

# A STUDY ON THE CONTRIBUTION OF A DIGITAL COMMUNITY TOWARDS THE TRANSFORMATION OF THE PARENTAL ECOSYSTEM

## ABSTRACT

A research study was conducted to identify the role and sphere of influence of digital communities in a parenting ecosystem. This report provides an overview of the target segments needs assessment and digitalization of their physical communities and support systems. Primary research was done via telephonic calls and zoom interviews of pregnant and new mothers and couples. 40 participants took part in the study to share their experiences and pain points. In addition to this, a WhatsApp group of 350 participants was created to observe the engagement on a digital medium. The study helped us validate the need for a social support system beyond the existing physical network of the participants, in order to reach out to others with similar or better parenting approaches. 70% of the participants have expressed their willingness to join digital parental communities for the same. The findings have been useful to understand the role of a digital community which can enhance the offerings of parenting facilitators and support parents implement better parenting practices.

*Keywords: Parenting facilitators, pregnant mothers, new mothers, digital parental communities, parenting approaches*

## 1. INTRODUCTION

People belonging to the generation Y, also called as millennial are those born between 1981 and 1996. They currently fall into the age bracket of 25 to 40 years, i.e predominantly new or early-stage parents category. Millennial parents across the globe have refrained from the traditional parenting approach by adopting a critically different and comparatively progressive parenting style. Planned Parenthood is a predominant aspect of this approach, where the genY parents choose to have a decent income and stability in life to ensure they can provide their off-springs with all the resources they need. Millennial also see the highest number of working women as compared to any previous generation, with both the partners juggling professional and personal roles.

In India, millennial parents have access to the Internet, online discussion forums, social media, products and service providers through the digital medium with widespread smart phone penetration and affordable data packs. These technologies have paved the way for these millennial parents to seek information, exchange experiences and support a like-minded community of parents in the similar journey through online platforms.

As part of this research, we have interacted with a number of women and couples, predominantly from Tier-1 and Tier-2 cities of India who have conceived, delivered, and contributed to the upbringing of a child, to understand their experiences with regard to the traditional approach of parenting and new-age parenting with the exchange of data via online platforms.

A steady rise in regional parenting communities has also been identified in the past 10-12 years. Hence, we chose our area of study as the impact and influence of digital parental communities on

these women's lifestyle and how they have enabled in the rise to a conscious and positive parenting style. The conclusion summarizes the influence of these communities and major issues that are being addressed with the rise in these community platforms.

## **2. LITERATURE REVIEW**

Traditionally, new or young parents always sought parenting advices from their parents, and others in their social network. In most traditional Indian cultures, it was a norm for an expectant woman to deliver the child at her maternal place so that she can be supported by her parents in taking care of the newborn. This is when the older generation imparts their knowledge to the new mother, all the dos and don'ts that are to be learnt and implemented by a new mother to continue in the path of upbringing as done by the previous generation.

With rise nuclear families and also the working population among Indian women, these traditions and rituals have undergone some changes. Women juggling multiple roles on the personal and professional front have had little time to spare for a few norms like these, unable to take off work even until the day before the delivery or not having an extended period of maternal leave, etc. The rise in income levels with both the partners working has also led to hiring nannies/ baby sitters, availing day care centres, etc. Hence, the Indian parenting culture has undergone a major transformation in the past 10-12 years [5].

Parenting in our country has also been shifting to a conscious parenting style from a predominantly authoritarian approach which sometimes causes more harm than not in the child's developing relationship with the parent [1]. Couples prefer a planned-parenthood approach which includes a conscious, positive parenting style. For example, parents today avail financial consultation for a stable higher education even before the child is born. Many millennial parents do a thorough research online for the different kinds of investments for pregnancy, child's education, life insurance, etc and also reach out to others who have availed such premium plans and investments. According to a Forbes report, 66% of millennials have invested for their child's college education even before the child began schooling while the previous 2 generations were significantly lower. The red free fundus image is obtained from the mean of green and blue channel images. Along with the classical LBP, features from the completed modeling of LBP are also utilized for the classification using K-Nearest Neighbor (KNN) [10]. The extracted colour based features and LBP features are analyzed independently for glaucoma diagnosis using SVM classifier [11]. SVM classifier calculates a hyperplane that separates the feature space with maximum margin. The complex texture features are discussed in for fundus image classification [12].

Also owing to the smart phone penetration, affordability of cheap data packages, and formation of parenting specific communities has led to an exponential rise in the awareness amongst new parents, regarding the traditional approaches which do not seem to be completely aligned to their ideologies and values [13]. With social media and budding parenting communities acting as a guide for conscious and positive parenting approach, parenting and parenthood in India has surely changed with the advent of the Internet [14]. Networking with like-minded parents on the digital communities, sharing experiences also provides them validation regarding these approaches and an incentive to continue pursuing the same [15].

## **3. RESEARCH METHODOLOGY**

The population of the study consisted of women aged between 25 to 40 yrs of age, predominantly expectant and pregnant mothers and a minor segment of those who have delivered in the past 8yrs. Various methods of research have been followed to conduct the primary and secondary research in sequence.

### **3.1. Sources of Primary Research:**

Respondents to the primary research were mothers who belonged to Tier1 and Tier2 cities of India such as Mumbai, Pune, Hyderabad, Bangalore, Kochi, Visakhapatnam, etc. All of the samples were married and their first pregnancy experience was primarily recorded. Overall, the sample was highly educated and some were working mothers. The research includes women who have delivered only between Jan 2013 to July 2021.

Primary research was conducted in 2 types, in-depth interviewing and observational methodology. Each approach is suited to identify certain data points and facts. Enormous focus was placed on the data collection, keywords identification which leads to the analysis of how digital communities serve this purpose.

Following the observational methodology, a sample of 340 new and expectant mothers were identified through interest forms/ Questionnaires and placed together in a WhatsApp group to observe engagement between women in the same stage of parenting. This research includes women who have delivered between Jan 2019 to July 2021.

For the in-depth interviewing, a sample of 40 women was selected and interviewed individually regarding their emotional journey while conceiving, pregnancy, delivery and early motherhood stages. Most of the interviews were done on zoom, recorded and a transcript file was generated later for our references. Some interviews were even conducted via phone calls.

A research questionnaire was prepared with open ended questions that allowed the mother to go beyond the scope of the questions and share their experiences. Initially, the colour components of input funds image such as Red, Green and Blue (RGB) are separated. Then, only the green channel is utilized to locate the OD region [14]. The development of the questions/topics to touch upon was by the result of literature review of the secondary sources mentioned earlier [3]. Research topics were in 5 broad sections, demographics, planning and pregnancy, delivery, post-delivery and emotional journey throughout. Questions asked in the interview included the following -

- Age of the mother, and location (city)
- Number of children and their age(s)
- Process of preparation and planning to have a child
- Lifestyle changes; diet and exercise
- Pregnancy journey through the 3 trimesters
- Experience with the hospital and care providers
- Spouse/ family involvement and support from work
- Role of social networks such as friends and cousins who are in the similar stage of parenting.
- Role of social media, digital platforms and the information overload
- Emotional journey during pregnancy and anxieties regarding the arrival of the baby
- Delivery experience, recovery and emotional journey during this phase
- Dealing with the lifestyle change post delivery
- Newborn baby care, sleep patterns and breastfeeding
- Realizations and regrets in hindsight

Willingness to join a digital parenting community

### **3.2. SOURCES OF SECONDARY RESEARCH:**

To understand a new mother's jobs and journeys better, it is important to define the user personas. Since parenting is a broad scope and involves multiple user personas within it, our scope was restricted to the expectant and early stage parenting demographic. For the secondary data, reliable and consistent data was assembled from the various touch points of millennial parents such as the digital parenting communities on Facebook and Instagram.

This included the following:

(a) A dummy profile was created to join parenting groups on Facebook, thereby collecting relevant user data regarding challenges, pain areas and sources of validations.

(b) Consistently following updates and engagements on Instagram profiles of mothers and couples who prefer to document their early stage parenting journeys on the platform and seek guidance from the larger community.

(c) Pregnancy and post pregnancy books and publications which give detailed information regarding the prospective pain areas and challenges that an expectant mother would face and tips to deal with them. A must read for those trying to understand this journey – “Pregnancy” by Rujuta Diwekar, “The baby book” by William Sears and Martha Sears and “What to expect when you are expecting – 4th edition” by Heidi Murkoff and Sharon Mazel.

(d) Joining relevant service provider’s online sessions: Building a community platform involves a two-sided market i.e. end users (parents) and the service providers (parenting facilitators), it was critical to study how the facilitators were servicing the parenting market currently and driving engagement amongst the digital community members to identify their level of influence.

For this purpose, we have identified 3 regional parenting communities on Instagram which we have considered as case studies for our research, “Coimbatore Parenting Network”, “Chennai Parenting Network” and “Conscious Parenting Summit”.

The observations of the secondary and primary research conducted are compiled and enlisted further in the report.

## 4. RESULTS & FINDINGS

### 4.1 FINDINGS FROM THE STUDY CONDUCTED ON MOTHERS:

As defined earlier, the aim of the research was to identify their jobs-to-be-done and the challenges/ pain areas in executing the same.

Effectively, post data collection, the data was analyzed and segmented into 2 categories, on the basis of pain areas experienced by these women during pregnancy and post-delivery is shown in Table 1.

**Table 1: Pain Areas during Pregnancy of Women**

| Pain areas during pregnancy            | Percentage of Women |
|--|---------------------|
| Unprepared for a pregnancy             | 65%                 |
| Overwhelmed with suggestions           | 59%                 |
| Changed doctors in the first trimester | 38%                 |
| Regret having an inactive lifestyle    | 42%                 |
| Fear of birth defects or complications | 52%                 |

It was observed that there were a number of challenges women faced during the initial stages of pregnancy stages which majorly impacted their emotional health such as

a) Being unprepared for an accidental pregnancy – 65% of the interviewed women from the tier1 and tier2 cities have placed large focus and effort on building their career paths or felt that they were

too young to have a child in the initial 2-3 years of the marriage. Hence, facing an unplanned pregnancy was one of the first challenges being face by women which sometimes took even 2-3 months for them to accept, leading to major emotional disturbances in the process.

b) Feeling overwhelmed with suggestions - 59% of the interviewed women experienced a high level of stress due to an overload of information, suggestions and advices for expectant mothers regarding the lifestyle changes, diet, exercise, etc. This various source that added to this stress included parents and in-laws, friends and the heavy online research done by these women. They felt this added significantly to their stress levels, especially when there were conflicting inputs on how to approach any particular issue.

c) Facing a traumatic experience with the gynecologist - 38% of the interviewed women have expressed traumatic experiences with the hospitals or care-givers as the concerns and needs of the expectant mother were not addressed by the gynecologist. In some cases, mothers were body-shamed by the nursing staff and attendants during the consultations. Due to these factors, mothers were forced to change 2 sometimes even 3 doctors within the first 2 semesters.

d) Regret having an inactive lifestyle – 42% of the interviewed women has realized in hindsight that having an inactive lifestyle during their pregnancy has led to major lifestyle problems for the women, obesity, health complications and also a delayed development of the child. Women who have had 2 pregnancies observed a difference in the child's development when the mother had regular exercise in comparison to being inactive.

e) Fear of birth defects or complications in the baby's delivery or development - 52% of the interviewed women have expressed a deep sense of fear and anxiety regarding the baby's developmental aspects in terms of a premature birth, deformities, birth-defects, disorders, etc. This is identified through a set of prenatal diagnosis tests during the 2nd trimester and sometimes even the 3rd trimester. Women are also observed to be anxious regarding their child birth experience [7].

Few predominant challenges that women faced post-delivery that significantly impacted the women's emotional and mental health, thus her recovery post-delivery are as indicated in Table 2.

**Table 2: Women's Mental Health**

| Pain areas post delivery                   | Percentage of Women |
|--|---------------------|
| Lack of sleep/ insomnia                    | 42%                 |
| Faced breast-feeding issues                | 80%                 |
| Underwent post-partum depression           | 69%                 |
| Lack of spousal support                    | 28%                 |
| Unable to bond with the baby post delivery | 19%                 |
| Overwhelmed with the environment           | 82%                 |

a) Lack of sleep or insomnia – All women face a significant reduction in their sleep time during the initial days of the new born baby's arrival, however this gets better over time with family support and also sleep-training the baby. 42% women that we have interviewed felt they suffered with lack of sleep and support to attend the baby. Traditionally, women felt that breast-pumped milk was not advisable to be fed to the baby. However, with the current lifestyle of working women, many women have opted to go for breast-pumped milk storage for their child, after consulting with their gynecologist.

b) Face breast-feeding issues -80% of the interviewed women have faced challenges while breast-feeding their baby. Various issues that arise include a low milk supply, inability to latch the

baby, pain and soreness around the nipple, oversupply of milk which leads to engorgement and pain, etc.

c) Underwent postpartum depression – 69% of the interviewed women have experienced mild to severe postpartum depression, which lasted as long as 3 to 4 months sometimes. There are several factors which can trigger this including hormonal imbalances, past history of mental illnesses, family support, physical and lifestyle changes, etc. Women with PCOS or other mental illnesses were observed to have a higher chance of experiencing postpartum depression.

d) Lack of spouse support or involvement – 28% of the interviewed women have felt that the spouse's involvement in the delivery and baby care process was quite limited which caused additional stress to the women.

e) Unable to bond with the baby post-delivery – 19% of the interviewed women have expressed that they were unable to bond with their baby in the initial few months of the delivery. All of these women have also suffered moderate to severe postpartum depression. This could be attributed to low acceptance to lifestyle changes, lack of family and spouse support, delivery trauma, etc.

f) Overwhelmed with the environment-82% of the interviewed women have felt overwhelmed with post-delivery exhaustion, lack of sleep along with the frequent visitors, and their inputs/suggestions. Few inputs by external sources other than the couple seemed rather coercive and conflicting to the couple's choices, which was an added stress for the new mother.

Out of the women interviewed, 36% of them were from joint families who have had support from other family members to take care of the baby while 64% of them were from a nuclear family setup. Majority of them have had external support like family members who visited for a short duration or nannies/doulas for the first 6 months after the delivery [5].

All the women interviewed have identified and emphasized on the importance of having external support for at least 2-3 months for the mother to have sufficient time to recover from the delivery and also feel capable of taking additional responsibility.

16% of these women have also suffered with problems while trying to conceive and have reached out for help from fertility experts and doctors.

Few steps taken by these women to address the previously mentioned pain areas is shown in Table 3.

**Table 3: Women's Education Session**

|                                     |     |
|-------------------------------------|-----|
| Attend prenatal education sessions  | 58% |
| Attend postnatal education sessions | 67% |
| Seek support from a social network  | 83% |

A significant percentage of these women and couples have availed online/offline sessions to educate themselves about various aspects of pregnancy and delivery such as healthy diet and exercise for a smooth pregnancy, preparation for childbirth, lamaze sessions for the couple, prenatal yoga sessions, postpartum health and fitness, breastfeeding sessions, lactation, postpartum mental health, focus on the mother's identity, etc.

From the research conducted, we observed that there is an increase in women reaching out for education and sessions post-delivery, from 58% to 67% majorly for breastfeeding, mother's emotional health, postpartum depression, etc.

Majority of these women have expressed that engaging with other parents in the similar-stage journey, hearing their experiences and stories have helped them prepare better for the same situations [6]. A significant 83% of these women have expressed that they seek support from their own social groups or external networks to understand pregnancy and delivery better.

## **4.2 FINDINGS FROM THE RESEARCH STUDY CONDUCTED ON DIGITAL PARENTING COMMUNITIES:**

To understand the impact of a community platform, we need to study its two-sided market. It is critical to complement the user research by conducting a research on the service providers in these communities who will drive engagement around specific pain areas. This has given us a better understanding of the need gap in the market.

While the research on parents yielded multiple pain areas for our understanding, secondary research was conducted by mapping the activities of these pain points to the activities of existing community platforms, to get our data points validated regarding the support offered by these digital parenting communities and relevant service providers to young mothers. We have chosen Coimbatore Parenting Network as our first case study.

## **4.3 INTRODUCTION TO CPN**

Coimbatore Parenting Network (CPN), is a parenting support group which was started as an offline community for young mothers living in Coimbatore to meet and support each other. It is being run by a founding committee of 5 women who are service providers and facilitators for various aspects of the motherhood journey such as gentle parenting, informed birthing, lactation, mental health education, etc. Due to the pandemic, their activities have shifted online and since then they have observed an exponential rise in their community members. Currently, CPN has about 12000 followers on Instagram.

They have subject matter experts who conduct regular online events to create awareness amongst the parenting community regarding their areas of expertise. This includes gynecologists, certified midwives, lactation counselors, mental health advocates, lamaze trainer, prenatal yoga expert, parenting coaches, parenting bloggers, influencers, natural birthing centers and other maternity care providers. Women are encouraged to talk openly about issues they face and seek support from the community which helps alleviate some fears [7].

Another major activity conducted by the group is breast milk collection which is donated to the Coimbatore Government Hospital almost every month. Traditionally there was a huge misconception that if a lactating mother donates breast milk, there won't be sufficient milk for her baby. During the COVID pandemic, CPN also worked on eliminating many misconceptions regarding vaccinations for lactating mothers [2]. Historically, breastfeeding has been a major area that this community targets on spreading awareness and helping mothers unlearn traditional misconception by providing valuable data backed by scientists and health experts.

## **4.4 PRIMARY RESEARCH CONDUCTED ON CPN'S REACH AND INFLUENCE:**

We have been following their Instagram business handle since 3 months and collecting engagement data to analyze the reach of the community. Major jobs done by the online parenting community platform include

- Non- Event Content Creation – posted daily on Instagram
- Promotions and Event Marketing – daily on the handles of all the founding members
- Event Hosting – Atleast 2 events per week conducted on Zoom, Google meet.

- Community building – daily posts, discussions, and myth-breaking daily on any parenting concept.

We had enrolled ourselves for sessions and events conducted by CPN to observe the community's engagement that is being driven by these service providers to foster better parenting practices. Table 4 are our observations regarding the engagement on the platform?

**Table 4: Engagement on The Platform**

|                                  |                           |
|----------------------------------|---------------------------|
| Total Number of followers        | 11.9K followers           |
| Participation in IG Live         | Atleast 300-600 followers |
| Responses received for Polls     | Atleast 20-40K responses  |
| Responses received for Questions | Atleast 20-30 responses   |

\*Followers include male and female.

- With these engagement stats, the digital community platform has managed to support women by achieving the following
- Creating a safe space for women to open up and share issues without any hesitancy [7].
- Building a community on the shared experience of motherhood which is quite personal.
- Making mothers and parents feel a sense of belonging in the community
- Making an aggregate community platform available for all parenting challenges.
- Breaking myths and taboos on traditional parenting approaches and creating awareness backed by science and health experts.
- Collecting excess breast milk and donating to orphan infants or those with low milk supply.

CPN has also collaborated with parenting facilitators and researchers outside Coimbatore to promote awareness by hosting common events with them. For example, CPN has also worked towards building awareness regarding natural birthing process and its impact on the mother's emotional health. In this regard, they have also promoted "Sanctum Birth Centre" from Hyderabad, which is run by a certified midwife, Dr. Vijaya Krishnan [4]. Sanctum birth centre primarily aims to prevent a bad hospital experience for an expectant mother by providing a comfortable environment for the mother. Out of 952 deliveries done in 2018 and 2019, 92% were natural births. This also helps the mother heal faster and reduces the pain areas faced by new mothers as mentioned earlier.

The success of CPN has also paved the way for other regional parenting groups to emerge such as Chennai Parenting Network, Mysore Parenting Network, etc. as the need for a digital community is clearly evident.

## 5. Discussions

Early-stage parenting is a complex task which only keeps evolving as the child develops in to a mature adult. Research studies pertaining to India in the parenting aspects have been highly limited. We have been able to source only a handful of research studies conducted on this target segment. Also, considering the fact that online communities for a niche market are only just building up, there is clearly not enough research conducted on the influence of these digital communities.

Based on the literature review and the various modes of research conducted, the take-away statement for this research study would be in 2 aspects -

- High level of willingness among women to explore information found online and join digital parenting communities. They are already having an immediate access to online data such as



articles, blogs, videos, etc. Finding apt ways to meet this growing demand for a niche community platform that can immediately connect them to professionals will be fruitful [9].

- We see a steady rise in regional digital communities, specifically for expectant and new mothers who need that kind of a support system that brings more awareness, especially when the population is undergoing a major transition in its parenting style.

- Studies conducted on prenatal education and support received by women in other countries have resulted in lower levels of mental health conditions among new mothers, higher levels of happiness and satisfaction in their overall quality of life [8].

## 6. CONCLUSION

From the extensive research that was conducted, we were able to validate our initial assumptions about the pain areas for the end users. We have identified that prenatal education in India is lacking and it can be facilitated through a digital networking platform.

The following points were validated based on the primary and secondary research conducted -

- Need for antenatal and postnatal education/awareness.
- Increased focus on the mother's mental health.
- Need for an emotional support system and a social group of like-minded parents.
- Interest in seeking other's motherhood experiences and stories to learn from.
- Need for uninterrupted engagement with others in the similar path.

The emergence of niche communities will provide parents new ways of connecting with other parents and exchange their experiences of pregnancy and parenting. These communities provide each user the option to connect with another parent, follow their pictures and stories.

There are specific spaces on existing platforms like Facebook groups for parents, hash tags for users on Instagram. YouTube has been one of the main content generators for antenatal and postnatal education. However, these are generic platforms and all over the place. A digital community for a niche target segment such as the early stage mothers who will also benefit for such a focused engagement will surely be welcomed by the parenting segment.

In conclusion, we have observed a staggering 80% willingness to join digital parental communities such as those observed on Facebook, Instagram and WhatsApp to facilitate the above-mentioned points.

Digital Parent Communities are still in their nascent stages in India. Through our research, we have seen a number of regional parenting communities coming alive in the past 2-3 years focused on promoting conscious, positive parenting practices, such as Coimbatore Parenting Network, Chennai Parenting Network, Mysore Parenting Network, etc. With a greater number of niche community platforms coming up, early-stage parenting will also benefit overall with digital communities for which India has an abundant market.

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