|---------|
| 1        | 82     | 13.6    |
| 2        | 61     | 10.2    |
| 3        | 69     | 11.4    |
| 4        | 83     | 13.7    |
| 5        | 132    | 21.8    |
| 6        | 38     | 6.3     |
| 7        | 43     | 7.1     |
| 8        | 41     | 6.7     |
| 9        | 56     | 9.2     |

*According to the Ministry of Interior, Iran is divided into 9 major regions. According to this division, the provinces of West Azerbaijan, East Azerbaijan and Ardabil Region 1, Gilan, Golestan and Mazandaran Region 2, North Khorasan, South Khorasan, Khorasan Razavi and Semnan Region 3, Kermanshah, Kurdistan, Hamedan and Ilam Region 4, Tehran, Alborz, Qom, Markazi, Zanjan and Qazvin Region 5, Khuzestan and Lorestan Region 6, Isfahan, Yazd and Chaharmahal and Bahktiari Region 7, Fars, Bushehr and Kohgiluyeh and Boyerahmad Region 8 and Sistan and Baluchestan, Kerman and Hormozgan Region 9 (Tavakoliniya et al., 2014).
epidemics can be one of the most important tasks of school nurses. A childcare program during this period can help students develop to their full potential. Child abuse prevention efforts and associated indicators on a population level (not just within suspected "high risk" groups/locations) during pandemics needs to be designed and implemented and school nurses can play a key role.

This study investigated child discipline strategies at the time of the COVID-19 pandemic on a national level. Due to the pandemic, this study was conducted remotely and online. The online nature of the study had some limitations, including uncertainty about the identity of the participant surveyed in the research and ensuring that the participant indeed has a 6–12-year-old child. Therefore, in order to authenticate the participants, specific codes were sent to a liaison in the province or the participants directly along with the questionnaire link so that they could enter the code related to themselves before answering the questionnaire. In addition, the possibility of registering the questionnaire from the same IP address was limited, but nevertheless, a person may have answered the questionnaire twice or not have completed the questionnaire themselves. The high number of questions in the questionnaire may have reduced the completion rate since many participants in the study left the questionnaire uncompleted (completion rate = 81%). Use of the convenience sampling technique may result in reporting bias. Sampling bias and self-selection bias may occur due to the possibility of unintentionally ruling out people from the study who did not have access to the internet. Parents who engaged in more harmful parenting practices may have been less inclined to participate in this study because they were more stressed and ashamed of their behavior. Although fathers spent more time at home during the COVID-19 pandemic due to implementation of the social distancing policy, the mothers’ caregiving roles did not change, and they responded to the questionnaire as

| Child Disciplinary Methods                                                                 | Before COVID-19 Pandemic | Mean ± SD | During COVID-19 Pandemic | Mean ± SD | Z (P-value) |
|-------------------------------------------------------------------------------------------|--------------------------|----------|--------------------------|----------|-------------|
| Denying a privilege, forbidding what the child likes, or not allowing her to leave the house | Yes: 250 (41.3), No: 355 (58.7) | 0.41 ± 0.49 | Yes: 313 (51.7), No: 292 (48.3) | 0.52 ± 0.50 | 4.092 (0.000) |
| Explaining to the child why the behavior was wrong                                         | Yes: 498 (82.3), No: 107 (17.7) | 0.82 ± 0.38 | Yes: 491 (81.2), No: 114 (18.8) | 0.81 ± 0.39 | 0.616 (0.538) |
| Shaking the child                                                                          | Yes: 57 (9.4), No: 548 (90.6) | 0.09 ± 0.29 | Yes: 68 (11.2), No: 537 (88.8) | 0.11 ± 0.31 | 1.324 (0.185) |
| Shouting, yelling, or screaming at the child                                                | Yes: 196 (32.4), No: 409 (67.6) | 0.32 ± 0.46 | Yes: 290 (47.9), No: 315 (52.1) | 0.48 ± 0.50 | 6.309 (0.000) |
| Assigning another task to the child                                                        | Yes: 147 (24.3), No: 458 (75.7) | 0.24 ± 0.42 | Yes: 187 (30.9), No: 418 (69.1) | 0.31 ± 0.46 | 3.455 (0.001) |
| Spanking the child with empty hands                                                        | Yes: 74 (12.2), No: 531 (87.8) | 0.12 ± 0.32 | Yes: 71 (11.7), No: 534 (88.3) | 0.12 ± 0.32 | 0.391 (0.696) |
| Using a belt, hair brush, wand, or any other hard object to strike the child's hips or other parts of the child's body | Yes: 28 (4.6), No: 577 (95.4) | 0.05 ± 0.21 | Yes: 38 (6.3), No: 567 (93.7) | 0.06 ± 0.24 | 1.622 (0.105) |
| Calling the child stupid, inept, or something like that                                     | Yes: 73 (12.1), No: 532 (87.9) | 0.12 ± 0.32 | Yes: 99 (16.4), No: 506 (83.6) | 0.16 ± 0.37 | 2.626 (0.009) |
| Smacking or slapping the child's face, head or ears                                        | Yes: 61 (10.1), No: 544 (89.9) | 0.10 ± 0.30 | Yes: 82 (13.6), No: 523 (86.4) | 0.14 ± 0.34 | 2.492 (0.013) |
| Beating or hitting the child's hands, arms or legs                                         | Yes: 86 (14.2), No: 519 (85.8) | 0.14 ± 0.34 | Yes: 94 (15.5), No: 511 (84.5) | 0.16 ± 0.36 | 0.800 (0.424) |
| Beating the child in a row means hitting with the strongest power a person can hit         | Yes: 21 (3.5), No: 584 (96.5) | 0.03 ± 0.18 | Yes: 19 (3.1), No: 586 (96.9) | 0.03 ± 0.17 | 0.426 (0.670) |
| Heating, burning and pinching the child                                                    | Yes: 4 (0.7), No: 601 (99.3) | 0.01 ± 0.08 | Yes: 4 (0.7), No: 601 (99.3) | 0.01 ± 0.08 | 0.000 (1.000) |
| Do you believe that in order to raise, discipline, and educate a child properly, she/he should be physically punished? | - | - | - | - | - |

*We could not compare before and during COVID-19 pandemic for the 13th question since this question, concerning believing in physical punishment to discipline a child, was answered yes/no according to current opinion.
the primary caregivers of their children. 88% of study participants were mothers in this study. Sampling was non-random so generalizability of the study results is limited.

The anonymity of the participants made it impossible to access them in cases that the result of their questionnaire indicated a need for counseling regarding their abusive behavior. Although the research team prepared a short video to present the results of this study and offered caregivers in-person, online, and telephone counseling, we cannot ensure that all abusive parents receive the required interventions.

We suggest that future studies include enough samples from all provinces to allow for cross-province comparisons.

Conclusion

Amid the COVID-19 pandemic, this study looked into the disciplinary strategies utilized by parents before and during COVID-19 in Iran. We examined how social distancing affected parents’ strategies for dealing with their children’s behavior. The findings of this study not only serve as a reminder to researchers and government officials that child abuse and violence are more likely to occur, but they also serve as a scientific foundation for the development of tailored psychological treatment.

This study can also be considered for community health care providers both in the community and at school. School nurses and social workers should pay attention to the consequences of the pandemic in the post-COVID-19 period, especially when pertaining to the physical, mental, and social health of children. This study showed that children were more exposed to domestic violence during the pandemic. They were also exposed to bullying and age-inappropriate content due to their increased use of cyberspace. Children were less active during this period and experienced irregular sleep patterns that could affect their physical health in the future. There is also evidence of the poor quality of virtual teaching that can be made apparent by academic failure during face-to-face training. Therefore, in the post-COVID-19 period, it is necessary to perform serious screenings to identify high-risk or at-risk children, and to design and implement the necessary interventions to reduce the negative effects of the pandemic.

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Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical Approval

The study was approved by the Ethics Committee of the Iranian Scientific Association of Social Work (case number: 98/D/248).

All participants received an informed consent form and signed them prior to responding to the questionnaire.

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### Appendix

#### Appendix 1. Child Discipline Checklist.

Did you or anyone else in your household use the following methods on your kid?

| Child Disciplinary Methods                                                                 | Before COVID-19 Pandemic | During COVID-19 Pandemic |
|-------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| Denying a privilege, forbidding what she/he likes, or not allowing her to leave the house  | Yes                      | No                       |
| Explaining to her/him why the behavior was wrong                                           |                          |                          |
| Shaking her/him                                                                           |                          |                          |
| Shouting, yelling, or screaming at her/him                                                 |                          |                          |
| Assigning another task to her/him                                                         |                          |                          |
| Spanking with empty hands                                                                  |                          |                          |
| Using a belt, hairbrush, wand, or any other hard object to strike her/his hips or other parts of her/his body |                          |                          |
| Calling him/her stupid, inept, or something like that                                      |                          |                          |
| Smacking or slapping her/his face, head or ears                                             |                          |                          |
| Beating or hitting her/his hands, arms or legs                                             |                          |                          |
| Beating in a row means hitting with the strongest power a person can hit                   |                          |                          |
| Heating, burning, and pinching                                                             |                          |                          |
| Do you believe that in order to raise, discipline, and educate a child properly, she/he should be physically punished? |                          |                          |