

Impact of covid-19 on family dynamics in relation to age: A comparative study

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Abstract

This study examines the differential impact of COVID-19 on family dynamics across two distinct age groups: young adults (20-40 years) and middle-aged adults (41-60 years). The primary aim is to assess how the pandemic affected family interactions and emotional well-being in relation to age. A sample of 100 participants was selected, with 50 individuals from each age group. Data was collected using a validated questionnaire designed to measure the pandemic's impact on family dynamics through a Likert-type scale. Descriptive statistics, including mean and standard deviation, were calculated for each group, followed by a t-test to compare the two age groups. The results indicate a statistically significant difference in the impact on family dynamics, with a t-value of -2.15 and a p-value of 0.034, suggesting that middle-aged adults experienced more significant changes in family dynamics compared to young adults. This study contributes to understanding the age-related psychological and emotional responses to the COVID-19 pandemic and highlights the need for targeted interventions based on age-specific challenges.

Keywords: Family dynamics; Covid-19; Age; Old adults; Young Adults

1. Introduction

1.1. COVID-19

COVID-19 is an infectious disease caused by the novel corona virus SARS-CoV-2. It emerged in late 2019 and led to a global pandemic declared by the World Health Organization (WHO) in March 2020. The disease primarily spreads through touching contaminated surfaces with virus and then touching the face, respiratory droplets when an infected person sneezes, talks, coughs, or breathes. The virus has evolved over time, and had given birth to several variants, some of which can be transmitted and had caused severe disease. These variants include Alpha, Beta, Gamma, Delta, and Omicron, among others.

1.1.1. Symptoms

COVID-19 symptoms can range from mild to severe. Common symptoms include:

- Cough
- Fever
- Shortness of breath
- Muscle or body ache
- Fatigue
- Loss of taste or smell
- Congestion or runny nose

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- Sore throat
- Diarrhea

Severe cases can lead to acute respiratory distress syndrome (ARDS), pneumonia, organ failure and death.

1.1.2. Prevention

Preventative measures include:

- Wearing masks
- Regular hand washing with soap and water
- Maintaining physical distance
- Avoiding large gatherings
- Using hand sanitizers with at least 60% alcohol
- Getting vaccinated

1.1.3. Treatment

Treatment for COVID-19 may vary depending on the severity of the disease. Mild cases only require fluids, rest, and over-the-counter medications, whereas severe cases may need oxygen therapy, hospitalization, and in some cases, mechanical ventilation.

1.2. Family dynamics

Family dynamics refer to the relationships, patterns of interactions, and behaviors among the members of a family. These dynamics are shaped by various factors, including the family roles, personalities of family members, communication styles and cultural and societal norms. To understand family dynamics it becomes crucial to recognize how family members influence each other interactions and how these interactions impact the overall functioning of the family unit. It involves parent's role, child's role, sibling's role.

1.3. Age

It refers to the length of time that a person, an organism, or an object has lived or functioned. It is typically measured in years. It helps in describing a person's stage in life, such as childhood, adolescence, adulthood, or old age. Age can be chronological age, biological age, social age and mental or cognitive age.

2. Literature review

- Feinberg, M. E et al (2022) in their research on how COVID-19 impacted parent, child and family functioning concluded that there were small changes in the parenting style of the parents. Parents with low income faced greater difficulties due to pandemic.
- Hussong, A. M et al (2022).in their research on how COVID-19 impacted life events of family functioning and adolescent adjustment conclude that there was a decline in the family open communication, family support and family satisfaction.
- Prime, H et al . (2020) in their research on Risk and Resilience in Family Well-Being during the COVID-19 concluded that stressors such as economic instability, care giving demands, and disruptions to work and school routines negatively impacted family dynamics. However, families with strong communication, adaptability, and emotional support systems demonstrated higher resilience
- Craig, L. et al (2020) in their research on Dual-Earner Parent Couples' Work and Care during COVID-19 concluded that women took on a disproportionate share of household chores and care giving duties, leading to increased gender inequality in the home. Despite both parents working remotely, mothers were more likely to report higher levels of stress and fatigue.
- Lebow, J. L. (2020) in his study on Family in the Age of COVID-19 concluded that families faced increased conflict due to stressors such as financial difficulties, confinement, and role strain. However, many families adapted by improving communication and establishing new routines to reduce tension.
- Spinelli, M et al (2020) in their research on Parents' Stress and Coping Strategies during the COVID-19 Pandemic: The Role of Family Dynamics concluded that parents who reported higher levels of stress often had less cohesive family relationships and poorer communication with their children. Families that engaged in collaborative problem-solving and emotional sharing had lower levels of stress.

- Clark, B et al (2021) in their research on *The Influence of COVID-19 Lockdown on Family Dynamics and Family Well-Being: A Global Perspective* concluded that lockdowns disrupted traditional family roles, leading to increased family tension in some regions. However, in many cases, families reported increased time spent together, which improved communication and bonding.
- Brown, S et al (2020) in their research on *Work-Family Conflict, Remote Work, and Parenting Stress during COVID-19* concluded that parents, particularly mothers, experienced significant work-family conflict while working from home, which increased their levels of stress and impacted family relationships. Parents with flexible work hours and strong social support networks reported lower levels of conflict and stress.
- Calvano, C. et al (2021) in their research on *Parenting during the COVID-19 Pandemic: Stress, Coping, and Family Adjustment* concluded that parents faced high levels of stress due to the disruption of routines and the challenge of managing children's emotional needs. However, parents who employed effective coping strategies, such as problem-solving and seeking social support, were better able to adjust, resulting in improved family dynamics.
- Patrick, C et al (2021) in their research on *COVID-19 Lockdown and Its Impact on Family Dynamics: Exploring the Roles of Stress and Communication* concluded that Families that engaged in open communication and regularly discussed their stress and challenges reported stronger family cohesion. In contrast, families that avoided conversations about their struggles or engaged in negative communication patterns experienced higher conflict and emotional distancing.
- Donker, M. H. et al (2021) in their research on *COVID-19 and the Family: Pandemic Stress and Its Impact on Family Functioning* concluded that families with pre-existing conflicts or mental health issues experienced more tension during the pandemic, leading to increased conflicts and emotional distance between family members. Families with strong pre-pandemic relationships and effective coping mechanisms managed the stress better and maintained more stable family dynamics.
- Patrick, S. W et al (2020) in their research on *The Impact of COVID-19 on Parent-Child Relationships* concluded that parents spent more time with their children, which led to both positive and negative outcomes. Some families reported strengthened bonds and more meaningful interactions, while others experienced increased conflict and stress due to the pressures of managing remote learning, work, and household responsibilities.

Objectives of the study

- To analyze the impact of COVID-19 on family dynamics across age different groups.
- To make comparative analysis of impact of COVID-19 on family dynamics across different age groups.

3. Methodology

3.1. Sample population

The study includes 100 participants. 50 participants from age group of (20-40 years) young adults and 50 participants from age group (40-60 years) middle age are taken. Sampling has been done from Meerut district of Western Uttar Pradesh.

3.2. Tool

The scale was developed by the researcher which was validated by professionals in the field of psychology.

The questionnaire has been developed for study COVID-19 pandemic. The questionnaire measures the impact of COVID-19 on Family Dynamics.

It is a 5 point scale questionnaire ranging from “very much to not at all”

For each question mark “Very much” if you are sure it is true for you and “To great extent” if you think it is true, but not that much. Similarly mark “Somewhat” if it is true, but you are not absolutely certain. Mark “Very little” if the question holds very little significance for you and “Not At All” if the question is false for you.

3.3. Procedure

The process of collection of data involved randomly choosing 50 participants from (20-40 years) age group and 50 participants from (40-60years) age group. Participants were provided brief overview about the purpose of the study i.e. to see how COVID-19 has impacted family dynamics of different age groups. Instructions were read out and participants were assured that their responses will be kept confidential and will only be used for research purpose only.

The questionnaire was given to the participants and they were asked to mark on the block that they thought suited their situation the best. The questionnaire included Lickert-type questions to understand the impact of covid-19 on family dynamics. After the collection of data debriefing section was conducted this included thanking participants for giving their valuable time and contact number was given for any question and concern. The collected data was securely kept and plan for data analysis was prepared. The result analysis was done and results were reported.

4. Results

Table 1 Scores of age group (20-40)

Descriptive Statistics	Scores
Mean	1.9314286
Standard Deviation	1.37149677

Table 2 Scores of age group (40-60)

Descriptive Statistics	Score
Mean	2.54285714
Standard Deviation	1.46858255

Table 3 Inferential statistics (t-test scores)

Statistics	Score
T-Test Value	-2.15160061
Degree Of Freedom	98
P-Value	0.03388618

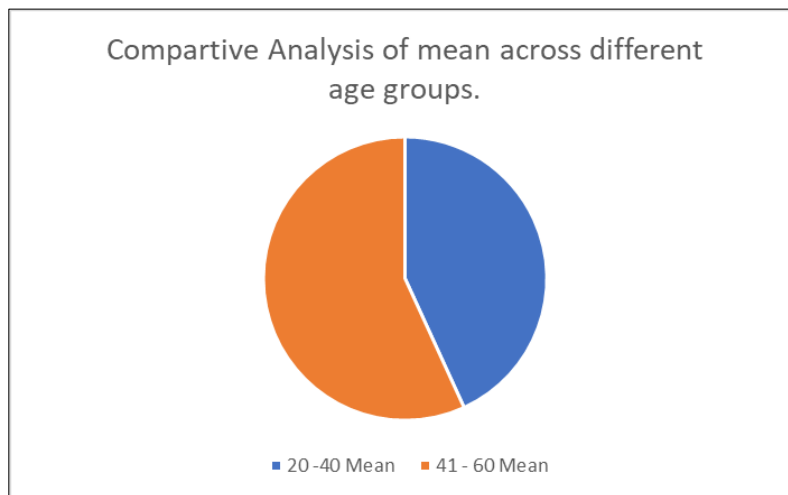


Figure 1 Comparative analysis of mean across different age groups

5. Discussion

The results show a clear difference in how the two age groups experienced the impact of COVID-19 on their family dynamics. The mean score for the 20-40 age group was 1.93, while the 41-60 age group had a higher mean of 2.54, indicating that middle-aged adults faced more pronounced changes. The significant t-test result ($t = -2.15$, $p = 0.0339$) suggests that these differences are statistically significant. One explanation could be the different family roles and

responsibilities typically held by middle-aged adults, such as care giving for both children and elderly family members, which might have intensified during the pandemic.

The higher mean for the middle-aged group aligns with existing literature, which suggests that this group faced greater psychological and emotional strain due to increased work-family conflict and care giving responsibilities. Moreover, the middle-aged group might have had greater concerns about financial stability and health risks, further exacerbating stress within the family environment. In contrast, the younger age group might have experienced fewer familial responsibilities and thus felt a relatively smaller impact on family dynamics.

6. Conclusion

The findings of this study reveal significant age-related differences in the psychological and emotional impact of COVID-19 on family dynamics. Middle-aged adults (41-60 years) exhibited a greater degree of disruption in family interactions compared to young adults (20-40 years), as evidenced by a significant t-test result ($t = -2.15, p = 0.0339$). This suggests that middle-aged adults, who often face multiple care giving responsibilities and work-related pressures, were more adversely affected during the pandemic.

In contrast, young adults, with potentially fewer familial obligations, experienced less pronounced changes in their family dynamics. These results underscore the importance of targeted support interventions that cater to the specific needs of different age groups. Policymakers and mental health professionals should prioritize providing age-appropriate resources and coping mechanisms to mitigate the long-term psychological effects of the pandemic on family interactions.

Further research is recommended to explore other factors such as gender, socio-economic status, and cultural background, which could provide a more comprehensive understanding of how different demographic groups navigated the pandemic's challenges within their family environments.

6.1. Practical implications

6.1.1. *Enhancing Communication with Family Members*

Encourage regular family meetings where each family member has the chance to express their concerns and needs.

Use communication strategies like active listening and conflict resolution techniques to improve interactions within the family.

6.1.2. *Restoring Work-Life Balance*

Encourage setting boundaries between work and home life by designating specific work hours and time for family or self-care.

Promote shared household responsibilities among family members, ensuring that care giving and chores are distributed fairly.

6.1.3. *Family Counselling or Therapy*

Engage in family therapy or counselling to rebuild trust, enhance communication, and address emotional or relational issues that arose during the pandemic.

6.1.4. *Re-establishing Intergenerational Relationships*

- Foster intergenerational interactions through family events, storytelling, or shared activities like cooking or gardening.
- Encourage elderly members to take an active role in family life by helping with childcare or mentoring younger family members.

Compliance with ethical standards

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Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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