EXPLORING THE FACTORS AFFECTING THE PAKISTANI FAMILY FOOD ENVIRONMENT IN THE POST-PANDEMIC ERA: A QUALITATIVE STUDY USING THEMATIC ANALYSIS

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ABSTRACT
The Covid-19 pandemic has impacted family life, including movement restrictions, lockdowns, and business closures. Distance increases, online work, and school settings have clashed and fused for many families to produce a new normal. The goal of this study was to elaborate on how families adapted to their changing dietary environments throughout the Covid-19 epidemic. NVIVO 12 was used for coding recorded interviews and analysis, and the 13 respondents were taken as a sample, including students, job holders, business people, and professional employees. Thirty themes and sub-theme identify increased distance, improper eating patterns, online services, and screen time during meals. The Covid-19 pandemic has affected the dietary environment of families in Pakistan. Families discussed how their eating patterns had been altered, and their usage of electronic devices had risen during mealtimes. Some changes may have long-term health consequences for both kids and parents. Current study implications will help families to food environment patterns and help them to follow good practices.

Keywords: family food environment, family mealtimes, thematic analysis, Covid-19 pandemic, Pakistan

INTRODUCTION
Family traditions, such as eating times, can facilitate families to retain a sense of regularity during times of uncertainty. Mealtimes with the family can be protective (Goldfarb et al., 2014), allowing families to be interconnected, unified, and secure during stressful times (Middleton et al., 2020). According to a recent meta-analysis, family food time abundance is linked to more great family activities, which contain analytical, communication, and emotions of family togetherness (Glanz et al., 2021). Furthermore, family dinners are a focal point for family gatherings and promote good eating habits. Healthy eating, like fruits and vegetables (Hammons & Fiese, 2011), and overall diet standards (Berge et al., 2017), have all been linked to the repetition of shared family mealtimes. Compared to the well-known adverse link immediately, healthiness and tastefulness is certainly shown in the West with commercial food items. Both types of research found a positive relationship with the health and flavor of pulses in both the West and the East (Berge et al., 2017).

Families have been compelled to alter their everyday lives due to the COVID-19 epidemic. Regular routines have been disrupted by constant lockdown limitations, school closures, remote employment, and the lockdown of family-motivated entertainment centers. Families are spending more time at their houses and eating food consumed in various areas. There is widespread agreement that parents have a vital role in establishing their children’s mealtime patterns, primarily through the

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availability of specific foods, accessibility (Santiago-Torres et al., 2014), engagement, and modeling (Dave et al., 2010), all of which may be impacted during the epidemic (Czaja et al., 2011).

Mealtime design variables, which accommodate dining as a family, gadget use, and food kinds ingested, provide direct access to children’s eating habits (Hammons & Robart, 2021). The family food environment impacts changes in healthy behaviors during stress (Bin Zarah et al., 2020). Lack of communication reduces interpersonal concentration, and negativity has been linked to powering good eating practices. In contrast, structured food with good interpersonal aggression has been linked to more significant stages of vegetable consumption and fewer BMIs. Mealtime stress, created using an experimental design, was linked to increased sweet intake and the last stages of positive social demurral in families (Fiese et al., 2015). In this study, women (Fiese et al., 2015) that accomplished after stressful situations, people who were stressed ate more food (Tomiyama et al., 2011). According to the current study, families were more stressed during the COVID-19 epidemic than before the pandemic (Jansen et al., 2021). During the first three months, there was an increase in junk food consumption (Bin Zarah et al., 2020). Other studies that used survey research during the first few months of the epidemic revealed similar shifts in eating patterns. (Ammar et al., 2020) (e.g., increasing use of processed meals and snack foods (Carroll et al., 2020), as well as fresh items in the house (Adams et al., 2020), Changes in parent eating habits, such as increased adherence, supervision, and eating pressure (Adams et al., 2020).

When families face the stress that exceeds their frustrating capacity, resulting in a crisis, the Family Adjustment and Adaptation Response Model predict that they would adjust in one of two ways: increased functioning or impaired functioning (Patterson, 2002). The whole economy’s stressors of an epidemic are now affecting all families. Yet, the patterns in which lives have been disruptors for personal families differ partly according to resources and family skills (Carroll et al., 2020). The epidemic has forced many families to spend an excessive proportion simultaneously, in close quarters, within the house. According to past research, families reported an increase in the level of stress during the COVID-19 epidemic than before (Jansen et al., 2021), and eating patterns included highly consumed junk food intake over the first three months (Jansen et al., 2021). Other surveys conducted during the first few months of the epidemic begun on eating patterns (Ammar et al., 2020), and dairy foods and vegetables in the home (Adams et al., 2020), as well as differences in the parent, eating patterns (e.g., increased limitations, monitoring, and stress to eat (Adams et al., 2020). The above literature has emerged the following research questions to be probed: What factors influence the Pakistani family food environment in the post-pandemic era? The following sections contain a literature review, methodology, analysis, and discussion.

REVIEW OF LITERATURE

COVID-19 has disturbed daily living and harmed the economy as a whole. The epidemic has infected many humans, and due to the coronavirus spread, humans are either sick or dying. The leading cause or symptoms of this viral illness, which can lead to pneumonia, are fever, flu, cold, cough, bone pain, and breathing problems. There are presently no vaccines for this novel viral disease, infecting people for the first time. As a result, drastic frequency such as social isolation, wearing masks, and following strict hygiene and food abstinence (like washing hands every fifteen minutes, avoiding face-to-face interaction, maintaining distance, wearing face masks and sanitizing, etc.) are being promoted. This virus is rapidly spreading over the globe. Because the virus spreads quickly from human to human, detecting it early is critical to preventing it from developing further. Many countries have made things (Haleem et al., 2020).

The COVID-19 epidemic has had an impact on the dietary environment in families. Families discussed how their eating patterns had altered and how their use of electronic devices had risen during mealtimes. Some changes may have long-term health consequences for both kids and parents. After the epidemic, public health professionals, physicians, and schools should engage with families to help them restart good practices (Hammons & Robart, 2021). The COVID-19 epidemic is a shock to the whole economy food system, impacting all aspects of it. Aquatic food retail prices surged momentarily in March-May 2020, then trended downward while production input prices soared. Because of the crucial role of halibut value chains in encouraging employment and food and nutrition security in Asia and Africa, they must be revived (Belton et al., 2021).
During the epidemic, most families modified their food patterns, with many admitting to eating unhealthily. This instruction is in line with the latest studies, which found that families reported harmful changes in dietary patterns during the first few months of the epidemic (Kleve et al., 2021). Families elaborated on alternated eating patterns in the current study through focus group talks, which included a wide range of topics, including the sorts of foods, consumed and the quantities ingested. The types and amount of food offered at home significantly impact kid eating habits (Sørensen et al., 2022). While good eating habits may not be achievable for all families owing to low finances, some may appreciate initiatives for living better during a pandemic. During the epidemic, several families in this research said they made conscious efforts to eat healthier. Incomparable circumstances, coordinated and consistent public health messaging should emphasize encouraging families to eat more nutritious foods.

Using a device during meals has been linked to an increased risk of obesity (Robinson et al., 2022). TV viewing during meals has been linked to poorer healthy eating (Robinson et al., 2022), and TV viewing increased during the epidemic in our research. During the pre-pandemic, lunchtime TV viewing was high; nevertheless, the epidemic produced estates in which mealtime TV consumption became much more overestimated. Other electronic devices, such as mobile phones and video games, were also more likely to be present during mealtimes. After a pandemic, this sort of behavior may be more resistant to alter. Furthermore, the slow restoration of regular activities throughout the epidemic may make implementing long-term changes surrounding screen use more challenging. When routines are beginning to be re-established, families may wish to adopt new restrictions around screen time to return to pre-pandemic levels of screen usage. While other researchers have suggested that using technology during eating might interfere with family communication (Hammons & Robart, 2021), the parents reported that their time together during eating times was often spent in discussion and was generally enjoyable.

In England, the Covid-19 outbreak has changed behavior on food consumed at home and while dining out. In the aftermath of the epidemic, these insights might help supermarket and food service suppliers offer more customized products and services (Filimonau et al., 2021). Following the COVID-19 pandemic, people have developed a stronger preference for eating (more) acceptable food at home. Foodservice operators are encouraged to redesign their business environments and implement covering and protective measures such as regular cleaning and inspections to stimulate visitors. Third-party food delivery programs took some steps to sharply feedback to the epidemic, including accommodating contactless services and collaborating with restaurants to maintain “peace of mind” consolation programs (He, 2021).

Pakistan’s growth has prioritized food security, with several programs and policies to increase food production, availability, and affordability. However, given the country’s existing resource constraints, there is a considerably low emphasis on the interrelationships of food and potency systems. Fuel shortages and long-term power outages have wreaked havoc on Pakistan in recent years, affecting every sector and region of the nation. This research explores the influence of natural gas, energy, and power availability on the food contexts of inhabitants in urban areas of Pakistan, based on fieldworker performed in Pakistan. This article investigates these concerns by presenting the people of Islamabad, Pakistan’s lived experiences of food and energy closure and then conceptualizing food settings. This article explores these concerns by delivering the people of Islamabad, Pakistan’s lived experiences of food and energy closure and then conceptualizing food settings to emphasize the sites of connection (Haleem et al., 2020).

**METHODOLOGY**

In this paper, we use an inductive-based approach, and the data collection method is video-recorded interviews. Use open-ended questions. Basic philosophical assumptions underpin social science research and understanding these assumptions aids researchers in developing a theoretical framework (Tuli, 2010). Qualitative research is a more flexible and particular type of study that demands a deep investigation of social phenomena or research topics to stress the relevance of the findings (Atieno, 2009). The positivist paradigm often incorporates quantitative analytic methodologies, and its research base is the measurement, expression, and quantification of social processes (Gray, 2014). The research technique outlines a procedure for gathering and analyzing data to answer the research
questions. Document analysis is a qualitative research strategy that systematically analyzes obtained material to answer research questions (Frey, 2018).

**Data Collection**

The data for this study was collected through video recording interviews from Pakistanis, including housewives, students, business people, and professional employees, and interviews conducted with semi-structured, open-ended questions. We wanted to provide a safe area for families to talk about their experiences openly and honestly. The 12 respondents were taken as a sample, including housewives, students, job holders, business people, and professional employees. The details are mentioned in Table 1. For interviews, a consent form is sent to the entire respondent and gets their consent. The consent form is sent physically and through WhatsApp to the respondents. The interview was conducted face to face and through video call.

The triangulation approach is used in this study; NVIVO 12 is used for the coding of recorded interviews and analysis. After analysis, according to the consent form, the nodes were sent to the respondents for verification. After the verification and acceptance of the respondents, the data is used for analysis. The whole process focused on family-food methodology during global pandemics and post-pandemic.

The transcripts were subjected to thematic analysis (Braun & Clarke, 2021) based on an inductive method. Before individually constructing codes based on patterns of meaning in the data, the study writers thoroughly acquainted themselves with the transcripts. The codes were then debated, agreed upon, and implemented independently. We accommodated the coding steps throughout the process and made adjustments as needed. Themes were developed based on meaning patterns, and sample quotes were chosen and agreed upon by the research. Participants were allocated a random letter, a focus group number, and the language in which the group was conducted (Braun & Clarke, 2021).

**Table No. 1: Respondents’ detail**

<table>
<thead>
<tr>
<th>Sr#</th>
<th>Name</th>
<th>Age</th>
<th>Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Naveed</td>
<td>31</td>
<td>Software house</td>
</tr>
<tr>
<td>2.</td>
<td>Mr. Mansha</td>
<td>40</td>
<td>Sub-inspector</td>
</tr>
<tr>
<td>3.</td>
<td>Sufyan</td>
<td>30</td>
<td>Teacher</td>
</tr>
<tr>
<td>4.</td>
<td>Khadija</td>
<td>24</td>
<td>Student</td>
</tr>
<tr>
<td>5.</td>
<td>Atiqa Aslam</td>
<td>25</td>
<td>Student</td>
</tr>
<tr>
<td>6.</td>
<td>Hafiz Fareed Minhas</td>
<td>28</td>
<td>Relationship manager</td>
</tr>
<tr>
<td>7.</td>
<td>Dr. Atif</td>
<td>36</td>
<td>Professor</td>
</tr>
<tr>
<td>8.</td>
<td>Nimrah</td>
<td>32</td>
<td>Housewife</td>
</tr>
<tr>
<td>9.</td>
<td>Nosheen</td>
<td>34</td>
<td>Housewife</td>
</tr>
<tr>
<td>10.</td>
<td>Neena</td>
<td>35</td>
<td>Housewife</td>
</tr>
<tr>
<td>11.</td>
<td>Rabia Razaq</td>
<td>28</td>
<td>Finance Manager</td>
</tr>
<tr>
<td>12.</td>
<td>Abaid</td>
<td>33</td>
<td>Finance Manager</td>
</tr>
</tbody>
</table>

**Data Analysis Techniques**

NVIVO 12 was used to apply various qualitative data analysis approaches, including video recording interview transcription, theme analysis, data coding, and word frequency analysis. Code-Based Cluster Analysis, the number of times authors, have coded the node with various forms of references is referred to as similarity. Those themes with comparable codes are close together, while those with dissimilar coding are separated. According to (Ozkan., 2004), NVIVO is highly helpful for data arrangement and analysis, but data structuring, coding, and analysis are still the researcher’s responsibility.

The functions of NVIVO Text Analysis assist in identifying themes and exploring language usage in the research. A text search query is used to look for themes or to learn about other people’s perspectives on a topic. The observations and their interpretation have been expressed using a variety of graphs, including a tree map. Query types include word frequency, text search, and metrics coding. Figure 1 depicts the Word Tag Cloud, which displays various themes in various sizes based on their number of occurrences. We can find other topics in our study using a word tag cloud diagram, which helps undertake thematic analysis.
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Figure 1. Word Tag Cloud

Figure 2 depicts a Word Tree Map, which depicts the connections between a core word and other speech patterns. In this inquiry, “Family Food” is the most important term. The Word TreeMap is a tool for discovering new topics and their connections to previous themes.

Figure 2. Word Tree Map
RESULTS OF THE STUDY
Figure 3 is a hierarchy chart that depicts the magnitude of the many implications of the family food environment. Figure 3 shows increased distance, improper eating patterns, online services, screen time, maintained social distance, school closure, restaurant closure, changed behavior, unhealthy food, technology, stress, and overeating as more critical results of the family food environment in post-pandemic because the frequency of allusions to these themes is higher than others outcomes of the family food environment. However, more time, avoiding gathering, economic effect, online work, aggressiveness, Weight gain, remaining in-home, isolation, and obesity have been analyzed as less analytical results of the family food environment in the post-pandemic world. In contrast, face masks, unemployment, availability of food, healthy food, frequency of food, and internationally as less critical results of the family food environment because the frequency of allusions to these themes is less than other outcomes of the family food environment in post-pandemic.

![Figure 3. Hierarchy Chart](image)

DISCUSSION AND CONCLUSION
During the COVID-19 epidemic, the goal of this research was to explain how families regulated their family food environment. When the epidemic hit, many parents straddled two realms that don’t usually meet at home: employment and their children’s education. Because these settings were combined, there was an overhang in eating and mealtimes that would not have occurred. Families hurried to adopt new eating patterns, which included both good and unhealthy ones. The current study looked at how the COVID-19 pandemic’s simultaneous impacts altered the family’s dietary situation. During the epidemic, families modified their eating habits, intake more snacks, increased meal time, and utilized electronic gadgets more frequently at mealtimes.

Future studies should look at how families stay connected after a pandemic by focusing on the number and quality of meal time. Similarly, research that puts together mother, father, and kid panoramas may give further helpful information regarding how children react to changes in the dietary environment during covid-19 and how those perceptions correlate with parent viewpoints.

During the pandemic, the mix of poor food, change behavior, and screen time can potentially have long-term health consequences. Distance increases, online work, and school settings have clashed and fused for many families to produce a new normal. The goal of this study was to elaborate on how families adapted to their changing dietary environments throughout the COVID-19 epidemic. NVIVO 12 was used to code recorded interviews and analysis, and the 12 respondents were taken as a sample, including housewives, students, job holders, business people, and professional employees. Thirty themes and sub-theme identify increased distance, improper eating patterns, online services, and screen time during meals. The COVID-19 epidemic has had an impact on the dietary environment.
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REFERENCES:


