Article

Influence of Information and Communication Technology (ICT) use in Family Dynamics: An Indepth study of Indian Cases

P-ISSN: 3048-9334 | E-ISSN: 3048-9342
SJCC International Journal of Communication Research
Vol: 2 | Issue: 1 | September 2025
pp. 9-32 |

J. Dinesh Kumar [1] and S. Arulchelvan[1]

Abstract

Studying technological influence in the family is one of the prominent areas to understand its impact on family dynamics. Information and Communication Technology (ICT) influence on family dynamics is not studied prevalently concerning attitude and behavioural aspects in India. This gap was filled in this study. The study adopted a qualitative research technique where an in-depth interview method was used to collect the data from 54 family members who measured ICT use in daily activities, communication, attitude, and behavior change. A strong influence of ICT on everyday activities in domestic life was found. The role-changing scenario among family members is prominent due to the increasing technological literacy rate of adults. Older adults started adopting technology to manage domestic life, but it is not prevalent. There is a sharp increase in family conflicts, conversation patterns, and routine activities that change due to ICT. Digital literacy, an effective monitoring system, and individual concern are a few areas the researcher needs to address in the coming years.

[1] Anna University, Chennai, India.

Corresponding Author:

J. Dinesh Kumar, Teaching Fellow, Department of Media Sciences, CEG Campus, Anna University, Chennai 25, India.

Email: dgdinesh.j@gmail.com

Keywords

Technology and Family, Family Functioning, ICT and Family Dynamics, ICT in Indian Families, Qualitative Research

Introduction

Information and Communication Technology (ICT) devices have extended far across all aspects of human life. Families saw changes in their dynamics as a result of ICT, just as they did in education, employment, medicine, banking, finance, and shopping. ICT influences dynamics in the family system. Family dynamics refers to how family members connect, love, and exchange feelings with one another (McGrath, 2012). Communication, leisure activities, education, work culture, and family responsibilities have all changed as a result of the advancement of technology and its use in the home. New ICTs, such as cell phones and the internet, have altered how people interact and collaborate (Garrett, 2006). From the start of the day to the end of the night, ICT gadgets play an important part in family dynamics (Villegas, 2012).

ICT also facilitates the sharing of information from anywhere. Family members who are geographically separated can communicate with one another via technology. Live monitoring and GPS assist in keeping an eye on elderly or vulnerable family members. When there is no one to care for, many elderly persons perceive ICT as a companion (Ihm & Patrick Hsieh, 2015). While playing games or using online services, children can be tracked quickly using mobile phones or other applications (Huisman et al., 2012). Non-working women can utilize ICT to broaden their expertise in areas of interest and launch their businesses. As a result, ICT integration is seen favorably by all family members and in the majority of family activities (Rudi, 2015).

Simultaneously, the use of ICT has transformed how family members socialize and altered relationship patterns. The parents' habit of watching television has influenced their children to practice it, and that becomes a habit. In an ICT environment, many family activities such as eating meals together, exchanging tales, ideas, and issues, and having family conversations are lacking (Villegas, 2012). In some cases, the role-shifting scenario in families causes intergenerational conflict (Carvalho, 2016). This shows the presence of ICT in the family.

Literature Review

ICT & Family

The advent of technology created an impact on individuals as well as families (Lanigan, 2009). Technology is heavily used for communication in most homes today. (Subrahmanyam & Greenfield, 2008) and it has become a part of the environment in the home (Johnson, 2010). The recent advancements in information and communication technology include cell phones and computers. (Lanigan, 2009). The use of computers and the internet in the home helps the family to access information internally and also to stay in touch with family members. (Baille & Benyon, 2008). The programme content on television is mostly educational or information-oriented in the entertainment genre, which helps children as well as their parents to learn the concepts better. (Wartella et al., 2010)

The Internet helps working mothers plan their daily activities and spend more time with other family members. It reduces the gap between the family members as well as concentrates on business. (Moore, 2006). The development of technology, commonly computers and the internet, keeps employees connected. The connection makes the individual take up the office work at home (Chesley, 2005). Young children who use computers at home scored higher on cognitive and self-esteem measures than children who do not use them (Attewell et al., 2003). Among couples, mobile phones are the easiest way to express affection. Relationship satisfaction does not predict the specific use of media, but it predicts several reasons for media use (Coyne et al., 2011). Female members in families seem to be more involved in online conversations, and male seems to confine themselves more to playing online video games (Cardoso et al., 2008; Van Rompaey et al., 2002) and this habit helps to develop social experiences and activities (Lenhart et al., 2008). Women prefer to use email more than men to communicate with family members (Chesley & Fox, 2012). Cultural difference is also recorded. Youth/ adults use email and chats to interact with friends and extended family members (Huisman et al., 2012). The adoption of ICT among older adults is growing fast, but not higher than among younger generations. (Zickuhr, 2013)

Huisman et al. (2012) found that recent technological advancements in the home were usually to making life faster and easier. Initially, the technology develop-

ment focused mainly on entertainment purposes, and at one stage, over-flexibility and inconsistent messages on using the technology created conflicts between the parents and children. The technology impact is also mainly based on the quality of content people access through that technology. (Schmidt & Vandewater, 2008). Extensive usage of social networking sites led children to loneliness and depression, especially among girls (Subrahmanyam et al., 2000). Children who are using more than eight hours per week spend less time in active play (Attewell et al., 2003). The high amount of internet usage leads to less time spent, lower communication, and increased depression and loneliness among family members (Hughes et al., 1999). Older adults find it hard to reach, are socially disadvantaged, and proportionally smaller than the general adult population (Freimuth & Ettger, 1990; Walsh et al., 1993). In many families, mobile and other technology have imposed certain limits on parental supervision, and access to ICT during the night when they are alone. Families have also restricted technology during vacations, dinners, functions, holidays, etc. (Shepherd et al., 2006). The other areas of the major impact seen are Time, Isolation, Stress, Video games, Parents' lack of ability to track, digital illiteracy, pornography, fewer family activities, the preparation time effect, and less conversation.

ICT Use in families based on demographic status

Age is also one of the important factors that give mixed results when researching digital disparities. It consistently resulted in a negative influence on the use of ICTs. It brings an exponential effect on digital inequalities when the population becomes older (Friemel 2014; Smith 2014). ICT does not have a similar influence/impact on all age groups (Selwyn, 2004).

On the other hand, Ono & Zavodny (2003) and Wasserman & Richmond-Abbott (2005) have found that disparities also exist between gender and access to ICT devices. Gender disparities may be because of socioeconomic inequalities, and young female users are more anxious than male users (Bunz, 2009).

When studying socioeconomic status, income plays a major role and is positively associated with a greater level of digital access (Ono & Zavodny, 2007), more advanced digital skills (Deursen & van Dijk, 2011), and variation in ICT uses (Pearce & Rice, 2013). Income harms older adults than younger ones regarding digital disparities (Smith, 2013).

ICT & Communication

Family Communication Pattern determines how one family member talks with other family members (Koerner & Fitzpatrick, 2002). Family communication plays a significant role in developing the relationship between family leisure and family functioning (Smith et al., 2009).

The communication process of the family changes continuously and is expanded by using different technological innovations such as mobile phones, social networking sites, etc. (Rudi et al., 2015). ICT provides rich and cost-effective interaction with other family members if they are away from their family circumstances (Green, 2002; Kennedy & Wellman, 2007). It is the best alternative method for communicating with their family members, in case of fewer face-to-face interactions. (Franzen, 2000; Hampton & Wellman, 2003; Hertlein & Blumer, 2014). Chesley and Fox 2012 gathered a positive effect on family communication among Women due to the use of ICT. It helps to the reinforcement of bonds besides the time saved in family communication.

Lee and Chae (2007) found that an increase in internet use decreases family time but not communication time. The decrease in communication time is due to the perceived online activity. In the case of using the internet for educational purposes, the decrease in communication time is not much recorded. But in terms of using the internet for entertainment purposes, the decrease in communication is recorded much and it is positively correlated with intergenerational conflicts in the family system.

Using mobile phones allows children to be in touch with family members easily. It helps to keep them updated about their activities and feel safe. It helps to connect and coordinate their lives positively with their family members (Devitt & Roker, 2009; Kennedy et al., 2008; Nelson, 2010). Social networking sites facilitate people in creating interconnectivity among people by sharing texts, audio, photos, and video updates with anyone (Boyd & Ellison, 2007). The Internet helps family collaboration and communication between parents and children when they play games together, watch videos online, and during software installation. (Mesch, 2006a). There is a strong association between low internet usage and better relationships. (Mesch, 2006b).

Even though ICT gives enriched interaction activities to share with outside family members, parents require more involvement in their communication (Tee, Brush & Inkpen, 2009). Human interaction is now mediated by devices (Church et al., 2010). New interaction scenarios, rearrangement in family structure, and social relational models are created due to the usage of ICT in everyday life (Stafford & Hillyer, 2012). The environment of family communication has more power to influence the perpetuation of weight stigma despite other factors such as health history, peer groups, health behaviors, etc. (Asbury, 2016). So, the unmediated communication practice is still expected in the family system.

Based on the literature, it is clear that ICT has a profound effect on family activities. This research aims to identify the effect of ICT on the family system in India based on a qualitative approach by addressing the following research questions.

1. What are the effects of ICT on family activities and family members?
2. What are the influences of ICT on the communication patterns of the family?
3. What attitudinal and behavioral changes occurred among the family members?
4. What are the solutions to overcome the negative influence of ICT in the family system?

Methods and Procedure

The in-depth interview method was employed in this study since the literature survey suggests qualitative data collection as one of the best methods for family-based studies. The researcher gathered data from 54 families (n=54) in Chennai City, one sample from each family based on their willingness to disclose information. Chennai is one of India's cosmopolitan cities, with a diverse population. The convenience sampling approach was used to choose the samples. After receiving consent from all of the participants, the researcher met with each of them individually and collected data. All of the samples were asked five main questions about ICT use in families: positive/negative changes in the family due to ICT use, family members' behavior and attitude toward ICT use, solutions from family members to overcome the influence of ICT in the family, and specific cases in their family due to ICT influence. The necessary follow-up questions are also asked related to the same theme.

Results

The result section is classified based on five thematic areas, based on the literature that outlined the consolidated version of information received from the samples in India. The classifications are,

1. ICT usage and Family
2. ICT and Communication Patterns in the Family
3. ICT influence on the attitude and behavior of family members
4. Solutions to overcome the negative influence of ICT on the family
5. Specific/ important cases/family members influenced by ICT in their own family

Demographic profile of the samples

Gender classification among the samples of the study represents 53.7 and 46.3 per cent of males and females, respectively. Among the age groups, this research included school-going children to older adult family members. This will help the researcher to understand the opinions of all types of family members. In educational qualification, there are 27.8per cent of samples completed schooling, whereas other respondents are either graduates, postgraduates, or above that. Concerning occupation, 31.5per cent are students either in school or college, 35.2 per cent are working professionals (both male and female) and 33.3 per cent are women homemakers. Among the family roles, 27.8 per cent are fathers, 22.2 per cent are mothers, 26 per cent are sons and 24 per cent are daughters. This equal classification helps us to understand the influence of ICT in families in general, as well as acting according to their family roles.

ICT usage and Family

ICT plays a significant role in the household setup, and it is installed in every area of the house, including the visitor's room, kitchen, bedroom, study room, and so on. Television, mobile phones (both regular and smartphones), laptops, and internet services are the most often utilized ICT applications in the family. Text messages, emails, photos, video, and text file sharing, producing audio

notes, and video calls are all common ICT activities in the family. At least two ICT gadgets are used by the majority of family members at home. Even a ten-year-old at home has his or her phone, and their individual use has created a different area in the household.

ICT's purpose and usage pattern vary from member to member, dependent on availability and requirement. In a household setting, non-working women have more access to television. They prefer to watch serials, cookery shows, lifestyle shows, and fashion shows. Some parents enjoy viewing educational television shows for the benefit of their children. Men in the household are more likely to use ICT for work and enjoyment. For both men and women, ICT developed a link between job and home life. Children at home are more accustomed to ICT and use it on television, smartphones, desktops, and laptop computers with and without internet access. Adults are adapting to the new culture and eating habits.

The availability of information via ICT has led them to attempt new activities, which have resulted in both positive and negative experiences in a family setting. Grandparents are also gradually switching from traditional phones to smartphones in India. Chatting with old acquaintances and viewing more religious videos/content enriches their experience. They primarily use WhatsApp and Facebook to share the information they obtain. They believe that whatever they see on the internet is factual, and they quarrel with their family over it. Smartphones and laptops are not used by older people in some homes instead of television. This is mainly due to digital illiteracy.

Those who watch more serials, particularly ladies and grandparents, have traditionally been more choosy in attending significant events or engaging in conversation during the broadcast period. When family members had access to ICT, this kept them apart. They may now watch programs anytime, anywhere, using mobile applications, ensuring that they do not miss anything. Working parents can spend more time with their families by using laptops and the internet in their work-family balance.

Interaction between students and faculty in open forums and WhatsApp groups allows students to get immediate answers to their questions. Google is chosen by parents and children to search for innovative ideas and information for school, college, and office assignments/projects since it provides more information in

less time. They believe that this combined activity makes their bond stronger. This aids in the advancement of education. Parents and children use a variety of mobile applications connected to school/college courses for innovative and extended learning. The children's self-study habits were also created as a result of this.

Outdoor activities, such as street cricket, traditional games, and football, were beneficial in developing social interaction among youngsters. Children are now kept at home by employing ICT as a babysitter. They miss their grandparents' imaginative and fantastical stories, which encourage them to ask questions and develop critical thinking skills. The majority of their recreational activities now include ICT. Children's constant exposure to social media and video games has an impact on their health. Parents recall, when they were children, there were no technology-based distractions. Kids now have many which interfere with their study time. Many family members claimed that ICT gadgets have somehow disrupted family communication. The use of a mobile phone for more than 6 to 8 hours, lack of attention in studies, non-personalized connection, health risks, addiction to pornography, psychological concerns, and the sending and disclosure of disinformation are some of the additional negatives of ICT for children.

Children noted that their mothers, fathers, and grandparents' use of ICT is rapidly increasing. Many youngsters claim that their parents pressured them to study, so they began watching TV, talking on their phones, and so on. This contrasting habit caused children to mimic their parents' actions. Additionally, parents' work-from-home habits have an impact on parent-child bonding because parents spend the majority of their family time at work.

Family members, on the other hand, believe that fundamental changes in the family are taking place slowly. Because parents are not spending more time with their children, parenting patterns are changing. Many parents believe that gaming behaviors have an impact on their children's education. Family members' social engagement was limited. YouTube, WhatsApp, TikTok, Instagram, and Facebook, in particular, have taken up a lot of family time and diverted family time. As a result, all family members agree on a time limit for improved family functioning in an ICT context.

ICT and Communication

In terms of communication, ICT allows more than two faces to appear on a digital screen, resulting in a richer experience. Non-resident family members appreciate this function. When a brother was in the army, a family member recalls how it helped to stay in touch using video calls and the dynamic connection that brings delight in being close. Parents of children who work in foreign countries also utilize this to interact more. The increased connectedness afforded by social networking applications strengthens the structure of relationships among young adult family members. Distant cousins or extended family members who do not communicate directly can often be easily reached via social media. In some circumstances, a video chat or live recording directly from the family event makes family members more connected and less excluded.

The majority of family members said that ICT is an excellent communication tool that is useful during an emergency. WhatsApp is the most widely utilized mobile application tool for exchanging messages and making video calls when it comes to ICT-based communication services. Most of the family members recalled Skype as another video chat tool. Creating WhatsApp and Facebook groups with family and friends strengthens group communication and aids relationship maintenance. Group messaging is also useful for planning a reunion, establishing weekend arrangements, and discussing current events such as politics, entertainment, and education.

However, family members have reported drawbacks that have an impact on the family structure. It helps to bring distant family members closer together, but it also drives adjacent family members away. The communication transmitted by ICT has the potential to be misinterpreted by family members, resulting in a problem. When people use ICT to communicate with others, they frequently end up using it for longer periods. The availability of technology has made people a bit lazier in the family system, reducing physical attachment to other family members. Family members emphasized that the absence of face-to-face interaction inevitably leads to issues in family functioning that cannot be restored. Others pointed out that family members are utilizing ICT devices to convey messages and information from one room to another within the same house. This diluted the family members' interpersonal interactions. Those who take advantage of the service, however, have a variety of effects on themselves. As a result, caution is advised.

ICT Influence on Attitude and Behavior of Family Members

This section explains attitudes and behavioral influences among family members. Everyone in the family admitted to utilizing some form of ICT. Elder's prominent use of social media platforms is YouTube and Facebook, while children spend more time on games. Also, both categories become addicted to messaging features. They continue to text all of their friends and sometimes strangers, which has caused them to be distracted from their normal duties. When parents interrupt or provide directions during ICT use, especially when playing games, their children's behavior becomes unpleasant, according to parents. They also resemble the characters and acts they see in games, which harms their conduct because the game characters and activities are not realistic.

Housewives who are watching soap operas notice the characters' speech and outfits and try to imitate them. The imagery depicted in Tamil serials about mother-in-law and daughter-in-law has more negative undertones, and their continued exposure has caused people to unconsciously follow them and erect barriers between them. During meal time, mothers used to cook/serve/eat food during the serial break. Newspaper readers no longer carry hard copies and instead use news apps to get instant information. For them, the notification during each news update was particularly beneficial. This practice helps them feel superior because they were the first to receive the news.

Mobile phones have been observed to be used in restrooms by youngsters in the adult age bracket. Even if there is no notice, many family members claimed that they check their phones at least four to five times every hour. Also, even though they have wristwatches in hand, every time they want to know the time, they go straight to their phones to check the time. Another important change is online purchases. When family members are too tired to cook or go out to get groceries, they can use mobile apps to order food/groceries online. Based on the information/forwarded messages they receive, elder family members develop fear/fear of rejection. Their inability to double-check facts has an impact on their mental health. A forward message received on a mobile phone, for example, indicates that if a religious message is not transmitted to at least 10 members within twenty-four hours, something horrible will happen to you. People feel that information obtained through the internet is accurate, and they are concerned about what will happen if they are unable to follow the instructions in the message and suffer health problems.

Another aspect that is changing people's minds is the selfie. Selfies are popular wherever and anytime family members gather or visit. From early morning to night, a mother reported that her son and daughter used to update their status on a social network using selfie images. Taking a selfie with unique culinary items or new products acquired and publishing it on various online platforms has become a frequent habit. Snapping pictures of food and not allowing others to eat before taking a picture has become a popular pastime. A father claimed that his son always listens to audio and video music using headphones. He claims that the son pays no attention to who enters and exits their home and never responds to relatives/extended family members, nor interacts with them.

Solutions to Overcome the Negative Influence of ICT on the Family

The following are the solutions suggested by the family members to restrict ICT usage and to overcome the negative influence on the family.

Self-control and transformation, according to many family members, are considered to be essential. A single person cannot bring about systemic change; rather, it is a combined effort in which each family member contributes to the family's good. They believe that ICT is necessary for a family setting, but setting a time restriction for use, teaching family members about the necessity for devices, and emphasizing the value of family ties should also be considered.

Mobile data rates have been cut to some extent since the advent of Jio network services in India, resulting in an increase in internet users in India. The low cost and increased data usage allowed for unrestrained use for an indefinite period. As a result, some family members believe that the data service restrictions will result in a shift. On the other hand, a few family members object, claiming that this would push us further back from where we are today.

Another crucial idea suggested by family members is to create their own family rules. One of the most significant rules, according to many family members, is to keep ICT devices out of the bedroom. Keeping cell phones out of the room, especially during sleeping hours, will help to establish and strengthen interpersonal communication. Restricted Wi-Fi in the home, having meals together without ICT devices, putting mobile or TV in the airplane or switching off mode, during important family meetings, allotting minimum time for ICT use per day, limiting

ICT usage by doing all associated duties directly, combined use of a TV in the living room, avoiding unnecessary communication using ICT, understanding the needs, monitoring children's ICT use parental guidance are some of the family rules reported by family members. Accessibility can also be reduced by placing restrictions on various mobile application settings and data services.

A few family members said that limiting ICT use is difficult due to its requirement in family life. Parents in many homes tell their children not to use ICT devices, but still do. Parents are sometimes obliged to limit their ICT use and then educate their children about the benefits and drawbacks of ICT. This helps sometimes. But using ICT as a babysitter leads to children becoming addicted to ICT in the future. As a result, parental accountability is also anticipated in this situation.

A mobile application tracker that restricts application usage, according to one of the family members, can be incorporated on smartphones. To regulate consumption, other devices can also have a tracker. It is also suggested that involvement in physical activity helps to reduce ICT usage. People nowadays prefer to book a movie ticket online, for example. Instead, phoning a conveniently available family member, taking them to the theatre, and purchasing a ticket allows you to spend more time with that specific family member. This aids in the formation and enhancement of familial bonds. In the hands of the majority of people today, the internet plays a dominant role. As a result, rather than spending more time outside raising awareness, internet campaigns can be used as an effective tool to address problems and propose solutions.

A few family members suggested that India's telecommunication policy be strengthened and that undesired web/mobile applications that divert individuals be restricted. One of the family members recalled that just a few countries offer universal Wi-Fi connection. However, they are not addicted to it because they understand what is and is not essential. People are aware of the importance and repercussions. Similarly, awareness is expected in India.

Exclusive Cases Reported in Families Related to ICT Use

Case 1: A WhatsApp group for one family includes both immediate and extended family members. When new messages are posted in the group, the other mem-

bers begin to discuss them, offering both favorable and negative feedback. The family member who sent the message was disappointed and quit the group when an irrelevant opinion was shared. After being convinced by someone, the family member rejoins the family group but is not as active as before. Furthermore, the link between the two people weakens over time. This demonstrates how a simple conversation in a messaging group can cause problems.

Case 2: When a family member searched for content on his sibling's laptop, he discovered access to pornographic material. His sibling was just 15, and the brother was taken aback. When he inquired, he learned that the sibling had initially been exposed to sexual information via click advertising. This prompted him to look at sexual content, which he continued to do, and to which he grew addicted. He gradually recovered after receiving good counseling from his brother. This demonstrates that, despite our lack of desire, we have access to unsuitable and irrelevant content displayed online.

Case 3: Another family member stated that most of his relatives have difficulty communicating with one another. Even at 11 p.m., everyone is on their phone. Elder family members also use WhatsApp to access religious groups, pretending that the information conveyed is accurate and defending themselves on that basis if an issue arises. He claims that his family has never had a problem like this before. Even his family members wanted to buy vegetables and medicines online at times, which kept them confined to the four walls of the family. He also mentioned that ICT at home had completely ruined the work-family life balance. He said that they are frequently forced to carry their workplace job home and complete it without taking a break. Because of their ICT use, they can appear distant from other family members at times. He believed that those who are not connected to technology are in a safer environment, so he began limiting his online time and attempting to spend quality time with his children and seniors.

Case 4: A mother in a household claimed that her son's constant use of headphones at home has made her angrier and that she constantly shouts at him. Only as a result of this does a relationship barrier emerge. She claims that her son can only sense the feeling of calling when she approaches and touches him. He is unresponsive until then due to his use of ICT. She was concerned about mental and physical health difficulties as a result of the activities.

Case 5: A son recounts how ICT caused a conflict between his father and mother. One day, when cleaning the television, his father unintentionally cracked the TV's glass. Her mother began an intense quarrel with his father right away, demanding an instant replacement because she missed watching her favorite shows. Her mother had never looked like that before, according to her son. The TV has created a divide between them. Her mother only returned to the normal phase following the TV replacement after a day. He expressed his father's disappointment that she prioritizes financial possessions over human feelings. This demonstrates that family members are occasionally unconcerned about each other's emotions, regardless of how strong the tie is.

Case 6: A family member recalls how things used to be before ICT. Whatever happened in the family (good or negative) was shared with close friends and helped with self-exploration from all sides. This also aids in the development of their thought processes, perspectives, and handling adjustments. We now tend to rely on machines quickly after hearing something, especially if we need to verify the accuracy of the information presented. As a result, the emphasis in the household changed from humans to machines. He also stated that his family members prefer to look at the overflowing information on the internet rather than come up with their own ideas. In his household, individuality, aggression, a lack of social bonding, and iPad parenting have become more prevalent. Because he enjoys writing letters, visiting native villages, and providing individualized interaction/material to them, these hobbies have kept him away from other family members. He was also concerned about the potential dilution of his own cultural and family values in the name of modernity and the promotion of a materialistic family structure.

Case 7: ICT has made a good transformation in one family. A woman in the family communicated using basic mobile phones and watched television on a regular television set. However, the other male members of the family adapt to the new ICT devices in the home and begin to use them for communication and pleasure. Following this, the mother became intrigued and began learning about technology from her son. She initially began by learning how to communicate using WhatsApp. She was then instructed on how to use YouTube. She never gets advice on technology use from any of her family members after learning the basics. To learn new stuff, she followed YouTube lessons. She started earning on her own after learning new dishes and creative crafts on YouTube. In

addition, the grandma in the household frequently uses YouTube to learn new meals, rangoli patterns, and craft making. The entire household uses ICT to learn new knowledge, which enables them to start a small household business and generate money on their own.

The other families not quoted here also say that ICT is both a gift and a disaster for their children's education. Other commonly reported incidents in families include meal times, spending time with family and relatives, rifts caused by abuse, parental challenges, and hacking/money-loss difficulties.

Discussion

Many of the studies on the integration of ICT devices into family activities and daily life date back to the 1990s, when the use of technology, particularly television and computers, began to spread widely. Today's ICT devices come in a variety of uses and roles, and they provide support to various family members in ways that deviate from their original purposes. Most rooms in a house have at least one ICT gadget. Television, in particular, was historically used as a communal activity and is not doing so today. Nowadays, regardless of age, everyone has access to several ICT gadgets and the devices are more personalized in terms of ownership and use. In contrast to television, smartphones, and internet access are currently taking over the domestic space. The growth of ICT has also resulted in a significant shift in family communication. Many family members can stay in touch with their non-resident family members who are apart from work and school thanks to online communication. Additionally, it helps to maintain a vibrant vibe by keeping in touch with them via audio and video chats. Particularly when communication takes place in an environment where extended family members are present, intimacy has increased.

Men always take the lead when it comes to accessing technology. Men use technology more frequently than other family members in their homes, whether they are at work or home, and they tend to think of themselves as tech experts. The category of non-working women uses television and smartphones more than working women do. Another entertainment platform they use to hone and display their talents is YouTube. Their time management ability was improved when watching soap operas, as more mobile applications are viable today with minimal cost.

ICT devices are used for both amusement and education by kids who are exposed to more of them. Many kids discover that using ICT fosters their creativity, but it also puts their lives in danger by adopting irregular consumption habits. While middle-aged persons use ICT for purposes other than amusement, such as learning online or using it as a tool for entrepreneurship, young adults use it more for entertainment. When older persons are isolated, ICT serves as a support system for them. They frequently assume that all of the information is obtained from the internet, and they behave accordingly. Information literacy is necessary for dealing with such an environment. At the same time, older adults also face a fear of rejection from their family members as they pretend they are comparatively low in learning and using technology.

Due to the usage of ICT, parental role members are observed to be more stressed when it comes to managing kids and other family members. When others discuss or warn about ICT restrictions, especially when it is an older adult, children occasionally express their unhappy experiences toward other family members, which exacerbates the problem within the family structure. Adults who are exposed to or have a solid understanding of ICT view themselves as talented, and this perception affects their conduct, which changes how people communicate. Their other daily routines are impacted by the unrestricted use of electronics, even in restrooms and changing areas. The older individuals in the household watch serials, and the practice of binge-watching has an impact on their physical activity. Their tendency to socialize while shopping was reduced by online purchasing practices.

Family dynamics are said to present certain difficulties. The main issue for many families is role reversal. There is a greater likelihood of family conflicts when the younger family member assumes the primary position in the name of technology and dominates others. Another major problem is keeping an eye on children's technological usage. Working professionals can benefit greatly from ICT use in some circumstances since it allows them to share their office work from home, and they value the work-from-home option. However, managing the work-family balance has emerged as a new source of family relations concern. Physical activity is yet another crucial issue that needs attention. The socializing element has been steadily declining because there are fewer outdoor/play activities. Health risks and another significant issue brought on by excessive ICT use in family dynamics are pornography. The link that family members have

tends to weaken when they are overly preoccupied with or attached to their use of technology, and there may eventually be a decrease in their relationship with other family members, friends, and neighbors. The individual will become cut off from social interaction as a result. The family members are expected to deal with this significant issue.

The families provided three significant, potentially workable solutions as a summary of the options. They are technology tracking, family rules, and self-control. Many family members believe that one of the best treatments is self-controlled behavioral change. When something is fixed and utilized just for that purpose, a slow practice may result in a better transformation, if not a complete one. A focus should also be placed on family rules, but no universal set of norms can be developed for all families. Each family can establish its own rules for managing the technology-life balance depending on the nature, need, and purpose of the technology. We cannot escape integrating technology into our daily lives; therefore, families cannot be an exception. Future family dynamics will more closely integrate with ICT. The tracking system can therefore be one of the best ways to manage it, where technology-based activities are monitored or balanced, and its use can also be beneficial for family dynamics.

Conclusion

This research has approached the influence of ICT use in families in-depth using the qualitative approach. The major key findings of the study pointed out that ICT integration in family dynamics has been traveling on an elevated path, and its influence on family structure will be more than expected in the next five years. The attitude and behaviour changes across all the age groups, and family members are witnessed in this research. The importance of the family system and dynamics needs to be taught to handle the surge in ICT-integrated family structures.

Limitations

The study has approached the samples from cosmopolitan cities in Tamil Nadu. In the future, the study can be extended to different cosmopolitan and megapolitan cities in India and record the cultural and social differences in technology use in families. The extension can also be between rural and urban Indian cases.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship and publication of this article.

Funding

The authors received no financial support for the research, authorship and publication of this article.

References

Asbury, M. B., & Woszidlo, A. (2016). Understanding the relationship between family communication and the development of weight stigma. *Health Psychology Report,* 4(3), 213–223. https://doi.org/10.5114/hpr.2016.57682

Attewell, P., Battle, J., & Suazo-Garcia, B. (2003). Computers and young children: Social benefit or social problem? *Social Forces; a Scientific Medium of Social Study and Interpretation*, 82(1), 277–296. https://doi.org/10.1353/sof.2003.0075

Baille, L., & Benyon, D. (2008). Place and technology in the home. *Computer Supported Cooperative Work*, 17, 227–256.

Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*: JCMC, 13(1), 210–230. https://doi.org/10.1111/j.1083-6101.2007.00393.x

Bunz, U. (2009). A generational comparison of gender, computer anxiety, and computer-email-web fluency. *SIMILE Studies In Media & Information Literacy Education,* 9(2), 54–69. https://doi.org/10.3138/sim.9.2.003

Cardoso, G., Espanha, R., & Lapa, T. (2008). Dinâmica familiar e interacção em tornodos media: Autonomia dos jovens, autoridade e controlo paternal sobre os media em Portugal. *Revista Comunicação e Sociedade*, 13, 31–53.

Carvalho, J. G., Fonseca, R., Francisco, G., & Ana, P. (2016). Information and Communication Technologies and Family: Patterns of Use, Life Cycle, and Family Dynam ics. *Journal of Psychology and Psychotherapy*, 6.

Chesley, N. (2005). Blurring boundaries? Linking technology use, spillover, individual distress, and family satisfaction. *Journal of Marriage and the Family*, 67(5), 1237–1248. https://doi.org/10.1111/j.1741-3737.2005.00213.x

Chesley, N., & Fox, B. (2012). E-mail's use and perceived effect on family relationship quality: Variations by gender and race/ethnicity. *Sociological Focus*, 45(1), 63–84. https://doi.org/10.1080/00380237.2012.630906

Church, K., Weight, J., Berry, M., & MacDonald, H. (2010). At home with media technology. *Home Cultures*, 7(3), 263–286. https://doi.org/10.2752/175174210x12785760502171

Coyne, S. M., Stockdale, L., Busby, D., Iverson, B., & Grant, D. M. (2011). "I luv u:)!" A descriptive study of the media use of individuals in romantic relationships. *Family Relations*, 60(2), 150-162.

Devitt, K., & Roker, D. (2009). The role of mobile phones in family communication. *Children & Society*, 23(3), 189–202. https://doi.org/10.1111/j.1099-0860.2008.00166.x

Franzen, A. (2000). Does the Internet make us lonely*? European Sociological Review*, 16(4), 427–438. https://doi.org/10.1093/esr/16.4.427

Freimuth, V. S., & Mettger, W. (1990). Is there a hard-to-reach audience*? Public Health Reports* (Washington, D.C.: 1974), 105(3), 232–238.

Friemel, T. N. (2016). The digital divide has grown old: Determinants of a digital divide among seniors. *New Media & Society*, 18(2), 313–331. https://doi.org/10.1177/1461444814538648

Garrett, K. (2006). Protest in an Information Society: a review of literature on social movements and new ICTs. *Information Communication and Society*, 9, 202–224.

Green, N. (2002). On the move: Technology, mobility, and the mediation of socialtime and space. *The Information Society*, 18(4), 281–292. https://doi.org/10.1080/01972240290075129

Hampton, K., & Wellman, B. (2003). Neighboring in Netville: How the Internet supports community and social capital in a wired suburb. *City & Community*, 2(4), 277–311. https://doi.org/10.1046/j.1535-6841.2003.00057.x

Hertlein, K. M., & Blumer, M. L. C. (2014). *The couple and technology framework: Intimate relationships in a digital age*. Routledge.

Hughes, R., Ebata, A. T., & Dollahite, D. C. (1999). Family life in the information age. *Family Relations*, 48, 5-6.

Huisman, S., & Edwards, A. (2012). The impact of Technology on families. *The Community (IJEPC)*, 2, 44–62.

Ihm, J., & Hsieh, Y. P. (2015). The implications of information and communication technology use for the social well-being of older adults. *Information, Communication and Society,* 18(10), 1123-1138. https://doi.org/10.1080/1369118x.2015.1019912

Johnson, G. M. (2010). Internet use and child development: Validation of the Ecological Subsystem. *Educational Technology & Society*, 13(1), 176-185.

Koerner, A. F. (2002). Toward a theory of family communication. Communication Theory: CT: *A Journal of the International Communication Association,* 12(1), 70-91. https://doi.org/10.1093/ct/12.1.70

Lanigan, J. D. (2009). A socio-technological model for family research and intervention: How information and communication technologies affect family life. *Marriage & Family Review*, 45, 587-609.

Lee, S.-J., & Chae, Y.-G. (2007). Children's Internet use in a family context: influence on family relationships and parental mediation. Cyberpsychology & Behavior: The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society, 10(5), 640–644. https://doi.org/10.1089/cpb.2007.9975

Lenhart, A., Kahne, J., Middaugh, E., Macgill, E. R., Evans, C., & Vitak, J. (2008). *Pew Internet & American Life Project*.

McGrath, S. (2012). The Impact of New Media Technologies on Social Interaction in the Household. Department of Sociology, National University of Ireland.

Mesch, G. S. (2006a). Family characteristics and intergenerational conflicts over the Internet. *Information, Communication and Society*, 9(4), 473-495. https://doi.org/10.1080/13691180600858705

Mesch, G. S. (2006b). Family relations and the internet: Exploring a family boundaries approach. *Journal of Family Communication*, 6(2), 119-138. https://doi.org/10.1207/s15327698jfc0602_2

Moore, A. M. (2006). A parent looks at technology. *Montessori Life*, 18(2), 11.

Nelson, M. K. (2010). *Parenting out of control: Anxious parents in uncertain times. New* York University Press.

Ono, H., & Zavodny, M. (2003). Gender and the Internet. *Social Science Quarterly,* 84(1), 111-121. https://doi.org/10.1111/1540-6237.00143

Pearce, K. E., & Rice, R. E. (2013). Digital divides from access to activities: Comparing mobile and personal computer internet users: Digital divides from access to activiti es. *The Journal of Communication*, 63(4), 721-744. https://doi.org/10.1111/jcom.12045

Rudi, J., Dworkin, J., Walker, S., & Doty, J. (2015). Parents' use of Information and communication technologies for family communication: differences by age of children. Information (Vol. 18). *Communication and Society*.

Schmidt, M. E., & Vandewater, E. A. (2008). Media and attention, cognition, and school achievement. *The Future of Children*, 18(1), 63–85. https://doi.org/10.1353/foc.0.0004

Selwyn, N. (2004). The information aged: A qualitative study of older adults' use of information and communications technology. *Journal of Aging Studies*, 18(4), 369-384.

Shepherd, C., Arnold, M., & Gibbs, M. (2006). Parenting in the connected home. *Journal of Family Studies*, 12(2), 203-222. https://doi.org/10.5172/jfs.327.12.2.203

Smith, A. (2013, April 25). *Civic engagement in the digital age*. Pew Research Center: Internet, Science & Tech. http://www.pewinternet.org/2013/04/25/civic-engagement-in-the-digital-age/

Smith, A. (2014, April 3). *Older adults and technology use*. Pew Research Center: Internet, Science & Tech. http://www.pewinternet.org/2014/04/03/older-adults-and-technology-use/

Smith, K. M., Freeman, P. A., & Zabriskie, R. B. (2009). An examination of family communication within the core and balance model of family leisure functioning. *Family Relations*, 58(1), 79-90. https://doi.org/10.1111/j.1741-3729.2008.00536.x

Stafford, L., & Hillyer, J. D. (2012). Information and communication technologies in personal relationships. *The Review of Communication*, 12(4), 290–312. https://doi.org/10.1080/15358593.2012.685951

Subrahmanyam, K., Kraut, R. E., Greenfield, P. M., & Gross, E. F. (2000). The impact of home computer use on children's activities and development. *The Future of Chil dren*, 10(2), 123–144.

Subrahmanyam, Kaveri, & Greenfield, P. (2008). Online communication and adolescent relationships. *The Future of Children*, 18(1), 119–146. https://doi.org/10.1353/foc.0.0006

Tee, K., Brush, A. J. B., & Inkpen, K. M. (2009). Exploring communication and sharing between extended families. *International Journal of Human-Computer Studies*, 67(2), 128–138. https://doi.org/10.1016/j.ijhcs.2008.09.007

Tracy, L. M. (2007). The Networked Household. *Information. Communication & Society,* 10(5), 645–670.

van Deursen, A., & van Dijk, J. (2011). Internet skills and the digital divide. *New Media & Society*, 13(6), 893–911. https://doi.org/10.1177/1461444810386774

Van Rompaey, V., Roe, K., & Struys, K. (2002). Children's influence on internet access at home: Adoption and use in the family context. *Information. Communication & Society,* 5, 189–206.

Villegas, A. A. (Ed.). (2013). *The Influence of Technology on Family Dynamics*. Proceedings of the New York State Communication Association. Article 10.Vol. 2012.

Walsh, D. C., Rudd, R. E., Moeykens, B. A., & Moloney, T. W. (1993). Social marketing for public health. *Health Affairs (Project Hope*), 12(2), 104–119. https://doi.org/10.1377/hlthaff.12.2.104

Wartella, E., Richert, R. A., & Robb, M. B. (2010). Babies, television, and videos: How did we get here? *Developmental Review*, 30, 116–127.

Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2), 79–94. https://doi.org/10.20982/tqmp.09.2.p079

Zickuhr, K. (2013). *Who's not online and why*? In the Pew Internet and American Life Project.

(N.d.). Pewinternet.org. Retrieved February 20, 2023, from http://www. pewinternet .org/Reports/2008/Networked-Families.aspx

About the Authors

Dr J. Dinesh Kumar has been working as a Teaching Fellow in the Department of Media Sciences, Anna University, Chennai since 2014. He completed his M.Sc. in Electronic Media from the Department of Media Sciences, Anna University Chennai. He received a Ph.D. from Anna University for his thesis on Family Functioning and ICT. He is qualified with CBSE-NET and Tamil Nadu SET in Mass Communication and Journalism. His area of interest is Journalism, Communication, Research in social sciences, Statistics & Data Analysis, Scriptwriting, Television Production, Web Designing and User Interface Design. He has attended more than 35 capacity-building programmes. His area of research interest is media and communication studies. Political Communication, Family Studies, Journalism, Film, New Media, and User Experience Design are a few specific areas where he is currently working. He has published many research articles in international journals and chapters in books.

Dr. S. Arulchelvan is the Professor & Head, Department of Media Sciences, Anna University, Chennai, India. Earlier, he worked as a Journalist in leading Tamil dailies. He has been awarded the FCT Post-Doctoral Research Fellowship from the University of Aveiro, Portugal and the Graciano Lopez Jaena Fellowship in Community Journalism by the University of the Philippines. His specializations are Journalism, Development Communication, Educational Media and Community Media. He has been passionately engaged in several research projects with the support of UNICEF, Department of Rural Development, Government of Tamil Nadu and other international and national agencies. He has authored a few books and has published more than 80 articles in reputed journals.