Research Paper

Trajectory of Ph.D Work of Working Women Having Young Children

Ms. Meenakshi Verma[1]*

ABSTRACT

Education is essential for all as it helps an individual to acquire information and knowledge. It fosters skills and develops character traits. Education plays a vital role in women's life. Women education can bring about a radical change in society. Today, we understand that education is also a key to women empowerment. In spite of the known importance of education in a woman's life, the ratio of men to women in higher education is not equal. This study is an attempt to understand the socio-psycho-cultural phenomenon in the trajectory of obtaining a Ph.D degree by the working women having young children. This study tries to fathom the difficulties, in particular, encountered in obtaining the Ph.D degree by women. The method of Free Verbal Protocols, as a part of Collaborative Autoethnography was utilized to collect data from the participants. The participants were selected through purposive sampling. Five themes emerged after the thematic analysis of the data and the subsequent discussions with the participants. These themes were Reasons for Joining Ph.D, Role of Ph.D Supervisor, Difficulties Faced While Working for Ph.D, Support Systems, and Future Suggestions.

T he purpose of education is to achieve certain aims, such as transmitting knowledge and fostering skills and character traits. Education is commonly subdivided into different types. The most common subdivision is between formal, non-formal, and informal education. A process of teaching constitutes formal education if it happens in a complex institutionalised framework while informal education, on the other hand, happens in an unsystematic way through daily experiences and exposure to the environment. Formal education plays a central role in modern civilization and occurs in a structured environment. Usually, formal education takes place in a school environment with classrooms comprising of many students learning together under the supervision of trained and certified teacher of the subject. It can be subdivided into various categories or levels such as Early Childhood, Primary, Secondary, and Tertiary. All the levels of education except Tertiary level are considered compulsory. Higher Education also known as Tertiary is the non-compulsory educational level. Tertiary education is normally taken to include undergraduate and postgraduate education, as well as vocational education and training. Ph.D or research

---

[1]Ph.D Scholar, University of Delhi, Delhi, India
*Corresponding Author

options are offered only after post-graduation. Ph.D is the higher level of degree awarded after completing a course of study. It can be achieved in all the academic areas (UNESCO, 2011).

Importance of Ph.D in Academic careers

Ph.D is important as it can transform the lives of individuals by improving their long-term career prospects. It's relevance is high in the areas that are centered in education, research and innovation. Ph.D can equip the individual with the expertise and the credentials required to publish in academic journals, and present research findings at seminars and conferences. It also helps in finding desirable employment. According to Bhushan Patwardan, Vice Chairman, UGC (2019), "In most cases, girls are stopped from pursuing higher education because of societal pressures and limitations due to family reasons. Since M.Phil can be completed in around 2 years, it is considered to be viable option by women as compared to Ph.D, which takes around 5 years' (Times of India, 2019). Further he goes on to add that women tend to be cautious of making a commitment especially that might last for 4-5 years. Striking a balance between personal and professional goals becomes a challenge. The UGC through its circular in 2018 made Ph.D an essential requirement for direct recruitment and promotion in academic careers (The Gazette of India, 2018). Ph.D has become mandatory for those aspiring to join as lecturers/assistant professors or to get promotion from assistant level to associate level or professor level. Many women assistant professors, aspiring for promotion, had registered and re-registered for the Ph.D program in light of the changing rules in academia.

Determinants of Girl Child Education in India

Education is the fundamental right. It is a driver for economic, social and political change. It is the powerful tool to create a better world for all, a world that would be just, prosperous and inclusive. It is only through education that people of all ages can acquire the information and knowledge. It also fosters skills to adapt to the changes that affect our societies. Education helps girls and women develop skills that can help them earn a living and support themselves in the future. It enables them to lead a healthy and productive life by reducing maternal and infant mortality. An educated girl is less likely to marry early and has better chance of entering the workforce with equal and better pay. Education is the main agenda of United Nations Educational, Scientific and Cultural Organization (UNESCO) 2030.

According to United Nations International Children's Emergency Fund (UNICEF, 2023), factors at the international level like poverty, marriage, and gender disparity affect the education of a girl child. In some places, schools are unable to meet the safety, hygiene or sanitation needs of the girls. Efforts made by the international and national policies are making strides in reducing the gender gap in education. More efforts are still required in this direction. In India, the understanding of the socio-cultural, economic, and geographical factors will help in the implementation and success of the various policies, encouraging girl and women education. These factors are discussed below;

Socio-cultural factors

India is a multireligious and multicultural country which inhabits people of varied ethnic background. India is majorly a patriarchal society. Thus, the growing up experiences of women in Indian patriarchal society includes physical restrictions as well as psychological negativity. These are conveyed to them from birth onwards. The unwantedness of daughters is disseminated in the ways which are quite obvious (Kumar, 2009). A son's birth is often celebrated in a grand way while a daughter's birth may not be celebrated at all. In certain

parts of India, from where the researcher belongs, the girls are named as 'DHAPU' meaning enough. The idea of marriage and motherhood are instilled in them since childhood, inculcating the idea of insecurity and life-long dependence in them. Marriage and becoming mother becomes their primary objective of life. The societal obligation post-marriage and after the birth of the children leave them with little scope for education, especially higher education.

Economic Status

The poor or low economic status also influences the mindset of the elders in the family. The son of the house gets priority of education in case of low economic state. The daughter of the house is left to take care of the household chores and the younger siblings while the parents go out to work. Girls are also asked to step-in to help them financially by working as house-maids or as child laborers. Another reason for spending less on girl education is influenced by the cultural norm of marriage. During the marriage, hefty amount is spent on gifts and dowry. Spending money on education is, therefore not considered to be worth.

Geographical landscape

India has a varied geographical landscape. Some parts of the country are hilly while some regions are in remote. Thereby, the landscape becomes important in the access of education. The lack of schools in these regions or in the nearby vicinity makes it difficult for girls to access education. Girls are seldom allowed to travel to other places for the purpose of education due to safety and security reasons.

Many research highlights the importance of various factors in education. The present research is focused on the difficulties encountered in obtaining Ph.D by working women having young children.

Bronfenbrenner's Ecological Systems theory

According to 'Ecological Systems Theory' given by Urie Bronfenbrenner in 1974 there are various aspects of a developing child's life that interacts with and affects the child. He laid emphasis on the wider influencing factors and the ecology of development.

Bronfenbrenner's ecological systems theory views child development as a complex system of relationships affected by multiple levels of the surrounding environment, from immediate settings of family and school to broad cultural values, laws, and customs. Bronfenbrenner divided the person's environment into five different systems: the microsystem, the mesosystem, the exosystem, the macrosystem, and the chronosystem. These five systems are considered to be inter-related. The influence of one system on a child's development depends on its relationship with the other system. He revised his theory in 1994 to include the influences of developmental processes, individuals experience over time.

The first level of Bronfenbrenner's theory is microsystem. **Microsystem** is composed of immediate environment such as parents, siblings, school peers and teachers, that have direct contact with the child. The **mesosystem**, encompasses the interactions between the child's microsystems. The interactions between the child's parents and teachers or between school peers and siblings affect all systems. In mesosystem, the components of Microsystems do not function independently. They are interconnected and assert influences upon each another. The **exosystem** incorporates both, the formal and informal social structures. These social structures like neighbourhood, parent's workplaces, and the mass media do not directly contain the child, but exert indirect influence on them. The **macrosystem** is the

fourth component that focuses on how cultural elements such as socioeconomic status, wealth, poverty, and ethnicity affect a child's development. The individual's beliefs and perceptions about events that occur in life are shaped by his culture and society. The fifth level, **chronosystem**, consists of the environmental changes that occur in an individual's lifetime such as major life transitions and historical events, which influence their development.

METHODOLOGY

Objective
The objective of the study was to understand the trajectory of Ph.D work by the working women having young children.

Sample
Purposive sampling technique was used to select the participants. Four female participants in the age range 40-50 were selected. They were all married, working in the higher educational institutions in Delhi, living in a nuclear family set-up, having 1/2 young children. The age of their children ranged from 8-12 years.

Procedure
Method of Free Verbal Protocols was employed to collect data. Free Verbal Protocols are part of Collaborative Autoethnography (CAE), which allows the researchers to use self-narratives of their experiences as a storehouse of qualitative data for understanding the phenomenon. It is a methodological process of documenting, sharing, and interpreting personal reflections, visions, and stories. The researcher and the participants worked together on many committees and had interactions on regular basis for almost 10 years. Thus, CAE was deemed suitable method to study the trajectory of participants Ph.D work. The discussion was based on the themes derived from the verbal protocols with the four participants and the experiences of the researcher herself. After transcribing the data, the thematic analysis was done. The themes that emerged were further discussed with all the participants individually as analysis of the pooled autoethnographic data requires a rigorous commitment to personal reflection and collaborative sharing. The time taken for the free verbal protocols and the expression of emotionality during the verbal protocols was also noted down.

RESULT AND DISCUSSION
Education is important in empowering woman. Ph.D, the tertiary level of education can improve the long-term career prospects especially in the areas that are centered in education, research and innovation. This study was designed to explore the trajectory of Ph.D of working women having young children. The participants were selected through purposive sampling. The participants were all women working in higher educational institutions. The method of Free Verbal Protocols as a part of Collaborative Autoethnography was employed to study the experiences of the participants.
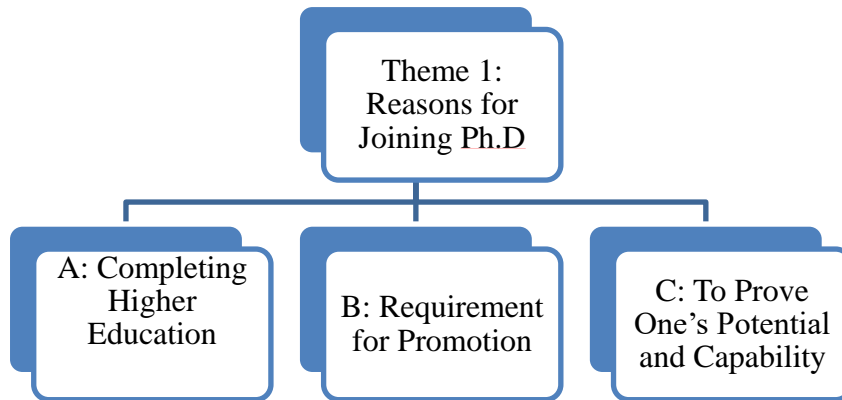
Analysis of the verbal protocols of the researcher herself and other participants indicated several themes and sub-themes. The following major themes were delineated;
- Theme 1: Reasons for Joining Ph.D
- Theme 2: Role of Ph.D Supervisor
- Theme 3: Difficulties Faced While Working for Ph.D
- Theme 4: Covid-19

- Theme 5: Support Systems
- Theme 6: Future Suggestions

The first theme was **Reasons for Joining Ph.D**. There were three sub-themes under this. These were A) **Completing Higher Education** B) **Requirement for Promotion**, and C) **To Prove One's Potential and Capability.** They are represented below in **Flow Chart I**;

```
┌─────────────────┐
│   Theme 1:      │
│   Reasons for   │
│   Joining Ph.D   │
└─────────────────┘
         │
   ┌─────┴─────┬─────────────┐
   │           │             │
┌──────────┐ ┌──────────┐ ┌──────────┐
│A: Completing│ │B: Requirement│ │C: To Prove │
│ Higher   │ │for Promotion│ │One's Potential│
│ Education │ │          │ │and Capability│
└──────────┘ └──────────┘ └──────────┘
```

The participants reported that they always wanted to do Ph.D but could not do immediately after completing post-graduation because of the marriage. Marriage was life changing event. Two of the participants had registered before marriage but had to discontinue post marriage. They decided to register for the Ph.D, till the time their children were little grown-up. The term 'grown-up' used by the participant, meant that dependency of the child on the mother would reduce a little. Growing up of children would give participants a space to work on Ph.D.

The analysis of the verbal protocols led to emergence of three sub-themes as the reasons for joining Ph.D. First sub-theme was **Completing Higher Education**, second was Ph.D as a compulsory **Requirement for Promotion** in the job and the third was **Proving One's Potential and Capabilities.** All the participants unanimously agreed that they had registered and re-registered for Ph.D as the rules and regulation announced by the University Grants Commission (UGC), 2018 made Ph.D an essential degree for the promotion to Associate Professor and Professor level. Apart from this reason one of the participants reported, " I had my M.Phil and I wanted to complete my higher education, so I re-registered for Ph.D" while other two participants reported that registering for Ph.D was not just for promotions, but it was integral part of their identity. They did not want themselves to be felt as incompetent in comparison to other academic staffs, who were Ph.D holders. They also considered Ph.D as a degree to prove their academic capability. This was reflected in the statement of one of the participants, "The main issue is that majority of the members of my department are Ph.D's. I don't want others to perceive me as incapable of completing higher education. For me, proving my capability is more important than becoming a professor".

Flow Chart II depicts the second theme, **Role of the Ph.D Supervisor,** and the sub-themes A) **Supervisor's Knowledge in the Area of Study,** B) **Timely Guidance and Feedback, and** C) **Helpful and Supportive.**
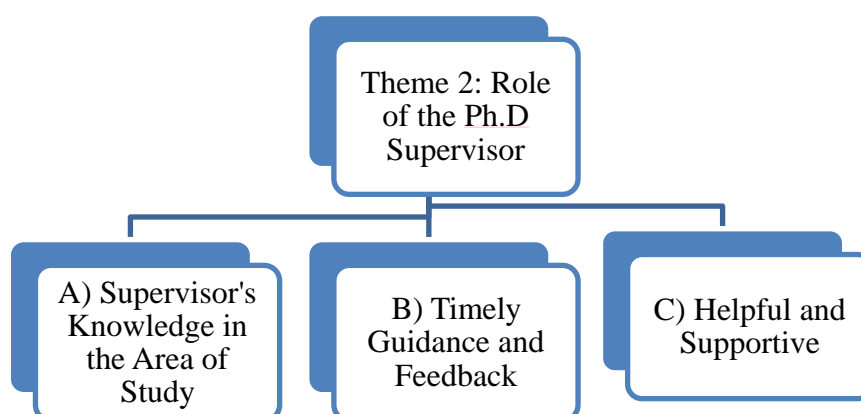

The Role of Ph.D Supervisors is highly important for Ph.D student supervision. Supervisor's support is needed from start to the submission of the thesis. These tasks normally include discussing the research topic, reading drafts, providing feedback and being available to respond to emails and other forms of contact within a reasonable time frame. Research studies indicate that the supervisor and Ph.D student interpersonal relationship is important for the success of Ph.D (Marsh et al. 2002; McAlpine and Norton 2006). On the basis of the responses of the participants, Role of Supervisor was further categorized into sub-themes as someone who has knowledge in the area of study, provides timely guidance and feedback, and who is helpful and supportive.

The sub-theme A) **Supervisor's Knowledge in the Area of Study** was reflected in the statements, "We used to work together on the topic. We researched the topic together. It was very cordial and co-operative relationship with her" and "My supervisor was a systematic and intensive researcher. He had vast knowledge in area of research, I had undertaken. It was really helpful". According to the study by Almusaed (2020), the supervisor must have in-depth scientific expertise in his specialty; have extensive experience and he must understand and imagine the ways of scientific research.

The sub-theme B) **Timely Guidance and Feedback** was reflected in the statement, "My principal supervisor, unfortunately, towards the end of my Ph.D got sick, and she was in a difficult state, health wise. In spite of her health and the fact that I was appointed with another co-supervisor, she was very helpful and supportive. Whenever I submitted my written work to her, she was right there, checking it quickly and giving me lot of feedback and telling me about the books. She was very kind when she was visiting Australia and was on a chair of Philosophy in Sydney University, she sent me some reading material from there. I stayed in Delhi (Capital of India) and my Ph.D registration was from Calcutta (Indian metropolitan City), it was a long distance relationship with my supervisor but she was always available". In another case, it was mentioned that "the supervisor was helpful, supportive and understanding. He always extended his help by giving time, feedback and helping in getting the extension of the Ph.D tenure" (**Theme C. Helpful and Supportive**)

Flow Chart III depicts the third theme: **Difficulties Faced While Working on Ph.D.** The sub-themes that emerged were A) **Multitude of Task at Home,** B) **Difficult to Do Ph.D Work Along with College Duties,** C) **Challenges of Data Collection, and** D) **Challenges of Writing Research Work. These are discussed below in detail;**
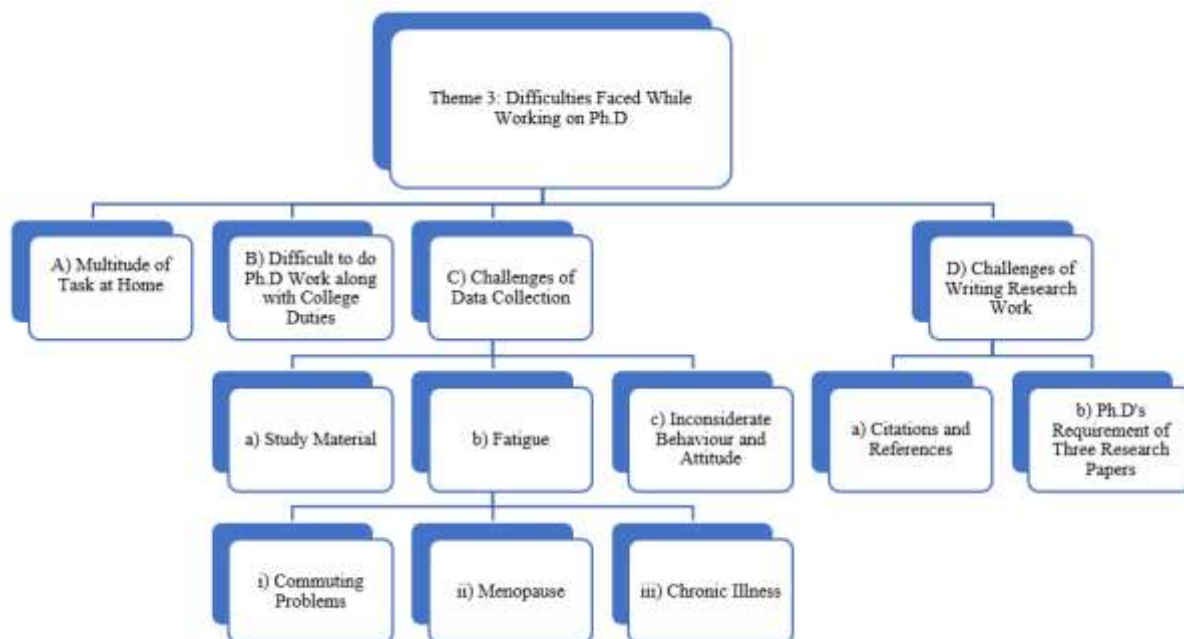
The first sub-theme was **Multitude of Task at Home**. All the participants lived in a nuclear family set-up. They reported that there had to do multitude of tasks at home. The statement by one of the participants clarifies this further, "Along with Ph.D, if you have household responsibility also, it becomes very difficult to do Ph.D work. I have major responsibility of my child. Anything related to school like fee payment, Parent Teacher Meeting or home-work is entirely my responsibility. Apart from this, I have household responsibility too. Further adding to this, other participant said, "Household chores took away my time".

The sub-theme **Difficult to Do Ph.D Work along with College Duties** is quite evident in the verbal protocols of one of the participants, "Job left me with little time to work on my Ph.D". Another participant said "Initially I did not take leave as I thought that I will do Ph.D work along with teaching. Soon I realised that I was unable to work along with college duties. Finally in 2021, I took study leave". All the participants availed study leave to do Ph.D work. Study Leave was a respite amidst the college duties and the multitude of tasks at home for a working woman.

The other sub-theme was **Challenges of Data Collection.** Data collection is an important part of Ph.D work. Depending on the method of data collection, Ph.D scholars face varied challenges while obtaining information from participants or a resource person in a study (Rimando et.al., 2015). A resource person may be described as the person who is in the position of providing information related to the topic of Ph.D work.

This sub-theme was further categorized as related to a) **Study Material**, b) **Fatigue,** and c) **Inconsiderate Behavior and Attitude** of the resource person from whom the data was to be obtained.

Participants in the third level of sub-theme a) **Study material** raised three main concerns. According to the participants the available **online material was insufficient**. "The challenge of scarcity of material is unlimited and never ending", reported the participant. **Non-availability of Data** was the second concern reported by the participants. The study material related to the research topic, especially those who use secondary sources for research is either scarce or unavailable online. "The quality material is not available on online resources; sometimes the data itself is not available. I needed the annual reports of empowerment committee, but the available reports were from 2007 only", reported the participant. Adding further she said, "Sometimes the study material is not available in preferred language, which makes it more difficult as the material has to be translated and the translation itself is a difficult task. When the Google translator is used to translate the material, the meaning and the essence of the information is lost".

In the process of collecting data, b) **Fatigue** becomes another hurdle. Researcher fatigue can influence the information collected during research. Fatigue was a result of i) **Commuting Problems,** ii) **Menopause and** iii) **Chronic Illness**. Collecting data requires the researcher to travel from one place to another in the same city as well as to another city. One participant said, "I had to travel to another city for data collection, which took lot of my energy". The fatigue generated by travelling is coupled up by the **Chronic Illness** as well as the **Menopausal** onset at the middle age. "I have an early onset of menopause, I get tired easily", said the participant. The researcher herself suffers from chronic illness (diabetes) which according to her brings the energy levels down. This further affects her progress in Ph.D work.

After planning for household chores and leaving the house and children at the hands of others, the **Inconsiderate Behaviors and Attitudes** of the resource person from whom the data was to be collected upsets the research scholars. The participant remarked, "I tried collecting data from one of the libraries, but I did not get the material. I called them many times; I wrote emails too. Nothing worked. Apart from this the resource person, in the library, were filled with lot of suspicion about the data I was collecting".

The sub-theme D) **Challenges of Writing Research Work** is further classified as a) **Citations and References** and b) **Ph.D's Requirement of Three Research papers**. According to one of the participants, she faced difficulty in writing the thesis as she was not in the habit of writing references and citations. As she remembers, "the most difficult part for me was writing, I used to write the references elsewhere. I have the habit of reading without looking at the references. I just read it and complete it. I don't like to break it in between. I think Ph.D needs a different kind of reading, you have to stop, and you have to write references and citations, which I kept missing. It was the most difficult part". Another difficulty posed was due to the Ph.D's requirement of three research papers. As per the UGC guidelines for Ph.D 2016, a Ph.D scholar is required to present two research papers in the national and international conference/seminar and publish one research paper in a peer reviewed journal. This requirement affected the writing work of the participants. In a study by Schoot et.al (2013), one cluster of reasons for the delay in Ph.D was related to the thesis-related issues, such as extra paper being written or statistical analyses taking longer than expected, bad planning, or a change in plans and external circumstances, among others. The participant recalled, "The research scholar is supposed to write three research papers, which was part of Ph.D work. It hampers the writing work. The time taken in collecting data and writing paper takes a lot of time. I spent two to three months for writing one research paper. Just imagine! We have to write three research papers. Then we have to either present it or

get it published which further takes time. Another issue I faced while writing these research papers was regarding data collection. I prepared one online questionnaire for one research paper but till date I haven't received the data. I had received only 15 responses. Without data, I was unable to complete that paper. In the entire process I had lost my valuable time".

The **Flow Chart IV** depicts the **Fourth Theme, Covid-19 Pandemic**. This theme was further categorized into sub-themes as A) **Lockdown and Social Isolation** and B) **Coronavirus Illness**. The sub-theme Coronavirus Illness was further categorized as a) **Physical Health**, b) **Mental Health**, c) **Post-Covid Effects**, d) **Increased Multitude of Task**, and e) **Reduced Interaction with the Supervisor**. These are discussed below in detail;
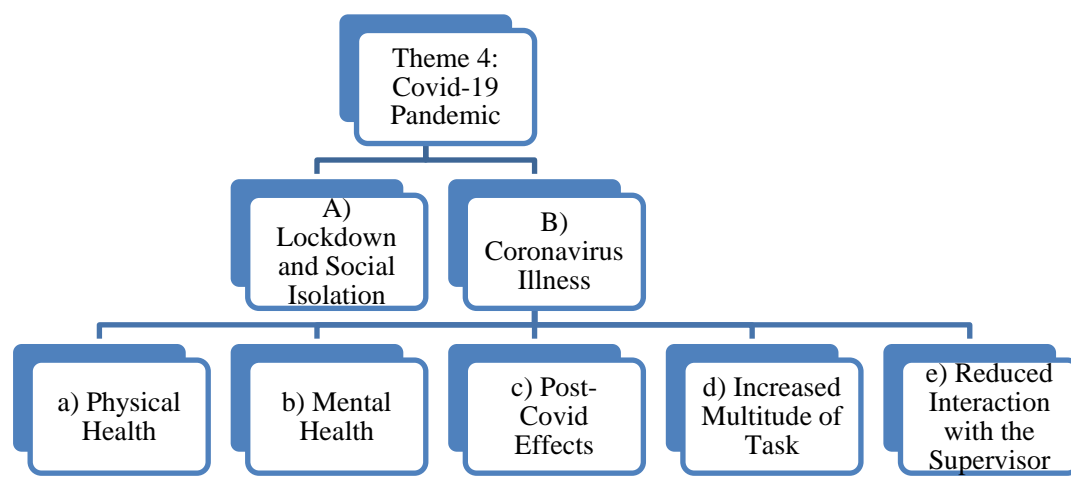
Some of the participants were either at the stage of data collection or in the phase of writing work when Covid-19 Pandemic occurred. The pandemic posed many challenges globally. The Ph.D scholars were also affected by it. The plethora of difficulties was posed by Covid-19 for few participants while for others considered it as an opportunity. The circumstances created by A) **Lockdown and Social Isolation** and B) **Coronavirus Disease** added together produced difficulties in completing the Ph.D work. Social isolation and lockdown were the need of the hour, to curb the spread of the disease. Covid-19 affected people globally in all spheres. The academic institutions were completely shut down. The libraries were closed too. This led to difficulties in the process of data collection. One of the participants stated, "There were problem in data collection. I lost physical access to library and institutes. There were many policy papers which were crucial for my study. They could have been very helpful. Apart from the closure of academic institutes, my resource persons were unwell, and I was afraid about their health. My interviews were scheduled. Institutional permission and everything was shut. People stopped responding. I was uncertain whether I should speak to and follow-up with the resource person. Pool of my resources became less. Nothing worked as per the plan". "The prior appointments with the resource person were cancelled and getting a new appointment for data collection was difficult under the new circumstances created by lockdown and social isolation", reported another participant.

As the disease was new and its nature was unpredictable, there was lot of fear and panic among people. The researcher had to partially re-plan the research because of impositions (Curfew and Section 144 of the Criminal Procedure Code, 1973) created by the Covid-19. Her research required her to do face to face interaction with the participants. Getting the appointment was very difficult. Participants, who agreed for interviews initially, did not

respond to the calls later. They would randomly cancel the appointment. Data collection took lot of time in her case, which prolonged the length of Ph.D work.

The sub-theme B) Corona virus Disease was further classified into five sub-themes a) **Physical Health**, b) **Mental Health**, c) **Post-Covid Effects**, d) **Increased Multitude of Task** and e) **Reduced Interaction with the Supervisor**. It was not just about the **Physical Health** of the resource person but of the participants also. "I was Covid positive and was hospitalized for 10 days", reported the participant. Covid-19 also affected the mental health of the participants. The statement, "Covid-19 was one time where I didn't want to think about the deadlines. During Covid-19, there were lot of things; I had to take care of everyone's health, people were getting sick here and there", emphasized the pain and suffering of the participant.

Covid-19 affected people by 360 degree. The covid impacted the physical health as well as the **mental health** of people to such an extent that the participants were unable to concentrate and do their Ph.D research work. "Covid was quite depressing. During that phase many people advised me to read to divert my mind but I did not feel like reading", emphasized the participant. Another participant, in a statement, turned the spot-light on the hurdles created during Covid-19. She went further by stating that during lockdowns, when everybody had to stay together, there was not enough space; there were not enough activities around. It was a difficult time; I was not working at all. It did affect my work a lot. Similarly, another participant's narrative, "During delta wave, life stopped for Delhi. Everything stopped. The entire system collapsed. My Ph.D became distant. From April 2021 till July 2021, I did not touch my Ph.D work. This was the worrisome period, and I went to my hometown for a month. I was totally switched off. The situation was such that it triggered fears that the world might end", describes the effect of Covid on the mental health of the participants. The physical distance and separation created by the Covid also affected the mental health. The statement, "I felt at times very much, I would not say lonely but helpless because I saw many people suffering at that time. When I was unable to pay the last visit to the deceased father of my friend, I really felt bad. It made me depressed. I lost a friend also. She tried to contact me but I was unable to meet her. It still affects me". "My friend lost her father in total lockdown, when she was in Pune. Her father was quite old and the mother was around 75 to 80 years. She called me to go and check. We got some special pass to go to her place. It was so heart breaking to see a dead man lying on his bed and only an old women looking at the dead body and sitting alone in the room nobody to come". This verbal protocol by the participant reflects the pain and the sufferings experienced by them during Covid-19.

The **post-covid effects** were more for some as compared to others. According to one of the participants, "I had weakness post-covid and I was unable to do my Ph.D work for 3-4 months. Since then, I have been having constant health issues. My health is not the same anymore. I am unable to sit for studies for longer periods now. I get tired easily. This breaks my concentration levels and affects my Ph.D work". While recollecting the memories of the pandemic, the participant affirmed, "I faced lot of problems, post-covid. My husband after lockdown had a major heart attack and I somehow relate it to Covid-19. It was very difficult time, I had huge break in my work". A study by Schoot et. al (2013) also reported that the delay in Ph.D was caused by myriad of personal problems such as care responsibilities, or more serious circumstances such as death of a relative, candidate suffering from severe illness; or personal difficulties in managing the project.

Covid -19 further affected the Ph.D work as it brought in increase in **Multitude of Tasks at Home**. The important outcome of the analysis of interviews in a research by Shomotova (2022) was that the doctoral student who was a mother as well, applied multitasking regime(s) on daily basis. They compared themselves metaphorically to "octopus", indicating their efforts to do multiple things simultaneously. During Covid-19, everybody was at home and the new concept of work from home emerged. The school became online and the burden of teaching children fell on the mothers. The two statements, "My children had online classes. I had to sit with them during the online classes. If I did not sit with them, they would not study. That was the time for my study also", and "I have never been happy with online classes for young children. One reason was the realisation that whatever online classes were happening was basically not doing much for the kids. Secondly, the schools were sending lot of material and things which my kids were not able to do. I felt it created an unnecessary tension and pressure on my kids as well as on me because ultimately, I had to sit down, teach them what was being taught in the class and I knew they were not getting it and somewhere I felt that the kids were not able to concentrate in the online classes. So it actually created lot of tensions and irritability", shows the multitude of task, a woman Ph.D scholar had to perform during the pandemic.

The increased household chores reduced the time of study. In India, the cultural role of the woman in the house is such that they are perceived to be home-makers primarily. So, when everybody was at home, work such as cooking, feeding and bathing children on time, maintaining their schedule, and taking care during illness fell on the shoulders of the woman.

The online transition led to newer modes of communication, but Covid for some participants **reduced interaction with the supervisor** as they too were infected with the Coronavirus.

The Covid played **positive role** for some participants as it gave them the platform to learn technology and use it for their Ph.D research work. They were able to write the thesis directly in the word document, where editing became easy. This can be seen in the self-report of the participant, "The online transition because of Covid-19 helped me to some extent. I was more into reading printed books and reading materials. I was always scared and never comfortable with the idea that we can actually read or write online. In that sense for the first time in my life I started enjoying what was an imposed thing on me. I noticed that my work became easier, when it came to writing. Before the pandemic, I kept a thick notebook where I was writing, and rewriting. For other things, the online transaction helped me with household things because the whole world was buying things online. So, it took away lot of tension from my mind".

Another participant reported, "The system of e-library was introduced which helped in searching the material. The telephonic and email ways of data collection gained impetus during Covid. My data collection was majorly online i.e., telephonic and email. I used secondary data. I tremendously benefitted during the Covid time as there was free access given by the university as well as publishing houses. E-library system was introduced."

The difficulties faced by the participants could be explained with the help of the **Bronfenbrenner's theory of Ecological systems**. According to the fifth level i.e **Chronosystem** of this theory, the environmental changes which occur over the lifetime influence the development of the individual. The interactions between the various levels and events during Covid-19 pandemic affected the Ph.D work of the participants.

The fourth theme, **Support Systems** is shown below in the **Flow Chart V**. This theme is further categorised into five **sub-themes**; A) **Strategy to Facilitate the Process of Ph.D ,** B) **Immediate Family's Help,** C) **Parents and Extended Family's Help,** D) **Colleagues and Friend's Help and** E) **House-help's Support.**

```
                          ┌─────────────┐
                          │  Theme 5:   │
                          │  Support    │
                          │  Systems    │
                          └─────────────┘
```

| A) Strategy to Facilitate the Process of Ph.D | B) Immediate Family's Help | C) Parents and Extended Family's Help | D) Colleagues and Friend's Help | E) House-help's Support |
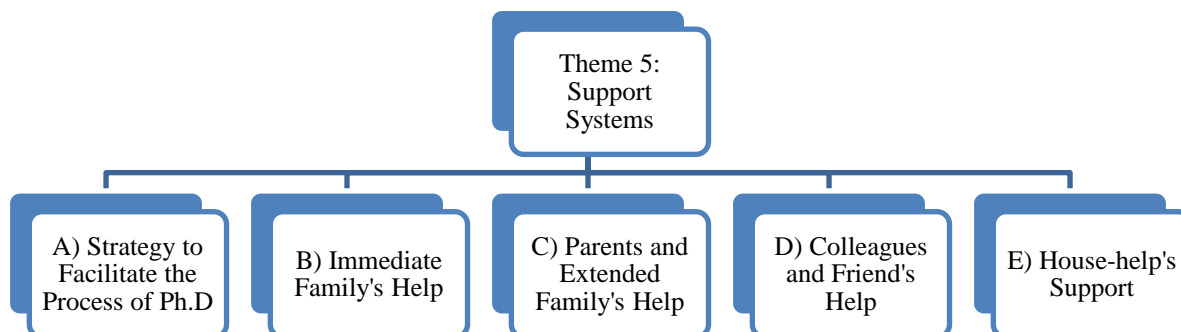
Sub-theme A) **Strategy to Facilitate the Process of Ph.D** referred to the Study Leave availed by the participants. Education plays a significant role towards the betterment of the society. Therefore, the international and national forums play a crucial role in ensuring the access to education. Many policies have been framed to make education accessible to all. One such policy is the Study Leave to facilitate those who desire to get Ph.D degree while in job. All the participants availed study leave to complete their Ph.D research work. "It was because of study leave that I am able to work on my Ph.D research work. I got it when I actually needed it" revered a participant. The researcher herself was able to work rigorously on Ph.D work after availing study leave.

The **other sub-themes** under the theme 6, Support Systems were **Immediate Family's Help, Parents and Extended Family's Help, Colleagues and Friend's Help,** and **House-help's Support.** Every little help provided by them became important towards completion of Ph.D. All the participants were living in a nuclear set-up. So, the term 'immediate family' refers to the husband and children in this study. "My husband was the biggest support. He took care of the family when I was doing my Ph.D. He pushed me to complete it", stated the participant remembering the the emotional support provided by her husband. Another participant too happily recalled the support extended by her husband by taking care of kitchen responsibilities, "My husband was very supportive, and he was equally committed to my Ph.D. He wanted me to do quality work. To ensure this happens, he cooked food for us daily". To support the participant to complete her Ph.D work, he along with the child went to stay with the extended family so that the participant could focus on the Ph.D work. This was explicit in the statement made by the participant, "My 8-year-old daughter and husband stayed away for about six months during my last phase of Ph.D. That gave me time to complete my work".

The term 'parents and extended family' referred to the participant's own parents, parent-in-laws, siblings, and the cousins. The participants received support from one or the other member of the family. Some came over to help in managing the house-hold chores while others took care of the children. Two participants felt extremely happy when they talked about the support given by their house-help. "She is just like a family. She does understand that I am doing my Ph.D. When I am sitting and reading, she brings tea for me as I drink lot of tea. These are still basics, I would say she takes care of my kids in a wonderful way. Even for my guests, she knows how I wanted to be handled and I have been blessed to have her in

my life", this statement by the participant explains the importance of support for a working woman received from the house-help.

According to the **Bronfenbrenner's Theory of Ecological Systems**, the **Microsystem level** i.e., the immediate environment is very important in development of the individual. Thus, the support provided by the family, extended family, house-help, and friends were crucial towards obtaining the Ph.D.

The **Flow Chart VI** depicts the sixth theme **Suggestions**. The sub-themes are A) **Maintain the Dedication and Motivate Yourself**, B) **Don't Lose Hope and Try to Complete it,** C) **Surround Yourself with People Having Positive Outlook,** and D) **Need to be Relaxed**
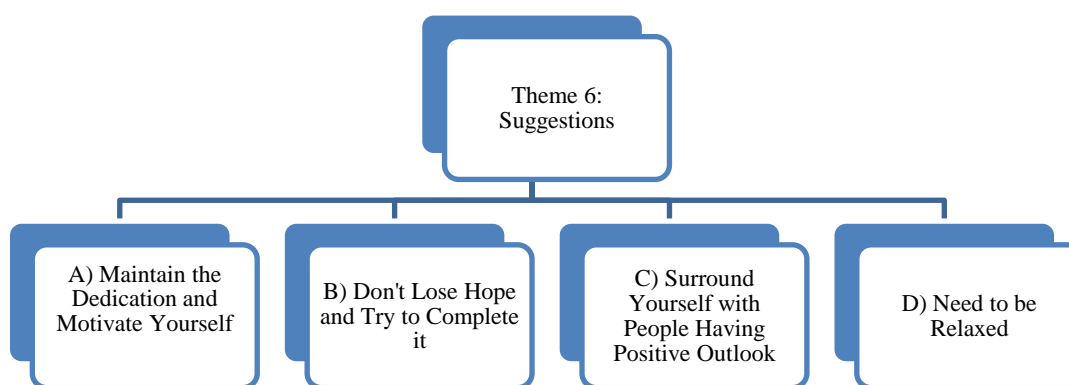
The sixth theme was based on the **Suggestions** made by the participants for woman who are pursuing Ph.D;

A) **Maintain the Dedication and Motivate Yourself**: "The reason for my re-registration was that it was getting too delayed. In 2020, I made a new-year resolution that I will revisit my research. I pushed myself to visit my supervisor so that I could get motivated. That year I started to read again. I started to write on my own', the participant citing the importance of dedication and motivation.

B) **Don't Lose Hope and Try to Complete it**. Ph.D is a long journey, so having optimistic outlook is important in completing it.

C) **Surround Yourself with People Having Positive Outlook**. The statements "At times nagging me for completing it and not missing the deadline" and "I had disconnected myself from my friend circle as I had one year window to finish it. I told my friends that I will not be available for some time. They understood it", made by the participants shows the importance of the positive and understanding nature of people who surround the individuals. Having people with positive outlook will always encourage others. The researcher was fortunate enough to have a senior colleague who always supported her unconditionally.

D) **Need to be Relaxed: "**Ease Out and Do Not Let Ph.D affect the Relationship and Health", "We need to look at the roots, enjoy the process and also take care of ourselves and our relationship because these are the things which sustain you and keep you happy. Be sincere with your work. Have integrity in your work. People in our age bother a lot about how other people are going to perceive us, what they will say, how our family and kids are going to look at us. We should be just honest with our work". This statement denotes the strength that a woman should keep in

completing her research work. The evaluations and judgements made by others around should not deter them in the journey of obtaining the Ph.D degree.

Ph.D is a huge task. Ultimately it will fall in its place, if the dedication, sincerity, motivation, hopes and support remains consistent.

REFERENCES

Almusaed, A. & Almssad, A. (2020). The Role of The Supervisor on Developing Ph.D Students' Skills. In R. Thripp & I. Sahin (Eds.), *Proceedings of iHSES 2020--International Conference on Humanities, Social and Education Sciences* (pp. 25-36). Monument, CO, USA: ISTES Organization. Retrieved 19 March 2023 from www.2020.ihses.net/proceedings/29/.

Banchariya, S. (5 Aug 2019). Gender Disparity at Ph.D level, Men Dominate by a Huge Margin. Times of India.

Gazette of India (2018). UGC Regulations on Minimum Qualifications for Appointment of Teachers and Other Academic Staff in Universities and Colleges and Other Measures for the Maintenance of Standards in Higher Education. University Grants Commission. New Delhi. https://www.ugc.gov.in/page/ugc-guidelines-2018.aspx

Kumar, k. (2009). The cultural Context of Girls' Education in India. India in Transition published by the Center for the Advanced Study of India (CASI) of the University of Pennsylvania. https://casi.sas.upenn.edu/iit/kumar

Marsh, H. W., Rowe, K. J., & Martin, A. (2002). PhD students' evaluations of research supervision. The Journal of Higher Education, 73(3), 313–348.

McAlpine, L., & Norton, J. (2006). Reframing out approach to doctoral programs: An integrative framework for action and research. Higher Education Research & Development, 25(1), 3–17.

Ministry of Education (2023). Press Information Bureau. Government of India. https://pib.gov.in/PressReleseDetailm.aspx?PRID=1894517

Miyahara, M. & Fukao, A. (2022). Exploring the use of Collaborative Autoethnography as a Tool for Facilitating the Development of Researcher Reflexivity. System *Vol 105* Elsevier https://doi.org/10.1016/j.system.2022.102751

Rimando, M.; Brace, A. M.; Namageyo-Funa, A.; Parr, T. L.; Sealy, D.; Davis, T. L.; Martinez, L. M.; & Christiana, R. W. (2015). Data Collection Challenges and Recommendations for Early Career Researchers. *The Qualitative Report*, *20* (12), 2025-2036. https://doi.org/10.46743/2160-3715/2015.2428

Shomotova, A. & Karabchuk, T. (2022). Navigating COVID-19: Female Ph.D. Students Coping with Family, Academic, and Job Duties. Journal of International Women's Studies, *23(3),* 57-75. https://vc.bridgew.edu/jiws/vol23/iss3/5

UNESCO (2011). International Standard Classification of Education. https://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf retrieved on 30/03/2023

UNESCO (2019). From access to empowerment: UNESCO strategy for gender equality in and through education 2019-2025. https://unesdoc.unesco.org/ark:/48223/pf0000369000

UNICEF (2023). Girls' Education. https://www.unicef.org/education/girls-education

Van de Schoot, R.; Yerkes, M.A.; Mouw, J.M. & Sonneveld, H. (2013.) What Took Them So Long? Explaining Ph.D Delays Among Doctoral Candidates. PLoS ONE 8(7): e68839. https://doi.org/10.1371/journal.pone.0068839\

Conflict of Interest
The author(s) declared no conflict of interest.

How to cite this article: Verma, M. (2023). Trajectory of Ph.D Work of Working Women Having Young Children. *International Journal of Indian Psychology*, *11(2)*, 824-838. DIP:18.01.085.20231102, DOI:10.25215/1102.085